REMIF
REDWOOD EMPIRE MUNICIPAL INSURANCE FUND

Member Cities: Arcata, Cloverdale, Cotati, Eureka, Ft. Bragg, Fortuna, Healdsburg, Lakeport, Rohnert Park, St. Helena, Sebastopol, Sonoma, Ukiah, Willits, Windsor

## AGENDA <br> REMIF BOARD OF DIRECTORS MEETING (TELEPHONIC)

Thursday, March 25, 2021 - 9:00 a.m.

1. City of Arcata
2. City of Cloverdale
3. City of Cotati
4. City of Eureka
5. City of Fortuna
6. City of Fort Bragg
7. City of Healdsburg
8. City of Lakeport
9. City of Rohnert Park
10. City of Sebastopol
11. City of Sonoma
12. City of St. Helena
13. City of Ukiah
14. City of Willits
15. Town of Windsor
16. REMIF

Members of the public have the option of commenting and/or attending this meeting telephonically by dialing +16699009128 (Meeting ID: 8620979 3284; Passcode: 60898).

## CALL TO ORDER: 9:00 A.M.

## ROLL CALL

## PUBLIC COMMENT

TIME RESERVED FOR THE PUBLIC TO OFFER COMMENTS REGARDING CONSENT CALENDAR OR BOARD BUSINESS NOT LISTED ON THE AGENDA. THE PUBLIC COMMENT PERIOD IS LIMITED TO FIVE MINUTES PER SPEAKER UNLESS ADDITIONAL TIME HAS BEEN ALLOWED BY THE CHAIRPERSON. STATE LAW PROHIBITS ACTION BY THE BOARD ON NON-AGENDA ITEMS.

## COMMUNICATIONS

General Manager, Amy Northam

## PRESENTATIONS - None

Page: CONSENT CALENDAR - (I) Information Item (A) Action Item
3 1. Approval of changes to board representation (A)
ACTION (A) AND INFORMATION (I) CALENDAR
5 2. REMIF self-insured health plan: discussion on renewals for medical; discussion on staff dental plan; discussion and possible action on network (JAA) renewal; discussion on pharmacy benefit plan; discussion and possible action on air ambulance renewal (I) and (A).

26 3. REMIF property program: discussion and possible action on property renewals (I) and (A).
41 4. CIRA merger: discussion and direction to staff and possible action on Transition Committee's recommendations (I) and (A).

## ADJOURN INTO CLOSED SESSION

Government Code Section 54956.95 - Conference regarding a claim for the payment of tort liability losses, public liability losses, or workers' compensation liability incurred by the joint powers' agency or a local agency member of the joint powers' agency.

Claimant: K. Perkins
Agency claimed against: City of Lakeport

## REPORT OUT OF CLOSED SESSION

## ADJOURNMENT OF MEETING



# CITY OF HEALDSBURG CITY MANAGER'S OFFICE 

401 Grove Street Healdsburg, CA 95448-4723

Phone: (707) 431-3316
Fax: (707) 431-3321
Visit us at www.ci.healdsburg.ca.us

March 16, 2021

Redwood Empire Municipal Insurance Fund (REMIF)
Attn.: Amy Northam
Via email: anortham@remif.com
RE: Healdsburg's Representation on REMIF Board of Directors

## Dear Amy:

With the City's recent change in City Manager, we request the REMIF Board consider taking action to approve Administrative Services Director Andrew Sturmfels as Healdsburg's representative and City Manager Jeffrey Kay as the Alternate representative on REMIF's Board of Directors.

Very truly yours,


Raina Allan
City Clerk
cc: Jeff Kay, City Manager
Heather Ippoliti, Retiring Administrative Services Director

| From: | Cathy Moorhead |
| :--- | :--- |
| To: | Amy Northam |
| Subject: | New Board Member for Willits |
| Date: | Thursday, January 28, 2021 5:56:45 PM |

Dear REMIF Governing Board Members,
The City of Willits would like to request a change in Board Members. On December 31, 2020 City Manager Stephaine Garrabrant-Sierra retire and on January 4th Brian Bender became the new City Manager. Therefore we are asking that the REMIF Governing Board remove Ms. Garrabant-Sierra and place Mr. Bender on the Board as the Director for the City of Willits.

Finest regards,

## Cathy

Cathy Moorhead<br>Deputy City Manager<br>Airport Manager/City Clerk<br>City of Willits<br>111 E. Commercial Street<br>Willits, CA 95490<br>Office (707) 459-7121<br>Fax (707) 459-1562

## City Office Hours:

9:00 a.m. - 5:30 p.m., Monday-Thursday.

CONFIDENTIALITY NOTICE: This communication with its contents may contain confidential and/or legally privileged information. It is solely for the use of the intended recipient(s). Unauthorized interception, review, use or disclosure of is prohibited and may violate applicable laws including the Electronic Communications Privacy Act. If you are not the intended recipient, please contact the sender and destroy all copies of the communication.

## AGENDA ITEM SUMMARY

TITLE: REMIF SELF-INSURED HEALTH PLAN: DISCUSSION ON RENEWALS FOR MEDICAL; DISCUSSION ON STAFF DENTAL PLAN; DISCUSSION AND POSSIBLE ACTION ON NETWORK (JAA) RENEWAL; DISCUSSION ON PHARMACY BENEFIT PLAN; DISCUSSION AND POSSIBLE ACTION ON AIR AMBULANCE RENEWAL; (I) AND (A).

## PRESENTED BY: AMY NORTHAM, GENERAL MANAGER

## ISSUE

Changes to the REMIF self-insured health care plan (medical, dental, vision) require ratification by the Board of Directors. A Health Care Committee has been appointed to review and discuss issues surrounding the REMIF health care plan and provide recommendations to the Board of Directors for ratification.

## BACKGROUND

REMIF has offered a self-insured health plan since 2015. The Board of Directors has contracted with RealCare/NFP as the broker for health care and other benefits. The plan uses the Anthem Blue Cross network and is administered through a third party, HealthComp. The Plan contracts with Elixir (formerly EnvisionRx) as the Pharmacy Benefits Manager.

A Health Care Committee has been appointed to review and discuss issues surrounding the REMIF health care plan and provides recommendations to the Board of Directors for consideration. The Committee recently addressed the following:

1. Preliminary Renewal Report (Discussion Item)

Each year the NFP Actuarial team collects data on Plan performance to evaluate and make recommendations for renewal. The preliminary renewal report is presented to the Committee and then to the Board at the Special Board Meeting in March.

The preliminary report from the NFP Actuarial team for 2021/22 report is based on claims and data through January 31, 2021. The actuaries used projections of stop loss renewal rates since stop loss renewal and marketing has not yet been completed.

## Preliminary Rate Recommendations

- Medical $-0.94 \%$ decrease from the current rates

The $0.94 \%$ decrease reflects no margin for adverse deviation. In addition, the 2021/22 Plan Year is the second year of a three-year program adopted by the Board to increase the retiree surcharge to $35.40 \%$ for $2021 / 22$. As a result, the retiree rates will increase.

As soon as all data is available, the recommended rate changes will be modified to reflect the February claims data and preliminary stop loss renewal. The modified recommendations will be discussed at the next Committee meeting.

## 2. REMIF Office Staff and Retiree Dental Benefits (Discussion and possible action)

The REMIF office staff and retirees have been eligible for dental benefits through Rohnert Park's selfinsured Delta Dental plan since Rohnert Park processes REMIF's payroll. This arrangement has been in effect for many years.

When the REMIF/PARSAC merger is complete, REMIF and PARSAC employees will become employees of a new entity, California Intergovernmental Risk Authority (CIRA). As employees of CIRA, the former REMIF office staff and retirees will no longer be eligible for Rohnert Park's selfinsured Delta Dental plan.

Health coverage for CIRA employees for the period July 1, 2021 - December 31, 2021, will continue through their current provider. Health benefits coverage would begin through CIRA for all employees of CIRA effective January 1, 2022.

In the interim period (July 1, 2021 - December 31, 2021), current REMIF employees and retirees will need to transition off the Rohnert Park plan and could be added to the REMIF self-insured Dental plan.

There are differences in benefits between the Rohnert Park and REMIF plan designs. To maintain consistent benefits, the Health Care Committee is recommending we create a separate class within the REMIF Delta Dental plan that would mirror the benefits of the Rohnert Park plan. This class (or classes) would include the current REMIF staff and retirees only. The CIRA staff would move over to the CIRA plan, effective 01/01/22.

Recommendation: The Health Care Committee recommends the Board of Directors approve the addition of the REMIF Staff and retirees to the REMIF self-insured dental plan, direct Delta Dental to create a new benefit class (or classes) to mirror the current benefits offered through Rohnert Park, and add the REMIF Staff and retirees to the newly created class (or classes) as of July 1, 2021.
3. Network renewal (JAA renewal) (Discussion and possible action)

REMIF contracts with Anthem to provide provider network access and authorization services for members covered under the REMIF Self-Funded medical plan. This is an annual contract that renews 7/1/21.

Anthem has proposed a $2.94 \%$ increase in fees for the 2021/2022 contract year. (This is a blended percentage since Anthem provides access to two distinct networks, the Anthem Prudent Buyer PPO (in CA) and the BlueCard (out of CA)).

## Recommendation: The Health Care Committee recommends the Board of Directors approve renewal of the JAA renewal.

## 4. Pharmacy Benefit Manager (PBM) Proposals (Discussion)

A significant part of a Self-Funded Health Insurance Program is the Pharmacy Benefit Management (PBM) component. Over the last five years pharmacy expenses have made up $15.45 \%$ of overall claims spend, or about $\$ 1.8$ million per plan year. In addition, on average pharmacy expenses continue to rise at a faster pace than medical expenses.

The role of a PBM is to:

- develop and maintain the formulary
- manage contracts with pharmacies and networks
- negotiate discounts and rebates with drug manufacturers
- process and pay prescription drug claims
- provide clinical analysis and recommendations to improve performance

Since the inception of the REMIF Self-Funded Medical Plan in 2015, REMIF has contracted with EnvisionRx (now Elixir) for PBM services. July 1, 2021 will mark the beginning of the third year of a 3 -year contract with Elixir. The agreement is a $100 \%$ pass through agreement that applies $100 \%$ of any manufacturer rebate available at the point of sale. Elixir reported $\$ 347,283$ in estimated Point of Sale Rx rebates last plan year.

Periodically, RealCare shops other PBM providers. This year they requested proposals from:

## a. AmWINS

AmWINS stated that they would be unable to improve upon the Elixir rates and so they declined to quote.

## b. Anthem

An unsolicited proposal was received from Anthem when they submitted their JAA (network) renewal. Since the proposal was unsolicited, they did not have the full data needed for a complete proposal. The data has been provided to them, and they will resubmit.

Anthem offers reduced JAA fees to groups that contract with them for additional lines of coverage. As incentive for adding additional coverage options, Anthem will offer rate guarantees on specialty products including PBM and will reduce or waive JAA fees for one year. If REMIF elects to replace Elixir with Anthem's IngenioRx contract, Anthem will reduce the Anthem JAA fees for one year by $64 \%$ on the PPO and $66.8 \%$ on the BlueCard contract.
c. NFP Rx Solutions

NFP Rx Solutions is a pharmacy benefits consulting division of NFP. Through the RX solutions coalition they provide strategic pharmacy oversight, account management, clinical services, and plan negotiation. NFP RX solutions is headquartered in Saint Louis, Missouri. In 2020 they partnered with CVS, Express Scripts, and Optum RX to cover 1.4 million lives.

NFP has provided proposals for PBM services with their 3 vendors CVS, Express Scripts, and Optum RX.

The Committee will evaluate all proposals and make recommendations to the Board for action on the PBM at the April Board Meeting.
5. Air Ambulance (REACH) renewal (Discussion and action)

Since $1 / 1 / 17$, REMIF has been providing membership for employees enrolled in the EPO and PPO (including most Blue Card) plans for air ambulance claims. The REACH contract provides a $17 \%$ discount for air ambulance charges.

Membership is purchased for all members on the EPO and PPO plans. HSA members are not eligible for REACH membership.

The contract cost for the 2021-2022 plan year will remain unchanged at $\$ 55$ per employee. These fees are blended with the program rates and are part of the monthly premium.

Currently, there are 645 employees enrolled on the REACH plan. REMIF provides REACH with quarterly employee count updates. Based on the current membership, the approximate cost for membership for Plan Year 2021/2022 would be $\$ 35,475$. This amount may increase/decrease slightly based upon the number of enrollees.

The bulk of the REMIF's member's employees reside in more rural areas where the need for air ambulance services is higher. The risk of a larger number of air ambulance claims was what caused REMIF to seek a contract with REACH, as they are the primary air ambulance provider within the REMIF area. Although the plan has been fortunate to have had no claims in the last Plan Year, there is no guarantee that this is an indication of future claim activity.

Prior to the REMIF contract, many agencies offered REACH membership through payroll deduction. This has been viewed by employees as a valuable member benefit.

In the past, the average cost of one air ambulance claim was $\$ 82,868$. The average discount was $\$ 14,000$. Assuming an annual cost for membership of $\$ 35,475$ the benefit would pay for itself in 2.33 claims during a Plan Year.

## Recommendation: The Health Care Committee recommends the Board of Directors approve the renewal of the REACH contract, effective 07/01/21.

## FISCAL IMPACT

None

## RECOMMENDED ACTIONS

(From items discussed above.)

1. (No action)
2. Recommendation: The Health Care Committee recommends the Board of Directors approve the addition of the REMIF Staff and retirees to the REMIF self-insured dental plan, direct Delta Dental to create a new benefit class (or classes) to mirror the current benefits offered through Rohnert Park, and add the REMIF Staff and retirees to the newly created class (or classes) as of July 1, 2021.
3. Recommendation: The Health Care Committee recommends the Board of Directors approve renewal of the JAA renewal.
4. (No action)
5. Recommendation: The Health Care Committee recommends the Board of Directors approve the renewal of the REACH contract, effective 07/01/21.

## ATTACHMENTS

1.1 Renewal analysis

## Renewal Analysis

For Plan Year Beginning
July 1, 2021


Developed with Data Through January 31, 2021

## Prepared by:

Geoffrey S. Seibel

Vice President, Actuarial Services

1250 Capital of Texas Hwy. S.
Building 2, Suite 600
Austin, TX 78746
T: 512.697.6159
gseibel@nfp.com read or distributed in its entirety.

February 24, 2021
Ms. Patricia O'Brien
Vice President
RealCare Insurance Marketing, Inc.

Re: REMIF Health Plan

Dear Ms. O'Brien:
Attached, please find a Statement of Actuarial Opinion and a Statement of Actuarial Assumptions regarding an analysis of the REMIF health plan.

Claims paid from 2/1/2019 through 1/31/2021 were used for this analysis.
The purpose of the analysis was to estimate and recommend the REMIF rates for medical and prescription drugs for plan year beginning 7/1/2021.

In my opinion, the analysis fairly represents the REMIF health plan. Based upon this analysis, a decrease of $0.94 \%$ from the current rates would be sufficient for the renewal plan year. Page 13 of this report details our assumptions related to the impact of COVID-19. Note that information is continuously changing, and this adjustment represents our estimated impact as of the date of this report. This is also the second year of a three year program to increase the retiree surcharge to $38.25 \%$ based on a retiree surcharge analysis performed in April 2020.

If you have any questions, please feel free to contact me.
Sincerely,


Geoffrey S. Seibel, ASA, MAAA
Vice President, Actuarial Services
Corporate Benefits
NFP Insurance Services, Inc.

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|  | Count | Current Premium Equivalents |
| :---: | :---: | :---: |
| EPO 250-Actives |  |  |
| Employee Only | 155 | \$837.00 |
| Employee + 1 | 98 | \$1,753.00 |
| Employee + Family | 172 | \$2,503.00 |
| EPO 500-Actives |  |  |
| Employee Only | 39 | \$725.00 |
| Employee + 1 | 30 | \$1,520.00 |
| Employee + Family | 21 | \$2,171.00 |
| PPO 500-Actives |  |  |
| Employee Only | 13 | \$720.00 |
| Employee + 1 | 13 | \$1,509.00 |
| Employee + Family | 22 | \$2,155.00 |
| HSA 1400 - Actives |  |  |
| Employee Only | 40 | \$615.00 |
| Employee + 1 | 23 | \$1,287.00 |
| Employee + Family | 53 | \$1,838.00 |
| EPO 250 - Retirees |  |  |
| Employee Only | 27 | \$1,109.00 |
| Employee + 1 | 16 | \$2,324.00 |
| Employee + Family | 6 | \$3,318.00 |
| EPO 500 - Retirees |  |  |
| Employee Only | 2 | \$961.00 |
| Employee + 1 | 5 | \$2,015.00 |
| Employee + Family | 0 | \$2,878.00 |
| PPO 500 - Retirees |  |  |
| Employee Only | 2 | \$954.00 |
| Employee + 1 | 2 | \$2,000.00 |
| Employee + Family | 2 | \$2,857.00 |
| HSA 1400-Retirees |  |  |
| Employee Only | 8 | \$815.00 |
| Employee + 1 | 4 | \$1,706.00 |
| Employee + Family | 0 | \$2,436.00 |
| Blue Card 250 (Out of State) - Retirees |  |  |
| Employee Only | 5 | \$1,109.00 |
| Employee + 1 | 5 | \$2,324.00 |
| Employee + Family | 0 | \$3,318.00 |
|  | nualized Costs | \$14,648,112 |
|  | ployee Count Current PEPM | $\begin{gathered} 763 \\ \$ 1,599.84 \end{gathered}$ |


|  | Experience | Experience |
| ---: | :---: | :---: |
|  | Period 2 | Period 1 |
| Start | $2 / 1 / 2019$ | $2 / 1 / 2020$ |
| End | $1 / 31 / 2020$ | $1 / 31 / 2021$ |
| Midpoint | $8 / 2 / 2019$ | $8 / 1 / 2020$ |


| (1) Total Medical Claims (Page 12) | \$10,967,306 | \$9,347,771 |
| :---: | :---: | :---: |
| (2) Remove Large Claims (Page 14) | \$3,443,056 | \$2,095,979 |
| (3) Total Completed Claims ( ( 3 ) = (1)-(2) ) | \$7,524,250 | \$7,251,792 |
| (4) Annual Trend Factor (Page 15) | 5.8\% | 5.7\% |
| (5) Months to Midpoint | 29 | 17 |
| (6) Total Medical Trend Factor ( (6) $=[1+(4)] \wedge[(5) / 12])$ | 14.4\% | 8.1\% |
| (7) Plan Change / Demographic Change Factor | 1.1\% | 0.5\% |
| (8) Trended Medical Claims ( (8) = (3) * $1+(6)] *[1+(7)]$ ) | \$8,705,447 | \$7,881,842 |
| (9) Number of Large Claimants (Page 14) | 10.06 | 7.46 |
| (10) Large Claims Not Subject to Reimbursement ( (10) = (9) * \$200,000) | \$2,326,588 | \$1,598,150 |
| (11) Total Projected Claims ( (11) $=(8)+(10)$ ) | \$11,032,035 | \$9,479,992 |
| (12) Employee Months (Page 12)* | 9,696 | 9,582 |
| (13) PEPM ( (13) = (11)/(12) ) | \$1,137.79 | \$989.35 |
| (14) Period Weights | 30\% | 70\% |
| (15) Total Projected Renewal Year Medical Claims (PEPM) | \$1,033.88 |  |
| (16) COVID-19 Renewal Year Adjustment Factor | 1.005 |  |
| (17) Total Projected Renewal Year Medical Claims Adjusted for COVID-19 (PEPM) | \$1,039.05 |  |

[^0]
## Rx RENEWAL DEVELOPMENT

Renewal
Date
7/1/2021
$\left.\begin{array}{l}\text { Experience } \\ \text { Period } 1 \\ 2 / 1 / 2020 \\ 1 / 31 / 2021 \\ 8 / 1 / 2020\end{array} \quad \begin{array}{c}\text { Experience } \\ \text { Period } 2\end{array}\right)$

## TOTAL RENEWAL DEVELOPMENT

## Renewal

Date
7/1/2021

| Claims | Renewal Year Expected <br> Costs |  |
| :--- | :--- | ---: | :--- |
| (1) Total Medical Claims (Line 17 Page 6) | Annualized |  |
| (2) Total Rx Claims (Line 12 Page 7) | $\$ 1,039.05$ | $\$ 9,513,536$ |
| (3) Total Expected Renewal Year Claims ( (3) = (1) + (2) ) | $\$ 245.43$ | $\$ 2,247,157$ |

## Fixed Fees

| (4) Administrative Fees | $\$ 23.05$ | $\$ 211,046$ |
| :--- | :---: | :---: |
| (5) Specific Stop Loss Fees | $\$ 206.69$ | $\$ 1,892,454$ |
| (6) Aggregate Stop Loss Fees | $\$ 3.63$ | $\$ 33,236$ |
| (7) Consulting Fees | $\$ 22.50$ | $\$ 206,010$ |
| (8) REMIF Admin Fee | $\$ 15.85$ | $\$ 145,109$ |
| (9) REACH Air Ambulance | $\$ 4.58$ | $\$ 41,934$ |
| (10) Anthem JAA | $\$ 24.08$ | $\$ 220,449$ |

## Renewal Summary

(12) Current Expected Costs (Page 5)
(13) Renewal Expected Costs ( (13) $=(3)+(11)$ )
(14) Renewal Expected Costs with Margin @ 1.5\%
\$1,599.84
\$1,584.85
\$1,604.12
$\$ 14,648,112$
\$14,510,932
\$14,687,343

Percent Change from Current
-0.94\%
0.27\%

Plan Year Beginning July 1, 2021

|  |  | Renewal Premium Equivalents Based On: |  |  | Plan Specific Rate Change Based On: |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Renewal Count | Expected Claims | 1.5\% Margin | COBRA <br> (Includes 2\%) | Expected Claims | 1.5\% Margin |
| EPO 250-Actives |  |  |  |  |  |  |
| Employee Only | 155 | \$827.10 | \$837.16 | \$843.64 | -1.18\% | 0.02\% |
| Employee + 1 | 98 | \$1,732.27 | \$1,753.33 | \$1,766.91 | -1.18\% | 0.02\% |
| Employee + Family | 172 | \$2,473.40 | \$2,503.47 | \$2,522.86 | -1.18\% | 0.02\% |
| EPO 500-Actives |  |  |  |  |  |  |
| Employee Only | 39 | \$716.43 | \$725.13 | \$730.75 | -1.18\% | 0.02\% |
| Employee + 1 | 30 | \$1,502.02 | \$1,520.28 | \$1,532.06 | -1.18\% | 0.02\% |
| Employee + Family | 21 | \$2,145.32 | \$2,171.40 | \$2,188.23 | -1.18\% | 0.02\% |
| PPO 500-Actives |  |  |  |  |  |  |
| Employee Only | 13 | \$711.48 | \$720.13 | \$725.71 | -1.18\% | 0.02\% |
| Employee + 1 | 13 | \$1,491.15 | \$1,509.28 | \$1,520.98 | -1.18\% | 0.02\% |
| Employee + Family | 22 | \$2,129.51 | \$2,155.40 | \$2,172.10 | -1.18\% | 0.02\% |
| HSA 1400 - Actives |  |  |  |  |  |  |
| Employee Only | 40 | \$607.73 | \$615.11 | \$619.88 | -1.18\% | 0.02\% |
| Employee + 1 | 23 | \$1,271.78 | \$1,287.24 | \$1,297.21 | -1.18\% | 0.02\% |
| Employee + Family | 53 | \$1,816.26 | \$1,838.34 | \$1,852.59 | -1.18\% | 0.02\% |
| EPO 250 - Retirees |  |  |  |  |  |  |
| Employee Only | 27 | \$1,119.91 | \$1,133.53 | \$1,142.31 | 0.98\% | 2.21\% |
| Employee + 1 | 16 | \$2,345.53 | \$2,374.04 | \$2,392.44 | 0.93\% | 2.15\% |
| Employee + Family | 6 | \$3,349.03 | \$3,389.74 | \$3,416.01 | 0.94\% | 2.16\% |
| EPO 500 - Retirees |  |  |  |  |  |  |
| Employee Only | 2 | \$970.05 | \$981.85 | \$989.46 | 0.94\% | 2.17\% |
| Employee + 1 | 5 | \$2,033.77 | \$2,058.49 | \$2,074.45 | 0.93\% | 2.16\% |
| Employee + Family | 0 | \$2,904.81 | \$2,940.13 | \$2,962.91 | 0.93\% | 2.16\% |
| PPO 500 - Retirees |  |  |  |  |  |  |
| Employee Only | 2 | \$963.36 | \$975.08 | \$982.63 | 0.98\% | 2.21\% |
| Employee + 1 | 2 | \$2,019.05 | \$2,043.60 | \$2,059.43 | 0.95\% | 2.18\% |
| Employee + Family | 2 | \$2,883.40 | \$2,918.46 | \$2,941.07 | 0.92\% | 2.15\% |
| HSA 1400 - Retirees |  |  |  |  |  |  |
| Employee Only | 8 | \$822.87 | \$832.88 | \$839.33 | 0.97\% | 2.19\% |
| Employee + 1 | 4 | \$1,722.01 | \$1,742.95 | \$1,756.45 | 0.94\% | 2.17\% |
| Employee + Family | 0 | \$2,459.26 | \$2,489.15 | \$2,508.44 | 0.95\% | 2.18\% |
| Blue Card 250 (Out of State) - Retirees |  |  |  |  |  |  |
| Employee Only | 5 | \$1,119.91 | \$1,133.53 | \$1,142.31 | 0.98\% | 2.21\% |
| Employee + 1 | 5 | \$2,345.53 | \$2,374.04 | \$2,392.44 | 0.93\% | 2.15\% |
| Employee + Family | 0 | \$3,349.03 | \$3,389.74 | \$3,416.01 | 0.94\% | 2.16\% |
| Total Annualized Costs |  | \$14,510,932 | \$14,687,343 |  |  |  |
| Renewal Employee Count |  | 763 | 763 |  |  |  |
| Renewal PEPM |  | \$1,584.85 | \$1,604.12 |  |  |  |
| Overall Percent Change |  | -0.94\% | 0.27\% |  |  |  |

Retiree rates include changing the retiree surcharge to $35.40 \%$ from the current retiree surcharge of $32.56 \%$

I, Geoffrey S. Seibel, am Vice President, Actuarial Services, NFP Insurance Services, Inc. I am a member of the American Academy of Actuaries.

I have been asked for an analysis of the REMIF health plan renewal premium increase as of 7/1/2021.
I have examined the claims, premiums and enrollment history for the REMIF health plan paid from 2/1/2019 through $1 / 31 / 2021$. I relied upon underlying records and/or summaries prepared by the responsible officers or employees of the Client and/or Health Comp/Elixir. In other respects, my estimations included such underlying assumptions and methods as I considered necessary and appropriate.

In my opinion, the analysis fairly represents the REMIF health plan. Based upon this analysis, a decrease of $0.94 \%$ from the current rates would be sufficient for the renewal plan year. Page 13 of this report details our assumptions related to the impact of COVID-19. Note that information is continuously changing, and this adjustment represents our estimated impact as of the date of this report. This is also the second year of a three year program to increase the retiree surcharge to $38.25 \%$ based on a retiree surcharge analysis performed in April 2020.

I confirm the information I have provided in this report represents an independent, professional assessment of the above noted plan renewal and related accounts as of measurement date. I do not have a relationship with REMIF that would hinder my independence related to the information I have provided REMIF.

The attached analysis is an estimate; the exact amount cannot be determined since various assumptions were made. Also, the more recent claims during the period of analysis are not fully mature yet.

Actuarial methods, considerations and analysis used in forming my opinion conform to the relevant Standards of Practice as promulgated from time to time by the Actuarial Standards Board, which standards form the basis for this statement of opinion.


Geoffrey S. Seibel
Member, American Academy of Actuaries
February 24, 2021

I, Geoffrey S. Seibel, am Vice President, Actuarial Services, NFP Insurance Services, Inc. I am a member of the American Academy of Actuaries.

I have been asked for an analysis of the REMIF health plan renewal premium increase as of 7/1/2021.
I have given an Actuarial Opinion regarding the Client's Health Plan. I relied upon underlying records and/or summaries prepared by the responsible officers or employees of the Client and/or Health Comp/Elixir. In other respects, my estimations included such underlying assumptions and methods as I considered necessary and appropriate.

Actuarial methods, considerations and analysis used in forming my opinion conform to the relevant Standards of Practice as promulgated from time to time by the Actuarial Standards Board, which standards form the basis for this statement of opinion.

## Assumptions and methods:

1) Census as of $1 / 31 / 2021$ was used; assumed no population growth after $1 / 31 / 2021$.
2) Historical equivalent premiums and claims were used unadjusted from the administrator - Health Comp/Elixir, except medical claims from May 2020 through October 2020 were adjusted to remove the estimated effect of COVID-19 from the experience.
3) No discounting or accruing of any values (i.e. no present value calculations).
4) Data was checked for reasonableness but not fully audited.
5) Claims rate was based on $100 \%$ experience and $0 \%$ manual claims rate.
6) Medical trends were based on a $0 \%$ weighting of plan experience and $100 \%$ national surveys and Rx trends were based on a $0 \%$ weighting of plan experience and $100 \%$ national surveys.
7) Claims used were on a paid basis. Enrollment setback 2 months in the medical development and 1 month in the Rx development.
8) HealthMaps was used to determine applicable plan and demographic mix changes.
9) Assumed medical and $R x$ administrative fees of $\$ 23.05$ PEPM for the renewal plan year.
10) Specific stop loss premium of $\$ 206.69$ for the renewal plan year, based on an increase of $20 \%$ from the current plan year.
11) Aggregate stop loss premium of $\$ 3.63$ PEPM for the renewal plan year, based on an increase of $7 \%$ from the current plan year.
12) Historical large claims not subject to reimbursement have been based on the renewal plan year stop loss coverage levels of a $\$ 200,000$ specific stop loss deductible. This analysis also assumes the $\$ 600,000$ laser for one member is still in place for the renewal plan year.
13) Consulting Fees of $\$ 22.50$ PEPM.
14) See page 13 for information regarding adjustments related to COVID-19 for this analysis.
15) REMIF Admin Fee of $\$ 15.85$ PEPM.
16) REACH Air Ambulance of $\$ 4.58$ PEPM.
17) Anthem JAA of $\$ 24.08$ PEPM.
18) A margin for adverse deviation of $1.5 \%$ was requested. It is the position of NFP that margin should not be included in equivalent premiums that will be used for either COBRA purposes or as the basis for setting employee contributions.
19) Other assumptions as shown in the workpapers attached.


Geoffrey S. Seibel
Member, American Academy of Actuaries
February 24, 2021

## EXPERIENCE HISTORY

REMIF Medical and Rx Experience

| Paid | Subscriber | Member | Gross Paid | Gross Paid Rx | Total Gross Paid |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Month | Months | Months | Medical Claims | Claims | Medical + Rx |
| Dec-18 | 813 | 1,858 |  |  |  |
| Jan-19 | 804 | 1,845 |  |  |  |
| Feb-19 | 802 | 1,847 | 553,443 | 130,073 | 683,516 |
| Mar-19 | 802 | 1,851 | 719,165 | 160,557 | 879,721 |
| Apr-19 | 810 | 1,870 | 1,557,282 | 147,804 | 1,705,086 |
| May-19 | 805 | 1,839 | 1,471,427 | 193,953 | 1,665,381 |
| Jun-19 | 798 | 1,829 | 1,147,193 | 184,361 | 1,331,554 |
| Jul-19 | 808 | 1,881 | 800,630 | 132,425 | 933,055 |
| Aug-19 | 814 | 1,896 | 436,217 | 216,270 | 652,487 |
| Sep-19 | 811 | 1,883 | 650,854 | 181,982 | 832,836 |
| Oct-19 | 815 | 1,886 | 930,343 | 160,832 | 1,091,175 |
| Nov-19 | 814 | 1,886 | 555,452 | 173,877 | 729,329 |
| Dec-19 | 813 | 1,881 | 1,095,766 | 194,545 | 1,290,310 |
| Jan-20 | 811 | 1,866 | 1,049,534 | 123,609 | 1,173,143 |
| Feb-20 | 811 | 1,851 | 828,690 | 147,318 | 976,008 |
| Mar-20 | 808 | 1,839 | 1,256,947 | 173,571 | 1,430,518 |
| Apr-20 | 807 | 1,844 | 1,396,286 | 148,171 | 1,544,457 |
| May-20 | 807 | 1,844 | 672,685 | 149,213 | 821,898 |
| Jun-20 | 798 | 1,825 | 597,613 | 138,060 | 735,674 |
| Jul-20 | 791 | 1,820 | 661,207 | 149,018 | 810,225 |
| Aug-20 | 786 | 1,816 | 663,868 | 173,481 | 837,349 |
| Sep-20 | 789 | 1,823 | 676,194 | 199,639 | 875,833 |
| Oct-20 | 784 | 1,810 | 684,703 | 172,613 | 857,316 |
| Nov-20 | 777 | 1,804 | 854,354 | 142,753 | 997,107 |
| Dec-20 | 772 | 1,798 | 423,548 | 150,204 | 573,752 |
| Jan-21 | 763 | 1,783 | 631,677 | 184,507 | 816,183 |
| Totals |  |  |  |  |  |
| 2-1-19 to 1-31-20 | 9,703 | 22,415 | \$10,967,306 | \$2,000,287 | \$12,967,593 |
| 2-1-20 to 1-31-21 | 9,493 | 21,857 | \$9,347,771 | \$1,928,547 | \$11,276,319 |
| Enrollment Setback Totals |  |  |  |  |  |
| 12-1-18 to 11-30-19 | 9,696 | 22,371 |  |  |  |
| 12-1-19 to 11-30-20 | 9,582 | 22,023 |  |  |  |
| 1-Month Setback | R |  |  |  |  |
| 1-1-19 to 12-31-19 | 9,696 | 22,394 |  |  |  |
| 1-1-20 to 12-31-20 | 9,541 | 21,940 |  |  |  |

## REMIF Adjustments by Month for COVID-19

| Month | Expected Medical Claims Prior to COVID-19 | Impact of Deferred Services ${ }^{1}$ | Impact of COVID-19 ${ }^{2}$ | Revised Expected Medical Claims | Expected Rx Claims ${ }^{3}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Jul-21 | \$1,026.53 | 0.0\% | 0.5\% | \$1,031.66 | \$243.68 |
| Aug-21 | \$964.14 | 0.0\% | 0.5\% | \$968.96 | \$228.88 |
| Sep-21 | \$1,034.77 | 0.0\% | 0.5\% | \$1,039.95 | \$245.64 |
| Oct-21 | \$1,005.47 | 0.0\% | 0.5\% | \$1,010.50 | \$238.69 |
| Nov-21 | \$1,043.22 | 0.0\% | 0.5\% | \$1,048.44 | \$247.65 |
| Dec-21 | \$1,025.70 | 0.0\% | 0.5\% | \$1,030.83 | \$243.49 |
| Jan-22 | \$1,051.74 | 0.0\% | 0.5\% | \$1,057.00 | \$249.67 |
| Feb-22 | \$1,056.09 | 0.0\% | 0.5\% | \$1,061.37 | \$250.70 |
| Mar-22 | \$1,026.19 | 0.0\% | 0.5\% | \$1,031.32 | \$243.60 |
| Apr-22 | \$1,064.72 | 0.0\% | 0.5\% | \$1,070.04 | \$252.75 |
| May-22 | \$1,034.57 | 0.0\% | 0.5\% | \$1,039.74 | \$245.59 |
| Jun-22 | \$1,073.41 | 0.0\% | 0.5\% | \$1,078.78 | \$254.81 |
| Totals | \$1,033.88 | 0.0\% | 0.5\% | \$1,039.05 | \$245.43 |
| COVID-19 Adjustment Factor |  |  |  | $\begin{gathered} \text { Medical } \\ 1.005 \end{gathered}$ | $\begin{gathered} \mathrm{Rx} \\ 1.000 \end{gathered}$ |

${ }^{1}$ On March 19, 2020, the CDC recommended that all non-essential procedures be postponed. Deferred services reflects the claims impact for these delayed services. Negative percentages reflect claim decreases while positive percentages reflect claim increases as delayed services are ultimately realized.
${ }^{2}$ COVID-19 cost impacts will vary as outbreaks occur. As infection rates throughout the country decrease, the claims impact of COVID-19 will normalize.
${ }^{3}$ The impact of COVID-19 on prescription drug claims is expected to be minimal until a vaccination is available. This analysis assumes no impact of COVID-19 on expected prescription drug claims for the renewal plan year.
(1) Reconcile Large Claim Reporting Periods with Experience Periods

| Large Claim <br> Reporting Period | Start Date | End Date | Experience <br> Period 2 | Experience <br> Period 1 |
| :---: | :---: | :---: | :---: | :---: |
| A | $7 / 1 / 2018$ | $6 / 30 / 2019$ | $42.0 \%$ | $0.0 \%$ |
| B | $7 / 1 / 2019$ | $6 / 30 / 2020$ | $58.0 \%$ | $42.0 \%$ |
| C | $7 / 1 / 2020$ | $1 / 31 / 2021$ | $0.0 \%$ | $100.0 \%$ |

## (2) Assign Claims Exceeding Spec to Experience Period (Amounts)

| Large Claim <br> Reporting Period | Claimant <br> A | Total Claims <br> Paid <br> A | Experience <br> Period 2 | Experience <br> Period 1 | Lasered <br> Amount |
| :---: | :---: | :---: | :---: | :---: | :---: |
| A | 2 | $\$ 883,598$ | $\$ 371,111$ | $\$ 0$ |  |
| A | 3 | $\$ 755,522$ | $\$ 317,319$ | $\$ 0$ | 600,000 |
| A | 4 | $\$ 407,785$ | $\$ 171,270$ | $\$ 0$ |  |
| A | 5 | $\$ 260,252$ | $\$ 151,306$ | $\$ 0$ |  |
| B | 6 | $\$ 225,609$ | $\$ 110,296$ | $\$ 0$ |  |
| B | 1 | $\$ 481,719$ | $\$ 94,792$ | $\$ 0$ |  |
| B | 2 | $\$ 452,738$ | $\$ 262,397$ | $\$ 202,322$ |  |
| B | 3 | $\$ 377,923$ | $\$ 219,196$ | $\$ 190,150$ | 600,000 |
| B | 4 | $\$ 326,626$ | $\$ 189,443$ | $\$ 158,728$ |  |
| B | 5 | $\$ 311,418$ | $\$ 180,623$ | $\$ 130,793$ |  |
| B | 6 | $\$ 257,361$ | $\$ 149,269$ | $\$ 108,092$ |  |
| B | 7 | $\$ 255,941$ | $\$ 148,446$ | $\$ 107,495$ |  |
| B | 8 | $\$ 254,549$ | $\$ 147,638$ | $\$ 106,911$ |  |
| B | 9 | $\$ 239,917$ | $\$ 139,152$ | $\$ 100,765$ |  |
| B | 10 | $\$ 233,866$ | $\$ 135,642$ | $\$ 98,224$ |  |
| B | 11 | $\$ 233,627$ | $\$ 135,504$ | $\$ 98,123$ |  |
| B | 12 | $\$ 213,538$ | $\$ 123,852$ | $\$ 89,686$ |  |
| C | 13 | $\$ 200,366$ | $\$ 116,212$ | $\$ 84,154$ |  |
| C | 1 | $\$ 250,766$ | $\$ 0$ | $\$ 250,766$ |  |
|  | 2 | $\$ 232,586$ | $\$ 0$ | $\$ 232,586$ |  |

(3) Assign Claims Exceeding Spec to Experience Period (Counts)

| Large Claim <br> Reporting Period | \# of <br> Claimants | Experience <br> Period 2 | Experience <br> Period 1 |
| :---: | :---: | :---: | :---: |
| A | 6 | 2.52 | 0.00 |
| B | 13 | 7.54 | 5.46 |
| C | 2 | 0.00 | 2.00 |


|  | Experience | Experience |
| ---: | :---: | :---: |
|  | Period 2 | Period 1 |
| (4) Total Claim Amount (Sum of (2) ) | $\$ 3,443,056$ | $\$ 2,095,979$ |
| (5) Count of Claims Exceeding Spec (Sum of (3) ) | 10.06 | 7.46 |
| (6) Amounts Below Spec ( (5) * $\$ 200,000)$ | $\$ 2,326,588$ | $\$ 1,598,150$ |
| (7) Implied Recovery ( (4)-(6)) | $\$ 1,116,467$ | $\$ 497,829$ |


| Future Trend Rates |  |  |  |
| :---: | :---: | :---: | :---: |
|  | Medical | Rx | Med/Rx |
| Aon Consulting's 2020 Health Trend Survey | 5.3\% | 11.3\% | 6.5\% |
| 2020 PWC's-Behind the Numbers | 4.7\% | 11.3\% | 6.0\% |
| 2020 Segal Health Plan Cost Trend Survey | 6.8\% | 11.3\% | 7.7\% |
| 2020 Willis Towers Watson Survey | 6.2\% | 11.3\% | 7.2\% |
| National Health Care Trend Survey Averages | 5.7\% | 11.3\% | 6.8\% |
| Historical Trend Rates |  |  |  |
|  | Medical | Rx | Med/Rx |
| 2020 | 5.7\% | 11.3\% | 6.8\% |
| 2019 | 6.0\% | 8.1\% | 6.4\% |
| Fraction of Each Trend Year in Each Renewal Period |  |  |  |
|  | Period 3 (Not Used) | Period 2 | Period 1 |
| 2021 | 99.4\% | 99.4\% | 99.4\% |
| 2020 | 100.0\% | 100.0\% | 41.7\% |
| 2019 | 100.0\% | 41.4\% | 0.0\% |

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## AGENDA ITEM SUMMARY

# PROPERTY RENEWAL: DISCUSSION AND POSSIBLE ACTION ON PROPERTY PROGRAM 

PRESENTED BY: AMY NORTHAM, GENERAL MANAGER

## ISSUE

Renewals of the fully insured programs (property, auto physical damage, flood and earthquake) require ratification by the Board of Directors.

## BACKGROUND

The insurance market for property has been a hard market for well over two years now, and it does not show an indication of slowing. Between years of devastating wildfires throughout the state and natural disasters nationwide, obtaining coverage, let alone affordable coverage, is becoming a serious challenge. Homeowners, commercial buildings owners and public agencies experienced carriers dropping them from coverage, as many insurers are leaving the state, with an "ABC" approach anywhere but California. The wildfire losses that once were considered one-off losses are now considered routine and almost expected. Where once we could negotiate property rates, the carriers have a "take it or leave it" approach, while some do not even offer coverage at all anymore. Unlike increases in workers' compensation and in liability, where increases generally reflect the experience of the pool, the increases in the property rates are not necessarily reflective of our losses (although that is a part of the increase).

Historically, REMIF has obtained property coverage through Alliant (called their APIP program, obtained through CJPRMA).

With the merger of REMIF and PARSAC to become CIRA, alternative programs were explored. Michael Simmons, CIRA's broker for property coverage, will be present to explore options for the property program for next program year.

## RECOMMENDED ACTION

Move to PRISM property program and direct staff to take steps necessary to effectuate same.

## ATTACHMENTS

3.1 PRISM property renewal indication

# Redwood Empire Municipal Insurance Fund (REMIF) Property Renewal in combination with CIRA effective July 1, 2021 

The purpose of this report is to provide the REMIF Board with information necessary to determine the best avenue for their upcoming property renewal, in combination with PARSAC, in the new CIRA Pool. After reviewing this analysis, the Board may determine that it is appropriate to authorize binding coverage now, in the PRISM (aka CSAC EIA) program effective July 1, 2021.

As of today's date we do not have final excess carrier underwriting approval for CIRA to join PRISM for property coverage. PRISM's program renews March 31, 2021 and final approval for REMIF is expected shortly. REMIF and PARSAC were previously approved by the PRISM Underwriting Committee, and the overall program rate of 18.5 cents ${ }^{1}$ (plus taxes and PRISM fees) has been negotiated. In this continuingly deteriorating property insurance marketplace, especially regarding wildfire risks, the negotiation with excess insurance carriers are complex. Both REMIF and PARSAC have members with high wildfire exposures compared with the profile of the other PRISM members.

We believe we will be successful in securing final approval from excess insurers to join PRISM with a "All Risk" deductible of $\$ 10,000$, but terms and acceptance are not final yet. (Currently, REMIF has a wildfire deductible of $\$ 500,000$ but participates in a risk-sharing layer with three other CJPRMA cities that reduces the deductible to $\$ 100,000$ ). It is important to note that this "buy-down" risk-sharing layer includes a few CJPRMA members and, has experienced higher than expected losses, so it may not be a viable option overtime; it was actuarially funded at a $90 \%$ confidence level, but wildfire and other property losses have exceeded that amount.

APIP, the CJPRMA hybrid APIP, and the PRISM programs have very similar coverage terms and conditions. We reviewed these coverage differences with you at a previous meeting. We have included the significant differences attached to the end of this report. The questions before the REMIF Board today is 1 ) whether the 18.5 cent rate is "competitive", 2) how does this overall cost at a $\$ 10,000$ deductible compare with your current program structure/concept and, most importantly, 3) how do you benefit from the lower deductible offered. Key to all of this involves determining the benefits of making a decision, now, to join the PRISM property program, and the impact that has of later decisions involving the liability renewal options.

This analysis was provided to PARSAC. Their rate at a $\$ 10,000$ deductible for FY $20 / 21$ was $16.75^{2}$ cents. For the purpose of this analysis, we are assuming that the deteriorating property market will generate a minimum of $30 \%$ increases on all client renewals. (Although some clients with excellent loss experience may see slightly lower increases, in general, the majority of California public entities are continuing to have high loss experience and the market will require increased rates that are even higher. For PARSAC, the 18.5 cent rate is only a $15 \%$ increase over the prior year. The PARSAC Board authorized binding coverage with PRISM earlier this year if the price is determined to be competitive.

[^1]REMIF and PARSAC currently have almost identical property coverages; both are APIP programs, but PARSAC was a legacy member, having joined in the mid-1990's. At that time, PARSAC had a $\$ 5,000$ member deductible and it increased to $\$ 10,000$ last year. REMIF joined a hybrid version of the APIP program a few years ago, and due the marketplace and lost history of that group, REMIF was offered the higher deductibles listed below. Losses in that group, and many public entities continued to deteriorate, especially with wildfire risks. As a result, the group (CPRMA) saw increases in deductibles, but not necessarily cost, it remained very competitive. With the exception of California wildfire losses, the cost increases are more about the general deteriorating property marketplace worldwide than any one city or type of risk. The following spreadsheet summarizes our expected results:

|  | CJPRMA <br> Actual <br> FY 20/21 | Projected Increase | CJPRMA <br> Projected <br> FY21/22 | PRISM <br> Indicated <br> FY21/22 |
| :---: | :---: | :---: | :---: | :---: |
| Estimated T.I.V.: <br> APD Values: | $\begin{array}{r} 1,444,627,549 \\ 91,000,000 \\ \hline \end{array}$ |  | $\begin{array}{r} 1,417,859,374 \\ 91,000,000 \\ \hline \end{array}$ | $\begin{array}{r} 1,417,859,374 \\ 91,000,000 \\ \hline \end{array}$ |
| TOTAL: | 1,535,627,549 |  | 1,508,859,374 | 1,508,859,374 |
| Premium: <br> Rate: | $\begin{array}{r} 1,070,085 \\ \mathbf{0 . 0 7 4 1} \end{array}$ | 30\% | $\begin{array}{r} 1,365,334 \\ \mathbf{0 . 0 9 6 3} \end{array}$ | $\begin{array}{r} 2,623,040 \\ \mathbf{0 . 1 8 5 0} \end{array}$ |
| Auto Phyiscal Dam: <br> Rate: | $\begin{array}{r} 251,160 \\ \mathbf{0 . 2 7 6 0} \end{array}$ | 30\% | $\begin{array}{r} 326,508 \\ \mathbf{0 . 3 5 8 8} \end{array}$ | $\begin{array}{r} 168,350 \\ \mathbf{0 . 1 8 5 0} \end{array}$ |
| Flood "buy-down" Insurance: <br> Rate: | $\begin{array}{r} 249,948 \\ \mathbf{0 . 0 1 7 3} \end{array}$ | 10\% | $\begin{array}{r} 269,848 \\ \mathbf{0 . 0 1 9 0} \end{array}$ |  |
| REMIF Flood Self-Fund: <br> Rate: | $\begin{array}{r} 500,000 \\ \mathbf{0 . 0 3 4 6} \end{array}$ |  | $\begin{array}{r} 500,000 \\ \mathbf{0 . 0 3 5 3} \end{array}$ |  |
| Cyber Coverages: Rate: | $\begin{aligned} & 12,862 \\ & \mathbf{0 . 0 0 0 9} \end{aligned}$ | 250\% | $\begin{aligned} & 44,183 \\ & \mathbf{0 . 0 0 3 1} \end{aligned}$ | $\begin{aligned} & 44,183 \\ & \mathbf{0 . 0 0 3 1} \end{aligned}$ |
| Pollution Coverages: <br> Rate: | $\begin{aligned} & 21,803 \\ & \mathbf{0 . 0 0 1 5} \end{aligned}$ | 150\% | $\begin{aligned} & 53,498 \\ & \mathbf{0 . 0 0 3 8} \end{aligned}$ | $\begin{aligned} & 53,498 \\ & \mathbf{0 . 0 0 3 8} \end{aligned}$ |
| CJPRMA "All Risk" and Wildfire Pool: Rate: | $\begin{array}{r} 203,851 \\ \mathbf{0 . 0 1 4 1} \end{array}$ | 50\% | $\begin{array}{r} 300,111 \\ \mathbf{0 . 0 2 1 2} \end{array}$ |  |
| Combined Premium ALL-IN: <br> Rate: | $\begin{array}{r} \hline 2,309,709 \\ \mathbf{0 . 1 5 0 4} \\ \hline \end{array}$ |  | $\begin{array}{r}2,859,481 \\ \mathbf{0 . 1 8 9 5} \\ \hline\end{array}$ |  |
| Member Self-Funding Cost Estimate between \$100,000 and a \$10,000 Deductible: Rate: |  |  | $\begin{array}{r} 231,111 \\ 0.0163 \end{array}$ |  |
| Combined Premium ALL-IN @ \$10K Deductible or w/ SelfFunding Costs: Rate: |  |  | $\begin{array}{rr} \$ 3,090,592 \\ \mathbf{0 . 2 0 4 8} \end{array}$ | $\begin{gathered} 2,835,573 \\ \mathbf{0 . 1 8 7 9} \end{gathered}$ |

## So what do the numbers above tell us?

At a $\$ 10,000$ deductible, the PRISM program is priced similarly as the CJPRMA program at $\$ 100,000$ member deductible; see the arrows on the bottom right of the prior page. But the PRISM program is risk sharing all of those 'buy-down' layers amongst many other member entities that creates a larger spread of risk to maintain greater certainty and program stability. We do not know the value to REMIF members of the lower, $\$ 10,000$ deductible since REMIF members have been adjusting those claims internally for the past few years.

In an effort to understand the apples-to-apples costs of these two programs, we first needed to determine the value of a $\$ 10,000$ deductible versus REMIF's current $\$ 100,000$. Since we did not have REMIF members' claims under the $\$ 100,000$ deductible to analyze, we looked at the actual claims from the past five years for four other municipal Pools: SCORE, NCCSIF, MBASIA, and of course PARSAC. (This data includes approximate 100 northern California cities).

We stratified the losses between $\$ 10,000$ and $\$ 100,000$ for "all risk" claim (excluding Flood and Vehicles). Average five year TIV was over $\$ 3,320$ Million and stratified claims were just under $\$ 550,000$. This results in a rate of .0163 (per 100's TIV). This analysis give us the ability to estimate, that REMIF members should fund somewhere it the range of $\$ 250,000$ if REMIF wants to fund this layer that PRISM will insure, and CJPRMA does not cover through their buy-down.

| Pool | $\frac{\text { Average } 5 \mathrm{Yr} \text {. }}{\underline{\text { Values }}}$ | Stratified 5 Yr. <br> Average Losses | Rate |
| :---: | :---: | :---: | :---: |
| MBASIA | 201,000,000 | 56,000 | 0.0279 |
| NCCSIF | 1,088,561,338.0 | 36,529 | 0.0034 |
| SCORE | 297,377,969 | 91,800 | 0.0309 |
| PARSAC | 1,733,119,591 | 355,675 | 0.0205 |
| TOTAL: | 3,320,058,898 | 540,004 | 0.0163 |

PARSAC stratified layer was similar to the sample group average; a higher rate of .0205 . This is very valuable information for CIRA to know - - if CIRA were to self-fund a shared risk layer at a $\$ 10,000$ deductible, but attach to excess at $\$ 100,000$ that would likely need to fund around $\$ 500,000$ each year to pay the losses in that layer. (This does not include either Flood or APD losses, and it does not include the cost to adjust these claims).

## What about the APIP "bolt-on" coverages that are unique advantages to that program?

Both Pollution and Cyber liability coverages have very recently quickly developed as deteriorating lines of coverage. Pollution and Cyber coverage are both "first party" and "third party" (liability) coverages. They were embedded into the APIP program beginning seven years ago because we found a way to avoid special applications for coverage that were difficult to complete, as well as using the large volume of the APIP program to purchase 'basic' limits needed by member public entities. PRISM did not do this; they created two separate joint purchase programs.

Unfortunately, the Cyber market is in crisis, and at this time, we do not have estimates for July $1^{\text {st }}$ renewal costs. Because of the high losses public entities are experiencing, we do know that premiums
will increase significantly. The same is true with Pollution, but more driven by the marketplace in general, then by specific municipal claims. Expectations of significant increases are likely, but unknown at this time. What we do know is that, no matter what program a city participates in, the same high percentage increases will occur. In addition:
$>$ REMIF members carry a $\$ 5$ million limit. PRISM currently has a $\$ 12$ million cyber limit.
$>$ REMIF will need to join these PRISM Pollution and Cyber Programs effective July 1, 2021.

## What is the status of PRISM final renewal quote?

An eight page Property Program INDICATION prepared by PRISM is attached to the end of this analysis. Please note that the earthquake section does not currently apply. Earthquake is separately insured through the D.I.C. policy currently purchased. We hope to roll earthquake into the PRISM program in a future year.

Please note the costs indicated on page \#7. The estimated annual premium is indicated at $\$ 2,623,010$ (plus taxes and PRISM fees still to be calculated). Because the PRISM program renews March $31^{\text {st }}$, and your participation will begin mid-term on July $1^{\text {st }}$, the first year's premium will be prorated to $\$ 1,962,010$. PRISM bills all members in July because of members' fiscal year budgeting, so you will likely collect the annual premium now and hold it until it is due.

Also important is that this pricing is based on currently estimated total insured values of $1,417,859,374$ as calculated on January 12, 2021. We will need to re-examine these values. For instance, it is clear in the spreadsheet above that you should move your automobile physical damage (APD) coverage, with values of XXX, to this program at the significantly lower rate.

When, and how, does REMIF have to decide their Property Program that renews July, 2021?
Making decisions regarding where you will secure the CIRA property renewal now will allows CIRA greater flexibility as you begin to evaluate your liability program options.

- Clearly, it will be best to have the merging groups in one program, rather than continuing in two separate property programs, especially with coverage and significant deductible differences.
- More importantly, because of the REMIF wildfire risk that some members face, it is difficult for REMIF to secure property coverage outside of the current CJPRMA program, but they cannot stay in that program if they are not a member for Liability. Although CJPRMA is one of three excess liability pools for consideration, and a good option for CIRA to consider, REMIF does not want it to be the only option you are able to evaluate because your property program would need to remind insured there.
- The indicated rate from PRISM for the core "All Risk" program at the $\$ 10,000$ deductible with no higher wildfire deductible is 18.5 cents. Based on an anticipated $30 \%$ in the marketplace the CJPRMA core program rate would be just half that ( 9.63 cents), but that does not include all of the buy-down programs and costs that members are self-funding. When we add all of these expected costs, the PRISM rate of 18.79 cents is significantly lower than the comparable rate of
20.48 cents, in an apples-to-apples understanding of what we think ALL IN costs will be in July, 2021. This are relatively close; as expected with municipal property programs.
- Although both programs offer similar terms and conditions, there are differences. PRISM's program:
- Includes flood coverage at all scheduled locations at the $\$ 10,000$ deductible.
- Includes Equipment (B\&M coverage at the same \$10,000 deductible.
- Includes APD for all vehicles on a Replacement cost basis at a $\$ 10,000$ deductible (but subject to different coverage terms to discuss), but values and losses for APD have not yet been reported to the carrier. There are important differences in these programs discussed on the last page where we have highlighted major coverage differences. It is valuable to review these differences listed below on page \#6 of this analysis.
- Does not include:
- The administration fees of either PRISM or CJPRMA.
- The Deadly Weapons coverage can be separately purchased through the Alliant program for a similar cost.

Please note that Alliant acts in the role of Retail Broker for all of these programs, and separately, the AUS Division acts in the Underwriting role for the APIP and PRISM programs, and this same team of professional property insurance underwriters manage both these programs. This is important because every property risk, and every property carrier, has specific needs and loss profiles. We this that, if approved by excess carriers, the PRISM options provides a good solution for CIRA to consider.

As stated earlier, REMIF cannot stay in the CJPRMA property program if they leave the liability program so they will lose this "buy-down" opportunity.

Combining REMIF and PARSAC's property programs is complex, to say the least. Both will be giving up something. It is likely, as the two pools finalize their merger as CIRA, they will need to consider creating their own shared risk program down the road. They may very likely self-insured to $\$ 100,000$, or higher, per occurrence and purchase lower cost access insurance as a result. We recommend developing a model for a self-insured CIRA Property layer.

Are there other options to consider? We do not believe there are any other property carriers outside these programs that would entertain the CIRA risks in the current market environment and the historical loss experience of both these Pools ${ }^{3}$.


Michael Simmons, Vice Chair - Public Entities, Alliant Insurance Services, Inc.

[^2]We have attached the following information for reference; it has been previously reviewed by the REMIF Board, and the CIRA Transition Committee. It reflects the major coverage differences between the APIP and PRISM programs bound July 2020 (and not necessarily coverages/limits for the upcoming year's renewal. It general, it summarizes the key difference between these programs.

Wildfire: This fire exposure is significantly responsible for the California municipal property insurance market deterioration. Many programs have high wildfires deductibles. Currently, the REMIF program has a wildfire deductible of $\$ 500,000$ for all members (with a buy-down through CJPRMA to $\$ 100,000$ ). PARSAC has two members that have had their wildfire deductible increased from the program deductible of $\$ 10,000$ to $\$ 100,000$ for FY20/21 (and we could see more cities facing this higher deductible in future years). PRISM does not have a wildfire deductible higher than the "all risk" deductible for members, and has no plans to institute one (they have the ability to control this since the deductible is within their self-insured layer). It is very unlikely they will consider this change in their program anytime in the near future,

Tax Interruption Coverage: This unique coverage is included on the APIP form, currently to a $\$ 1$ million limit, for ALL members, (and up to a $\$ 3$ million limit for members who report specific values). At least 2 PARSAC member cities have received prior claims payments under this coverage and benefited from the coverage advantage. Tax Interruption Coverage is a contingent business interruption exposure. It is not offered on the PRISM form. If PARSAC were to move to PRISM, members would lose this coverage advantage and there would be no way for us to find a separate market that would provide it at any cost.

Auto Physical Damage (APD): PARSAC currently purchases this coverage through APIP for all members on a full replacement cost basis. The coverage has no limit, so both "on the road" (collision) and "in-yard" (comprehensive) coverage is provided on a very unique replacement cost form that pays new for old. Currently PARSAC members have a $\$ 10,000$ deductible per loss. This has been an advantageous coverage with the current coverage conditions. REMIF also has this coverage in a different manner; it is purchased directly from a carrier (Hanover) separately from there APIP program. It also has a $\$ 10,000$ deductible per occurrence, and covers both comprehensive and collision on a replacement cost basis but with two important conditions; the maximum loss per vehicle is $\mathbf{\$ 1 . 5}$ million and the annual policy aggregate is $\mathbf{\$ 1 0}$ million. On the other hand, PRISM offers similar coverage but it is slightly more restrictive:

- Buses \$100,000 per occurrence
- Vehicles are still $\$ 10,000$ per occurrence, except $\$ 100,000$ per occurrence for any vehicle with replacement cost value greater than $\$ 250,000$.

Flood: PRISM covers Flood at the "All Risk" deductible for all members including the more hazardous zones, A and V. The pricing for this very important coverage benefit is reasonable. Currently, REMIF purchases flood coverage for all of its members through their current program. Currently, PARSAC only has flood coverage for three members. PARSAC members flood rate is $\$ .25$ per hundred dollars of value. The REMIF Flood rate indicated by PRISM in June was below $\$ .025-1 / 10^{\text {th }}$ the cost. This is because All PRISM members have full flood coverage, and REMIF's risks profile extremely well in comparison to the very few PARSAC members that currently purchase this coverage. Purchasing flood coverage would be a valuable improvement to PARSAC's program, but it may not be at this low of a rate; we will have to go through the underwriting process.

## PUBLIC RISK INNOVATION, SOLUTIONS, AND MANAGEMENT (PRISM) PROPERTY PROGRAM INDICATION

| ENTITY NAME | Redwood Empire Municipal Insurance Fund (REMIF) |
| :--- | :--- |
| COVERAGE TERM | March 31, 2021 to March 31, 2022 |

## PUBLIC RISK INNOVATION, SOLUTIONS, AND MANAGEMENT (PRISM) PROPERTY PROGRAM INDICATION

| LIMITS | Primary Limits (Defined as First \$25M in Coverage) |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | \$25,000,000 | 0 Per occur coverage VII | ce All Risk, Flo covered parties | and Earthquake Shock Towers I, II, III, IV, V, VI and |
|  | \$25,000,000 Al | 0 All Risk and Wayne Air | Flood limit appl t combined in | to Orange County and John wer VIII |
|  | \$25,000,000 Earthquak |  | $\$ 25,000,000$ Earthquake limit applies to John Wayne Airport in Tower VIII |  |
|  | Per occurrence limit applies to All Risk per Tower. Annual aggregate limit applies to Earthquake Shock and Flood per Tower. |  |  |  |
|  | REMIIF's schedule of locations would be in Tower VI. |  |  |  |
|  | Limits (including Excess): |  |  |  |
|  | Annual occurrence limits for All Risk and annual aggregate limits on Flood and Earthquake Shock applies as follows: |  |  |  |
|  | Tower | All Risk | *Flood | Earthquake Shock |
|  |  | \$300,000,000 | \$200,000,000 | \$100,000,000 |
|  |  | \$300,000,000 | \$200,000,000 | \$100,000,000 |
|  |  | \$300,000,000 | \$200,000,000 | \$100,000,000 |
|  |  | \$300,000,000 | \$200,000,000 | \$100,000,000 |
|  |  | \$300,000,000 | \$200,000,000 | \$100,000,000 |
|  |  | \$300,000,000 | \$200,000,000 | \$100,000,000 |
|  |  | \$300,000,000 | \$200,000,000 | \$ 25,000,000 |
|  | VIII | \$300,000,000 | \$200,000,000 | \$225,000,000 |
|  | $\begin{aligned} & \$ 300,0 \\ & \text { each T } \end{aligned}$ | 00 All Risk per | currence comb | d for all members within |
|  | \$200,0 memb | 00 Flood per oc within each Tow | urrence and an for locations in | al aggregate combined for all lood Zone A or V |
|  | \$225,0 memb | 00 Flood per oc within each Tow | urrence and an for locations out | al aggregate combined for all de Flood Zones A or V |
|  | Exces <br> \$300,0 <br> combin <br> III, IV, | Risk Only Ro <br> 00 per occurre excess of $\$ 300$ d VI separately | op Limit and annual a 0,000 per occu | egate for Towers I-VIII ence as respects Towers I, II, |
|  | \$200,0 County | 00 excess of $\$$ owhead Regiona | ,000,000 All R Medical Cente | only for San Bernardino |
|  | Exces \$365,0 <br> III, IV <br> in the a <br> separa | rthquake Roo 00 per occurre and VI comb al aggregate a | p Layer and in the an d, excess of $\$ 1$ espects Towers | al aggregate for Towers I, II, ,000,000 per occurrence and II, III, IV, V, and VI |

## PUBLIC RISK INNOVATION, SOLUTIONS, AND MANAGEMENT (PRISM) PROPERTY PROGRAM INDICATION

| SUBLIMITS | Terrorism each and every occurrence and in the annual aggregate shared by all members. <br> The following is understood to apply per occurrence and per Tower unless otherwise stated. |
| :---: | :---: |

## PUBLIC RISK INNOVATION, SOLUTIONS, AND MANAGEMENT (PRISM) PROPERTY PROGRAM INDICATION

| BOILER \& MACHINERY SUBLIMITS | $\$ 100,000,000$ Per Accident Boiler \& Machinery (Participating Members <br> only)  <br> $\$$ $5,000,000$ Errors and Omissions <br> $\$$ $2,000,000$ Each Incident, each member aggregate. Earthquake <br> Resultant Damage - applies only to locations where <br> Earthquake Shock is purchased under All Risk Property <br>  Policy  <br> $\$$ $2,000,000$ Service Interruption <br> $\$$ $2,000,000$ Consequential Damage (spoilage of food, medicine and <br> blood)   <br> $\$$ $2,000,000$ Ammonia Contamination <br> $\$ 2,000,000$ Hazardous Substances  <br> $\$$ $2,000,000$ Water Damage <br> $\$$ $2,000,000$ Media <br> $\$$ $1,000,000$ Computer Equipment - Blanket All Members <br> Newly Acquired Locations included up to 365 days   |
| :---: | :---: |
| MAJOR EXCLUSIONS (Including but not limited to) | - Aircraft, Watercraft, and Rolling Stock (except unmanned aircraft (drones) as defined in the MOC) <br> - Standing Timber, Growing Crops and Animals (except Specially Trained Animals) <br> - Unscheduled Dams, Piers, Wharves, Docks, Underground Pipes, Outfalls, Tunnels, Bridges, Catwalks, Roadways, Highways, Streets, Sidewalks, Culverts, Street Lights and Traffic Signals, etc., in excess of $\$ 3,000,000$ sublimit unless scheduled <br> - Land and Land values (and water excess of primary limit) <br> - Property in due course of Ocean Marine Transit <br> - Shipment by mail after delivery into the custody of the Post Office Department <br> - Course of Construction (non-incidental excess of $\$ 100,000,000$ project value) <br> - Power Transmission and Feeder Lines more than 1000 feet from insureds premises <br> - Railroad Property except while in Course of Construction <br> - Pollution, Contamination or Seepage (except Accidental Contamination) <br> - Contractors Equipment, unless scheduled <br> - Licensed Vehicles, unless scheduled <br> - Electronic Date Recognition <br> - Computer Virus/Cyber Exclusion <br> - Asbestos excess of the primary limit <br> - Communicable Disease |

## PUBLIC RISK INNOVATION, SOLUTIONS, AND MANAGEMENT (PRISM) PROPERTY PROGRAM INDICATION

| MAJOR EXCLUSIONS (Including but not limited to) Continued | - Error in Design, Faulty Workmanship and Faulty Materials (except for resulting damage) |
| :---: | :---: |
| OPTIONAL COVERAGES | A) EARTHQUAKE, AT SCHEDULED LOCATIONS ONLY <br> - At scheduled locations on file with PRISM only <br> B) CONTRACTORS (MOBILE) EQUIPMENT <br> - Summary of Equipment schedule required by type and overall value <br> - Including Earthquake, Flood and Collision <br> - Actual Cash Value or Replacement Cost Valuation at Covered party option (based on value declared) <br> C) LICENSED VEHICLES <br> - Summary of Vehicles schedule required by type and overall value <br> - Including Earthquake, Flood and Collision <br> - Actual Cash Value or Replacement Cost Valuation at Covered party option (based on value declared) <br> D) FINE ARTS <br> - Unscheduled automatically covered to $\$ 2,500,000$ per occurrence <br> - Per schedule over $\$ 2,500,000$ |
| DEDUCTIBLES | All Risk <br> \$ 10,000 per occurrence <br> Boiler and Machinery Breakdown <br> \$ 10,000 per occurrence <br> Earthquake Shock <br> $5 \%$ * of total values per unit** per occurrence subject to a minimum of $\$ 100,000$ and separate $\$ 50,000,000$ maximum for Tower VI less the PRISM Buy-Down credit as described below <br> PRISM Deductible Buy Down Credit <br> For all Earthquake events occurring in a single policy year in Towers I-VIII, PRISM is responsible for a maximum credit of $3 \%$ of total values per unit, per occurrence, per covered party subject to a maximum of $\$ 30,000,000$ per occurrence and annual aggregate for all covered parties. It is further understood and agreed that if the $\$ 30,000,000$ annual aggregate PRISM Deductible Buy-Down credit is exceeded by an accumulation of loss(es) from one or more events in a single policy year, the payments to individual covered parties will be made on a proportional basis. The proportion shall be the ratio of the total $\$ 30,000,000$ maximum credit available to all covered parties in a single year divided by the total amount payable has no $\$ 30,000,000$ maximum credit been imposed |

## PUBLIC RISK INNOVATION, SOLUTIONS, AND MANAGEMENT (PRISM) PROPERTY PROGRAM INDICATION

| DEDUCTIBLES <br> Continued | Flood <br> For locations outside the 100 year flood zone, the flood deductible is $\$ 25,000$ per covered party or the All Risk deductible whichever is higher, per occurrence. <br> For locations within the 100 year flood zone (as defined by FEMA) the flood deductible for the covered party(s) is $\$ 100,000$ per occurrence or the All Risk deductible whichever is higher. <br> Named Storm <br> $2 \%$ of total values per unit** per occurrence subject to a $\$ 500,000$ minimum <br> Piers (including Flood/Wavewash <br> \$ 500,000 per occurrence <br> Vehicles and Mobile Equipment: <br> Non-Collision/Collision: <br> If the member elects Actual Cash Value (ACV) or Replacement Cost Value (RCV) coverage then the applicable deductible will be $\$ 10,000$ per occurrence except $\$ 100,000$ per occurrence for any vehicle with RCV greater than $\$ 250,000$ <br> Buses <br> \$ 100,000 per occurrence <br> All Other Perils and Coverages <br> Please reference the Schedule of Deductibles for individual covered party deductibles <br> ** Unit defined as separate building, contents within separate building, property in the open (yard), or time element coverage at separate building |
| :---: | :---: |
| NEW LOCATIONS | Non-Earthquake Locations <br> It is understood and agreed that the Memorandum of Coverage is automatically extended to cover additional property and interests including new covered parties, which may be acquired or otherwise become at the risk of the covered party during the Memorandum period, within the Territorial <br> Limits, where the values for such additional property and/or interest including new covered parties do not exceed \$100,000,000 (for 100\%) per acquisition. Nil additional premium shall be charged in respect of such additional property and PRISM shall be advised of such addition by quarterly reporting. <br> In the event that the values of such additional property and/or interest including new covered parties exceed $\$ 100,000,000$ (for 100\%) per acquisition, details of such additional property and/or interests are to |

## PUBLIC RISK INNOVATION, SOLUTIONS, AND MANAGEMENT (PRISM) PROPERTY PROGRAM INDICATION

| NEW LOCATIONS Continued | advised to PRISM prior to effective date and will be added at rates to be agreed by PRISM. <br> Except for new and existing covered parties of a Joint Powers Authority, additions and deletions of Real and Personal Property and associated Business Interruption/ Extra Expense shall not be subject to any reporting to PRISM where the total insured values do not exceed \$10,000,000 per acquisition subject to a $\$ 100,000,000$ in the annual aggregate all acquisitions combined. <br> Earthquake Locations <br> It is understood and agreed that this Memorandum is automatically extended to cover additional property and interests including new covered parties, which may be acquired or otherwise become at the risk of the covered party during the Memorandum period, within the Territorial Limits, where the values for such additional property and/or interest including new covered parties do not exceed $\$ 25,000,000$ (for $100 \%$ ) per acquisition. Nil additional premium shall be charged in respect of such additional property and PRISM shall be advised of such additions by quarterly reporting (Applies to Towers I, II, III, IV, V and VI only). <br> Optional Coverages <br> In the event that a covered party who does not purchase coverage for vehicles and/or contractors equipment and/or scheduled Fine Arts at the inception/anniversary of this Memorandum subsequently purchases same an additional premium will be due to PRISM. |
| :---: | :---: |
| ESTIMATED PREMIUM (Annualized) | \$ 2,623,010 |
| PRO RATA PREMIUM (7/1/2021 to 3/31/22) | \$ 1,962,010 |
| BROKER | ALLIANT INSURANCE SERVICES, INC. <br> Ralph Hurst, President <br> Thomas Bryson, Senior Vice President Miike Simmons, Vice Chairman Sara Carlisle, Program Specialist- Lead |
| INDICATION DATE | March 12, 2021 |

## PUBLIC RISK INNOVATION, SOLUTIONS, AND MANAGEMENT (PRISM) PROPERTY PROGRAM INDICATION

This indication is provided as a matter of convenience and information only. All information included in this indication, including but not limited to personal and real property values, locations, operations, products, data, automobile schedules, financial data and loss experience, is based on facts and representations supplied to Alliant Insurance Services, Inc. by you. This indication does not reflect any independent study or investigation by Alliant Insurance Services, Inc. or its agents and employees.

Please be advised that this indication is also expressly conditioned on there being no material change in the risk between the date of this indication and the inception date of the proposed policy (including the occurrence of any claim or notice of circumstances that may give rise to a claim under any policy which the policy being proposed is a renewal or replacement). In the event of such change of risk, the insurer may, at its sole discretion, modify, or withdraw this indication whether or not this offer has already been accepted.

This indication is not confirmation of insurance and does not add to, extend, amend, change, or alter any coverage in any actual policy of insurance you may have. All existing policy terms, conditions, exclusions, and limitations apply. For specific information regarding your insurance coverage, please refer to the policy itself. Alliant Insurance Services, Inc. will not be liable for any claims arising from or related to information included in or omitted from this indication of insurance

Alliant embraces a policy of transparency with respect to its compensation from insurance transactions. Details on our compensation policy, including the types of income that Alliant may earn on a placement, are available on our website at www.alliant.com. For a copy of our policy or for any inquiries regarding compensation issues pertaining to your account you may also contact us at: Alliant Insurance Services, Inc., Attention: General Counsel, 701 B Street, 6th Floor, San Diego, CA 92101.

Analyzing insurers' over-all performance and financial strength is a task that requires specialized skills and in-depth technical understanding of all aspects of insurance company finances and operations. Insurance brokerages such as Alliant Insurance typically rely upon rating agencies for this type of market analysis. Both A.M. Best and Standard and Poor's have been industry leaders in this area for many decades, utilizing a combination of quantitative and qualitative analysis of the information available in formulating their ratings.
A.M. Best has an extensive database of nearly 6,000 Life/Health, Property Casualty and International companies. You can visit them at www.ambest.com. For additional information regarding insurer financial strength ratings visit Standard and Poor's website at www.standardandpoors.com.

Our goal is to procure insurance for you with underwriters possessing the financial strength to perform. Alliant does not, however, guarantee the solvency of any underwriters with which insurance or reinsurance is placed and maintains no responsibility for any loss or damage arising from the financial failure or insolvency of any insurer. We encourage you to review the publicly available information collected to enable you to make an informed decision to accept or reject a particular underwriter. To learn more about companies doing business in your state, visit the Department of Insurance website for that state.

## AGENDA ITEM SUMMARY

## TITLE: CIRA MERGER: DISCUSSION AND DIRECTION TO STAFF AND POSSIBLE ACTION ON TRANSITION COMMITTEE RECOMMENDATIONS (I) AND (A)

PRESENTED BY: AMY NORTHAM, GENERAL MANAGER

## ISSUE

Exploring a partnership with another JPA/Pool requires ratification by the Board of Directors. The REMIF Board of Directors directed staff and the REMIF Executive Committee to explore a strategic partnership with PARSAC.

## BACKGROUND

As the Board of Directors is aware, the Redwood Empire Municipal Insurance Fund (REMIF), representing 15 small to medium sized cities/towns, is a self-insured joint powers authority. It was formed in 1976 with a mission to provide workers' compensation coverage and to handle the insurance claims, benefit programs, and risk management needs of the members. Coverage was expanded in the mid-1980s to include liability coverage and other lines.

The Public Agency Risk Sharing Authority of California (PARSAC), representing 35 small to medium sized cities/towns, is also a self-insured joint powers authority. It was formed in 1986 with a mission to provide liability coverage in response to the insurance crisis that eliminated commercial coverage for cities.

Like REMIF, PARSAC provides a self-funded liability program for general liability, public officials' errors and omissions, auto liability and employment practices liability coverage. They have additional coverage programs including self-funded workers' compensation, group purchase property, special events, fidelity bonds, cyber liability and ancillary benefits.

PARSAC focuses on managing and maintaining a financially stable risk sharing pool and has a conservative funding and investment philosophy, which has given them programs that are funded in excess of the $90 \%$ confidence level. The PARSAC Board's philosophy is to embrace diverse opinions, have discussions that are constructive and collaborative, encourage participation from the members, balance member interests with those of the pool and work together towards a greater good.

REMIF and PARSAC share a similar culture in that both pools are member owned, member governed, member driven and exist to serve the members. Both pools also serve small to medium sized cities/towns, and share similar footprints in that they have Clearlake, we have Lakeport; they have Calistoga and Yountville, we have St. Helena; they have Ferndale, Trinidad, and Blue Lake; we have Eureka, Arcata and Fortuna.

PARSAC's president, John Gillison, says of PARSAC: "PARSAC is unique in my experience because of the shared governance structure and our collective values which place good governance and sound fiscal policy first, above individual self-interests. We work well together because we share risk in a partnership, not merely a business relationship. As member agencies, we can exchange knowledge, learn from one another, work together in unique ways that span the distances between our agencies and tailor the services the pool provides to the greatest common good while preserving our unique individuality."

When I met with the REMIF member agencies, a few members expressed an interest to "grow" REMIF out of a need to add more stability to the programs, as well as to spread both the risk and the costs amongst more members. Of course, that growth would need to be strategic, with careful consideration and intentional actions.

At the REMIF Board of Directors meeting in April of 2019, the Board directed staff to explore a strategic partnership with PARSAC. Per the Board's direction, REMIF initially entered into an exploratory partnership agreement with PARSAC with the concept of exploring the feasibility and practicability of a strategic partnership, as well as to explore the benefits in sharing resources, sharing expenses, and drawing on strengths. While exploring this partnership, consideration was given to everything from succession planning, more robust, stable programs, to long term program sustainability to redundancies. It was ultimately decided that REMIF and PARSAC would merge, but the REMIF health plan would remain a separate entity.

At the September of 2019 meeting, the Board directed the Executive Committee (and staff) to further explore the merger, including direction to explore options for an alternative experience modifier for the workers' compensation program. The merger will result in the creation of a new organization, called CIRA or the California Intergovernmental Risk Authority.

In response, both PARSAC and REMIF created a joint "Transition Committee," which contains REMIF's Executive Committee and representatives from PARSAC's Board of Directors, Executive Committee and other Committees. The Transition Committee meets monthly to discuss various aspects of the merger and provides recommendations to the Board of Directors.

## I. TRANSITION COMMITTEE

## A. March 1, 2021 Transition Committee meeting

At the October 19, 2020 Transition Committee meeting, the committee members reviewed:

1. Actuarial reports (general liability, employment practices liability, workers' compensation), the experience modification and options for premium allocation, and exposure data used for cost allocation formula.

Overall, CIRA's projected increase for the auto, liability, and employment practices liability program is projected to increase 6.8\% (over REMIF's and PARSAC's prior program year).

Overall, CIRA's projected increase for the workers' compensation is projected to decrease $7.1 \%$ (over REMIF's and PARSAC's prior program year).

Please note: These figures include excess coverage, general administration and the CIRA budget. The excess coverage is based on estimates at this point, as is general administration and the CIRA budget.

The Committee recommends the REMIF Board of Directors approve the actuarial reports for general liability, employment practices liability and workers' compensation, as well as the experience modification and options for premium allocation and exposure data used for the cost allocation formula for the liability program.

## 2. General Liability Master Program Document

Staff prepared a "Master Program Document" for the general liability program, following form to the Workers' Compensation Master Program Document. This document covers the program elements (to include funding, deposit contributions, self-insured retentions, experience modification, and excess coverage), administration, claims administration (to include settlement authority), the defense panel, participation, termination and dissolution of the program and amendments.

## The Committee recommends the REMIF Board of Directors approve the General Liability Master Program Document.

## 3. Review and approve recommendations from Transition Finance Committee

The Committee reviewed a draft budget (version 2) and contracts from various vendors (coverage counsel, general counsel, loss control, IT support, and the OPEB/Pension actuary.

At this point, a final budget has not been adopted.

## 4. Options for the Excess Workers' Compensation Coverage and Excess Liability

The Committee has been examining three options for the excess workers' compensation: a fully insured program (through Safety National, REMIF's current partner), PRISM (formerly known as CSAC EIA), and LAWCX.

The Committee has been examining three options for the excess liability program as well: CJPRMA (REMIF's current partner), PRISM (PARSAC's current partner), and CARMA (an excess pool).

At the point, the committee has not selected excess options.

## B. March 15, 2021 Transition Committee meeting

At the Transition Committee meeting the week prior (see above), recommendations for experience modification, options for the premium allocation and exposure data were determine for the workers' compensation program. This meeting (March 15, 2021) was to determine experience modification, options for the premium allocation and exposure data were examined for the liability program. The Committee ultimately selected a blended methodology, and one that will step us into our final allocation over a period of 5 years. This option provided the most smoothing for the liability rates.

The Committee recommends the REMIF Board of Directors approve the committee's recommendation of option 3a on the attached "California Intergovernmental Risk Authority Liability, Fiscal Year 2021-22 Funding - Discounted 80\% Confidence Level - \$1M SIR, Funding allocation Options."

## II. DEPARTMENT OF INDUSTRIAL RELATIONS

Because of the merger, REMIF will need to re-apply to permissibly self-insure under the Department of Industrial Relations. To do so, the REMIF members will need to adopt a resolution with the application. Staff will be working with the members to do so.

## FISCAL IMPACT

Unknown

## RECOMMENDED ACTION

The Transition Committee, which includes the REMIF Executive Committee, recommends the REMIF Board of Directors adopt the actions as outlined below.

1. The Committee recommends the REMIF Board of Directors approve the actuarial reports for general liability, employment practices liability and workers' compensation, as well as the experience modification options for premium allocation, and exposure data used for the cost allocation formula for the liability program.
2. The Committee recommends the REMIF Board of Directors approve the General Liability Master Program Document.
3. The Committee recommends the REMIF Board of Directors approve the committee's recommendation of option 3a on the attached "California Intergovernmental Risk Authority Liability, Fiscal Year 2021-22 Funding - Discounted 80\% Confidence Level - \$1M SIR, Funding allocation Options."

## ATTACHMENTS

4.1 Transition Committee Agenda Packet (03/01/21)
4.2 Transition Committee presentation on liability allocation (03/15/21)

# AGENDA <br> PARSAC/REMIF TRANSITION COMMITTEE MEETING 

March 1, 2021 - 9:00 a.m. - 2:00 p.m.
Zoom Meeting
Link: https://zoom.us/j/98508113819?pwd=R2gwMmQ1WGMwdUIzcUc1SjhPMEgzUT09
Dial: +1 (669) 900-9128
Meeting ID: 98508113819
Passcode: 517266

## CALL TO ORDER <br> ROLL CALL

## Page

 ACTION AND INFORMATION CALENDAR
## RECOMMENDATION

No. *denotes attachments enclosed for this item

1. Actuarial Reports Approve
2. General Liability Master Program Document Approve Amy Northam
3. Review and Approve Recommendations from Approve Transition Finance Committee
a. General Liability/EPL
b. Workers' Compensation
c. EPL Ex-Mod/Premium Allocation Options
d. Exposure Data Used for Cost Allocation Formula
a. CIRA Budget Draft 2
b. Coverage Counsel - Murphy, Campbell \& Alliston
c. General Counsel - BB\&K
d. Loss Control - Boretti
e. IT - Office Information Systems (OIS)
f. OPEB/Pension Actuary - MacLeod Watts
4. Excess Options Update

Review and discuss
5. Timelines - Kin Ong \& Amy Northam
6. Schedule Next Meetings:
a. Transition Committee - TBD
b. Transition Finance Committee April 7, 2021
c. PARSAC/REMIF Board - May 26, 2021
d. CIRA Board Meeting - July 1, 2021

## ADJOURNMENT OF MEETING

# Bickmore Actuarial 

Actuarial Review of the Self-Insured General Liability Program

Forecast for Program Year 2021-22

Presented to
California Intergovernmental Risk Authority

February 26, 2021 - DRAFT Actuarial

Friday, February 26, 2021

Mr. Kin Ong<br>General Manager<br>Public Agency Risk Sharing Authority of California<br>1525 Response Road, Suite 1<br>Sacramento, CA 95815<br>Ms. Amy Northam<br>General Manager<br>Redwood Empire Municipal Insurance Fund 414 West Napa Street<br>Sonoma, California 95476

## RE: Actuarial Review of the Self-Insured General Liability Program

Dear Kin and Amy:
As requested, we have completed our estimates of general liability claim costs, experience modification calculations, and premium allocation for the newly formed California Intergovernmental Risk Authority (CIRA). Assuming an SIR of \$1,000,000 per occurrence, we estimate the ultimate cost of claims and expenses in the pooled layer (i.e. above member deductibles and below pool SIR) for claims incurred during the 2021-22 program year to be $\$ 5,511,832$. This amount includes allocated loss adjustment expenses (ALAE), unallocated loss adjustment expenses (ULAE) and a discount for anticipated investment income. ALAE is the direct cost associated with the defense of individual claims (e.g. legal fees, investigation fees, court charges). ULAE is the cost to administer all claims to final settlement, which may be years into the future (e.g. claims adjusters' salaries, taxes). The discount for investment income is calculated based on the likely payout pattern of the Authority's claims, assuming a $1.5 \%$ return on investments per year. For budgeting purposes, the expected costs of 2021-22 claims translate to rates of $\$ 1.429$ per $\$ 100$ of payroll.

The estimates in this report do not include any provision for the potential impact on the cost of claims because of the coronavirus (COVID-19) pandemic.

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The table below shows our funding recommendations for CIRA for the 2021-22 fiscal year.

> California Intergovernmental Risk Authority Self-Insured Liability Program
> Loss and LAE Funding Guidelines for 2021-22
> Self-Insured Retention (SIR) of $\$ 1,000,000$

|  | Expected | Marginally Acceptable 70\% CL | Recommended Range |  |  | Conservative 90\% CL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { Low } \\ 75 \% \text { CL } \end{gathered}$ | Target 80\% CL | $\begin{gathered} \text { High } \\ 85 \% \text { CL } \end{gathered}$ |  |
| Loss and ALAE | \$4,927,378 | \$5,700,976 | \$6,070,529 | \$6,504,138 | \$7,046,150 | \$7,770,474 |
| ULAE | 820,000 | 950,000 | 1,010,000 | 1,080,000 | 1,170,000 | 1,290,000 |
| Investment Income Offset | $(235,546)$ | $(273,786)$ | $(289,952)$ | $(308,520)$ | $(334,230)$ | $(368,315)$ |
| Discounted Loss and LAE | \$5,511,832 | \$6,377,190 | \$6,790,577 | \$7,275,618 | \$7,881,920 | \$8,692,159 |
| Non-Claims Related Expenses | 1,262,814 | 1,262,814 | 1,262,814 | 1,262,814 | 1,262,814 | 1,262,814 |
| Indicated Funding | \$6,774,646 | \$7,640,004 | \$8,053,391 | \$8,538,432 | \$9,144,734 | \$9,954,973 |
| Rate per \$100 of 2021-22 Payroll | \$1.756 | \$1.981 | \$2.088 | \$2.214 | \$2.371 | \$2.581 |

The funding recommendations shown in the table above do not include any recognition of the existing funding margin (surplus or deficit) at June 30, 2021.

Note that the figures in the above table are for loss and ALAE in the pool layer, claims administration and general administration costs. They exclude excess insurance premiums.

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We provide the following allocation of premiums, which include ultimate loss and ALAE for loss and ALAE in the pool layer ( $\$ 6,865,618$ ) assuming a $\$ 1,000,000$ retention per occurrence at the $80 \%$ confidence level on a discounted basis at $1.5 \%$, claims administration costs ( $\$ 410,000$ ), overhead expenses ( $\$ 1,262,814$ ), excess insurance costs ( $\$ 5,000,000$ ), EPL loss and ALAE $(\$ 1,155,213)$ at the discounted $80 \%$ confidence level and ERMA premiums ( $\$ 1,353,696$ ). (see Rates Exhibit 2)

| Member | Xmod | $\begin{aligned} & 80 \% \text { CL } \\ & \frac{\text { Loss \& }}{\text { ALAE }} \end{aligned}$ | Claims Admin Costs | Admin Costs | Excess Insurance Costs | $\begin{gathered} \text { EPL } \\ \text { 80\% CL } \\ \text { Loss \& ALAE } \\ \hline \end{gathered}$ | ERMA Premium | Total Premium |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amador City | 0.777 | \$7,356 | \$35 | \$108 | \$454 | \$164 | \$123 | \$8,241 |
| Arcata | 1.104 | 284,103 | 15,185 | 46,771 | 129,690 | 50,971 | 35,112 | 561,832 |
| Avalon | 1.671 | 185,483 | 9,914 | 30,535 | 68,059 | 21,507 | 18,426 | 333,925 |
| Belvedere | 0.720 | 44,822 | 2,396 | 7,379 | 38,160 | 12,059 | 10,331 | 115,146 |
| Blue Lake | 0.956 | 12,388 | 662 | 2,039 | 6,532 | 2,567 | 1,768 | 25,957 |
| California City | 1.351 | 130,798 | 6,991 | 21,533 | 92,510 | 12,704 | 25,046 | 289,581 |
| Calimesa | 0.814 | 41,915 | 2,240 | 6,900 | 27,571 | 9,970 | 7,465 | 96,060 |
| Calistoga | 0.673 | 92,938 | 4,968 | 15,300 | 73,927 | 30,952 | 20,015 | 238,100 |
| Citrus Heights | 0.830 | 242,234 | 12,947 | 39,878 | 278,899 | 36,558 | 75,509 | 686,025 |
| Clearlake | 1.075 | 90,350 | 4,829 | 14,874 | 61,873 | 20,484 | 16,751 | 209,161 |
| Cloverdale | 1.403 | 155,618 | 8,318 | 25,619 | 55,899 | 21,970 | 15,134 | 282,557 |
| Coalinga | 1.104 | 161,599 | 8,637 | 26,603 | 89,777 | 29,721 | 24,306 | 340,644 |
| Cotati | 1.162 | 120,749 | 6,454 | 19,878 | 52,392 | 22,759 | 14,185 | 236,418 |
| Eureka | 1.051 | 358,717 | 19,173 | 59,054 | 209,378 | 66,166 | 56,687 | 769,175 |
| Ferndale | 0.777 | 13,860 | 741 | 2,282 | 8,989 | 3,905 | 2,434 | 32,211 |
| Fort Bragg | 0.805 | 84,687 | 4,526 | 13,942 | 53,018 | 20,837 | 14,354 | 191,364 |
| Fortuna | 0.805 | 113,230 | 6,052 | 18,641 | 70,887 | 27,860 | 19,192 | 255,861 |
| Grass Valley | 1.836 | 276,559 | 14,782 | 45,529 | 92,366 | 29,189 | 25,007 | 483,430 |
| Healdsburg | 0.863 | 397,958 | 21,271 | 65,514 | 232,530 | 91,390 | 62,955 | 871,618 |
| Highland | 2.342 | 102,148 | 5,460 | 16,816 | 41,660 | 11,911 | 11,279 | 189,274 |
| Lakeport | 1.300 | 114,828 | 6,137 | 18,904 | 47,288 | 18,899 | 12,803 | 218,859 |
| Nevada City | 1.066 | 63,170 | 3,376 | 10,399 | 36,325 | 12,026 | 9,835 | 135,132 |
| Placentia | 0.703 | 162,329 | 8,676 | 26,724 | 220,591 | 28,915 | 59,723 | 506,958 |
| Placerville | 1.769 | 242,772 | 12,976 | 39,966 | 101,024 | 18,507 | 27,351 | 442,597 |
| Plymouth | 0.948 | 16,092 | 860 | 2,649 | 8,556 | 3,363 | 2,316 | 33,836 |
| Point Arena | 1.572 | 11,926 | 637 | 1,963 | 3,824 | 1,503 | 1,035 | 20,889 |
| Rancho Cucamonga | 0.586 | 77,922 | 4,165 | 12,828 | 405,872 | 0 | 109,885 | 610,672 |
| Rancho Cucamonga FD | 0.442 | 47,846 | 2,557 | 7,877 | 198,290 | 29,209 | 53,685 | 339,463 |
| Rancho Santa Margarita | 0.724 | 45,737 | 2,445 | 7,529 | 33,824 | 12,231 | 9,158 | 110,924 |
| Rohnert Park | 1.645 | 787,141 | 42,072 | 129,584 | 293,498 | 92,749 | 79,461 | 1,424,506 |
| San Juan Bautista | 0.777 | 16,578 | 886 | 2,729 | 10,752 | 4,226 | 2,911 | 38,082 |
| Sebastopol | 1.541 | 231,957 | 12,398 | 38,186 | 75,859 | 32,953 | 20,538 | 411,891 |
| Sierra Madre | 1.675 | 220,175 | 11,768 | 36,247 | 80,624 | 23,051 | 21,828 | 393,693 |
| Sonoma | 0.978 | 85,935 | 4,593 | 14,147 | 44,305 | 17,413 | 11,995 | 178,388 |
| South Lake Tahoe | 0.790 | 120,371 | 6,434 | 19,816 | 278,896 | 36,557 | 75,508 | 537,583 |
| St. Helena | 0.727 | 135,547 | 7,245 | 22,315 | 99,821 | 36,095 | 27,025 | 328,047 |
| Tehama | 1.051 | 1,758 | 94 | 289 | 843 | 331 | 228 | 3,543 |
| Trinidad | 0.790 | 7,254 | 388 | 1,194 | 4,628 | 1,819 | 1,253 | 16,535 |
| Truckee | 0.603 | 153,810 | 8,221 | 25,321 | 156,287 | 44,685 | 42,313 | 430,637 |
| Twentynine Palms | 2.164 | 129,567 | 6,925 | 21,330 | 32,046 | 13,417 | 8,676 | 211,962 |
| Ukiah | 0.782 | 338,582 | 18,097 | 55,739 | 265,496 | 83,900 | 71,880 | 833,696 |
| Watsonville | 0.853 | 147,098 | 7,862 | 24,216 | 525,959 | 0 | 142,398 | 847,534 |
| Wheatland | 0.814 | 36,079 | 1,928 | 5,940 | 22,349 | 9,708 | 6,051 | 82,055 |
| Wildomar | 1.256 | 46,307 | 2,475 | 7,623 | 18,582 | 7,303 | 5,031 | 87,322 |
| Willits | 1.932 | 177,798 | 9,503 | 29,270 | 46,379 | 18,228 | 12,557 | 293,735 |
| Windsor | 0.989 | 242,171 | 12,944 | 39,868 | 131,039 | 47,383 | 35,478 | 508,883 |
| Yountville | 0.680 | 64,017 | 3,422 | 10,539 | 50,376 | 18,216 | 13,639 | 160,207 |
| Yucaipa | 1.457 | 134,897 | 7,210 | 22,207 | 68,162 | 12,487 | 18,454 | 263,416 |
| Yucca Valley | 1.566 | 88,442 | 4,727 | 14,560 | 53,935 | 6,396 | 14,602 | 182,663 |


| Member | Xmod | $80 \% \mathrm{CL}$ $\begin{aligned} & \text { Loss \& } \\ & \text { ALAE }\end{aligned}$ | Claims Admin Costs | Admin Costs | Excess Insurance Costs | $\begin{gathered} \text { EPL } \\ \text { 80\% CL } \\ \text { Loss \& ALAE } \\ \hline \end{gathered}$ | ERMA <br> Premium | Total Premium |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Menifee |  | 0 | 37,545 | 115,640 | 0 | 0 | 0 | 153,185 |
| Pacific Grove |  | 0 | 1,502 | 4,625 | 0 | 0 | 0 | 6,127 |
| West Hollywood |  | 0 | 4,348 | 13,393 | 0 | 0 | 0 | 17,741 |
| Total |  | \$6,865,618 | \$410,000 | \$1,262,814 | \$5,000,000 | \$1,155,213 | \$1,353,696 | \$16,047,341 |

The report that follows outlines the scope of our study, its background, and our conclusions, recommendations, and assumptions. Judgments regarding the appropriateness of our conclusions and recommendations should be made only after studying the report in its entirety, including the graphs, attachments, exhibits and appendices. Our report has been developed for the Authority's internal use. It is not intended for general circulation.

We appreciate the opportunity to be of service to CIRA in preparing this report. Please feel free to call Mike Harrington at (916) 244-1162, Becky Richard at (916) 244-1183, or David Kim at (916) 244-1166 with any questions you may have concerning this report.

Sincerely,
Bickmore Actuarial

## DRAFT

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## I. BACKGROUND

The California Intergovernmental Risk Authority (CIRA) will be formed to provide pooled insurance coverage to cities in the State of California. CIRA will begin its self-insured liability program on July 1, 2021. Its self-insured retention will be $\$ 1,000,000$, and excess coverage for claims exceeding that level. Claims administration services are provided by various third-party claims administrators.

The members of CIRA and their deductibles are shown in the table below.

| Member | Deductible | Member | Deductible |
| :---: | :---: | :---: | :---: |
| Amador City | $\$ 10,000$ | Point Arena | $\$ 5,000$ |
| Arcata | 5,000 | Rancho Cucamonga | 500,000 |
| Avalon | 25,000 | Rancho Cucamonga FD | 250,000 |
| Belvedere | 25,000 | Rancho Santa Margarita | 10,000 |
| Blue Lake | 5,000 | Rohnert Park | 25,000 |
| California City | 100,000 | San Juan Bautista | 5,000 |
| Calimesa | 10,000 | Sebastopol | 5,000 |
| Calistoga | 10,000 | Sierra Madre | 25,000 |
| Citrus Heights | 100,000 | Sonoma | 5,000 |
| Clearlake | 50,000 | South Lake Tahoe | 250,000 |
| Cloverdale | 5,000 | St. Helena | 10,000 |
| Coalinga | 25,000 | Tehama | 5,000 |
| Cotati | 5,000 | Trinidad | 5,000 |
| Eureka | 25,000 | Truckee | 25,000 |
| Ferndale | 5,000 | Twentynine Palms | 10,000 |
| Fort Bragg | 5,000 | Ukiah | 25,000 |
| Fortuna | 5,000 | Watsonville | 500,000 |
| Grass Valley | 25,000 | Wheatland | 5,000 |
| Healdsburg | 5,000 | Wildomar | 5,000 |
| Highland | 100,000 | Willits | 5,000 |
| Lakeport | 10,000 | Windsor | 10,000 |
| Nevada City | 25,000 | Yountville | 10,000 |
| Placentia | 100,000 | Yucaipa | 50,000 |
| Placerville | 50,000 | Yucca Valley | 100,000 |
| Plymouth | 5,000 |  |  |

The purpose of this review is to provide a guide to CIRA to determine reasonable funding levels for its self-insurance program in compliance with Governmental Accounting Standards Board Statements \#10 and \#30. The specific objective of the study is to estimate CIRA's project ultimate loss costs for 2021-22 and provide funding guidelines to meet future costs.

## II. CONCLUSIONS AND RECOMMENDATIONS

## A. COSTS OF 2021-22 CLAIMS

We estimate the ultimate cost of claims and loss adjustment expenses (LAE) for claims incurred in the pool layer during the 2021-22 program year to be $\$ 5,747,378$, which excludes excess insurance premiums and general administrative costs.
If the program is fully funded, CIRA can earn investment income on its funding for the coming year's claims before all payments come due. We estimate the impact of this investment income to be about $4.1 \%$, or $\$ 235,546$ for 2021-22. Thus the total expected cost of claims for program year 2021-22, including recognition of future investment income, is $\$ 5,511,832$.

We provide the following estimates of the costs of 2021-22 claims at various confidence levels, after recognition of investment income.

2021-22
Expected
$70 \%$ Confidence
$75 \%$
$80 \%$
$85 \%$
\$5,511,832
6,377,190
6,790,577
7,275,618
7,881,920
For budgeting purposes, these translate to the following contribution rates per \$100 payroll:

2021-22

| Expected | $\$ 1.429$ |
| :---: | ---: |
| $70 \%$ Confidence | 1.653 |
| $75 \%$ | 1.761 |
| $80 \%$ | 1.886 |
| $85 \%$ | 2.044 |

Again, we generally recommend funding to the $75 \%$ to $85 \%$ confidence levels. We consider funding to the $70 \%$ confidence level to be marginally acceptable, and to the 90\% confidence level to be conservative.

The claim costs and rates shown above do not include any recognition of the existing funding margin. They are for losses and loss adjustment expenses in the pooled layer only, and do not include a provision for loss control, overhead, excess insurance premiums, and other expenses associated with the program.

## B. PROGRAM FUNDING: GOALS AND OBJECTIVES

As self-insurance programs have proliferated among public entities, it has become apparent that there is a large measure of inconsistency in the way in which these programs recognize and account for their claims costs. This is the result of the fact that there have been several different sources of guidance available, none of which has been completely relevant to public entity self-insurance programs.

According to the Governmental Accounting Standards Board (GASB), the most relevant source of guidance on the subject is Financial Accounting Standards Board Statement \#60. A liability for unpaid claim costs, including all loss adjustment expenses, should be accrued at the time the self-insured events occur. This liability should include an allowance for incurred but not reported claims. It may be discounted for investment income at an appropriate rate of return, provided the discounting is disclosed. The regulations detailing the way in which this must be done are outlined in GASB's statements \#10 and \#30. These regulations are required to be applied by the Authority.
GASB \#10 and \#30 do not address asset requirements. They do, however, allow a range of amounts to be recognized for accounting purposes; specifically, GASB \#10 and \#30 allow recognition of a risk margin for unexpectedly adverse loss experience. Thus, for accounting purposes, it is possible to formulate a funding policy from a range of alternatives. The uncertainty in any estimate of the program's liability for outstanding claims should be taken into consideration in determining funding policy, but it may be offset by recognizing anticipated investment income earnings. This usually means developing a funding program based on discounted claims costs with some risk margin for unexpected adverse loss experience.
The amount of the risk margin should be a question of long-term funding policy. We recommend that the risk margin be determined by thinking in terms of the probability that a given level of assets will prove to be adequate. For example, a reasonable goal might be to maintain assets at the $85 \%$ confidence level.

A key factor to consider in determining funding policy is the degree to which stability is required in the level of contributions to the program from year to year. If you elect to maintain assets at a low confidence level, the chances are much greater that future events will prove that additional contributions should have been made for old claims. The additional contributions for old claims may be required at the same time that costs are increasing dramatically on new claims. The burden of funding for increases on past years as well as on current years, may well be prohibitive.

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We generally recommend maintaining program assets at the 80\% confidence level, after recognition of investment income, with a recommended range of the $75 \%$ to $85 \%$ confidence levels. We tend to think of the $70 \%$ confidence level as marginally acceptable and of the $90 \%$ confidence level as conservative. We recommend the $75 \%$ to $85 \%$ confidence level range because the probabilities are reasonably high that resulting assets will be sufficient to meet claim liabilities, yet the required risk margins are not so large that they will cause most self-insured entities to experience undue financial hardship. In addition, within this range, anticipated investment income generally offsets the required risk margin for the most part, which means that assets are likely sufficient on an undiscounted basis.

We also strongly believe, however, that the confidence level to which any future year is funded should be evaluated considering the relative certainty of the assumptions underlying the actuarial analysis, the Authority's other budgetary constraints, and the relative level of risk it is believed appropriate to assume. This means formulating both short and long-term funding goals, which may be the same in some years, but different in others.

In general, we recommend funding each year's claims costs in that year. When surpluses or deficits have developed on outstanding liabilities and funding adjustments are necessary, they should be clearly identified as such so that the habit of funding each year's claims costs that year is maintained. We also recommend that you reduce a surplus more slowly than you would accumulate funding to reduce a deficit.

## C. HISTORICAL TRENDS IN THE SELF-INSURANCE PROGRAM

## Loss Rate

We have evaluated the trend in the Authority's projected ultimate loss \& ALAE rate. This rate equals projected ultimate loss and ALAE (limited to either \$100,000 per occurrence or the SIR) divided by payroll in $\$ 100$ s, as displayed in the following graph.

Loss \& ALAE Rate Trend ${ }^{1}$ Ultimate Loss \& ALAE / Payroll (\$100s)


1 Losses are at expected (no risk margin) and are not discounted to reflect net present value.

## Severity

We have evaluated the trend in the Authority's projected ultimate claim size (or "severity"). The ultimate claim size equals projected ultimate loss \& ALAE (limited to either $\$ 100,000$ per occurrence or the SIR) divided by the projected ultimate number of reported claims, as displayed in the following graph.

Graph 3
Average Claim Size Trend ${ }^{1}$
Ultimate Loss \& ALAE / Ultimate Reported Claims


Losses are at expected (no risk margin) and are not discounted to reflect net present value.

## Frequency

We have evaluated the trend in the Authority's claim frequency. The claim frequency equals projected ultimate number of reported claims divided by payroll in $\$$ millions, as displayed in the following graph.

Graph 4
Claim Frequency Trend Ultimate Reported Claims / Payroll (\$ Millions)


## D. DATA PROVIDED FOR THE ANALYSIS

Overall, the data utilized in preparing this report appears to be accurate.
Comments and issues regarding the data are as follows:

- We have assumed that the program's self-insured retention will be at $\$ 1,000,000$ per occurrence for 2021-21 (See Appendix K).
- Detailed claim-level loss run with first-dollar unlimited loss information valued as of 9/30/20 was provided in PARSAC and REMIF member loss data. (See Appendix M).
- We also utilized the data from PARSAC and REMIF's most recent actuarial study for our assessment of loss development.
- We have assumed that CIRA's payroll for 2021-22 will be \$385,695,000 (See Appendix N).
The data provided for the analysis appears to be reasonable for use in this actuarial valuation of liabilities and projection of loss costs.


## III. ASSUMPTIONS AND LIMITATIONS

Any quantitative analysis is developed within a very specific framework of assumptions about conditions in the outside world, and actuarial analysis is no exception. We believe that it is important to review the assumptions we have made in developing the estimates presented in this report. By doing so, we hope you will gain additional perspective on the nature of the uncertainties involved in maintaining a self-insurance program. Our assumptions, and some observations about them, are as follows:

- Our analysis is based on loss experience, exposure data, and other general and specific information provided to us by PARSAC and REMIF. While we have not independently audited or verified this information, we have reviewed it for reasonableness and internal consistency.
- We have also made use of loss statistics that have been developed from the information gathered and compiled from other California public entities with selfinsured general liability program.
- We have assumed that the future development of incurred and paid losses can be reasonably predicted on the basis of development of such losses in the recent past. We have also assumed that the historical development patterns for the participants of other California public entities with self-insured general liability programs in the aggregate form a reasonable basis of comparison to the patterns from the Public Agency Risk Sharing Authority of California's data.
- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial review of other California public entities with selfinsured general liability programs.
- We have assumed that there is a continuing relationship between past and future loss costs.
- It is not possible to predict future claim costs precisely. Most of the costs of general liability claims arise from a small number of incidents involving serious injury. A relatively small number of such claims could generate enough loss dollars to significantly reduce, or even deplete, the self-insurance fund.
- We cannot predict and have not attempted to predict the impact of future law changes and court rulings on claims costs. This is one major reason why we believe our funding recommendations are reasonable now, but should not be extrapolated into the future.
- We have assumed that the loss rate trend associated with claim costs increases at $3.5 \%$ per year. We have assumed that claim severity increases at $3.5 \%$ per year, and that claim frequency is stable at 0.0\% per year.
- We have assumed that historical payroll and other inflation-sensitive exposure measures increase $2.5 \%$ annually due to inflation.
- We have assumed that assets held for investment will generate an average annual return of $1.5 \%$ over the duration of payment of the loss liabilities. It should be noted that actual future investment returns may vary significantly from this assumption, depending upon the prevailing investment market conditions.
- The claims costs we have estimated include indemnity and medical payments, and all loss adjustment expenses. We have not included estimates for excess insurance costs and other expenses associated with the program.
- Our funding recommendations do not include provisions for catastrophic events not in PARSAC and REMIF's history, such as earthquakes, flooding, mass civil disorder, or mass occupational disease.
- Our estimates assume that all excess insurance is valid and collectible. Further, our funding recommendations do not include a provision for losses greater than CIRA's excess coverage.


## IV. GLOSSARY OF ACTUARIAL TERMS

Accident Year - Year during which the accidents that generate a group of claims occurs, regardless of when the claims are reported, payments are made, or reserves are established.

Allocated Loss Adjustment Expenses (ALAE) - Expense incurred in settling claims that can be directly attributed to specific individual claims (e.g., legal fees, investigative fees, court charges, etc.)

Benefit Level Factor - Factor used to adjust historical losses to the current level of workers' compensation benefits.

Case Reserve - The amount left to be paid on a claim, as estimated by the claims administrator.

Claim Count Development Factor - A factor that is applied to the number of claims reported in a particular accident period in order to estimate the number of claims that will ultimately be reported.

Claim Frequency - Number of claims per \$1 million of payroll.
Confidence Level - An estimated probability that a given level of funding will be adequate to pay actual claims costs. For example, the $85 \%$ confidence level refers to an estimate for which there is an $85 \%$ chance that the amount will be sufficient to pay loss costs.

Discount Factor - A factor to adjust estimated loss costs to reflect anticipated investment income from assets held prior to actual claim payout.

Expected Losses - The best estimate of the full, ultimate value of loss costs.
Incurred but not Reported (IBNR) Losses - Losses for which the accident has occurred but the claim has not yet been reported. This is the ultimate value of losses, less any amount that has been set up as reported losses by the claims adjuster. It includes both amounts for claims incurred but not yet received by the administrator and loss development on already reported claims.

Loss Development Factor - A factor applied to losses for a particular accident period to reflect the fact that reported and paid losses do not reflect final values until all claims are settled (see Section IV).

Loss Rate - Ultimate losses per \$100 of payroll.

Non-Claims Related Expenses - Program expenses not directly associated with claims settlement and administration, such as excess insurance, safety program expenses, and general overhead. These exclude expenses associated with loss settlements (Indemnity/Medical, BI/PD), legal expenses associated with individual claims (ALAE), and claims administration (ULAE).

Outstanding Losses - Losses that have been incurred but not paid. This is the ultimate value of losses less any amount that has been paid.

Paid Losses - Losses actually paid on all reported claims.
Program Losses - Losses, including ALAE, limited to the SIR for each occurrence.
Reported Losses - The total expected value of losses as estimated by the claims administrator. This is the sum of paid losses and case reserves.

Self-Insured Retention (SIR) - The level at which an excess insurance policy is triggered to begin payments on a claim. Financially, this is similar to an insurance deductible.

Severity - Average claim cost.
Ultimate Losses - The value of claim costs at the time when all claims have been settled. This amount must be estimated until all claims are actually settled.

Unallocated Loss Adjustment Expenses (ULAE) - Claim settlement expenses that cannot be directly attributed to individual claims (e.g., claims adjusters' salaries, taxes, etc.)





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| Payroll (00s) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Member | 2015-16 <br> (A) | $\begin{gathered} \text { 2016-17 } \\ \text { (B) } \end{gathered}$ | 2017-18 (C) | 2018-19 (D) | $\begin{aligned} & \text { 2019-20 } \\ & \text { (E) } \end{aligned}$ | $\begin{aligned} & 2015-16 \\ & \text { to } \\ & 2019-20 \\ & \text { (F) } \end{aligned}$ |
| Amador City | \$320 | \$394 | \$394 | \$406 | \$418 | \$1,932 |
| Arcata | 82,871 | 84,741 | 86,199 | 92,800 | 94,299 | 440,910 |
| Avalon | 48,021 | 62,231 | 66,475 | 63,118 | 70,524 | 310,368 |
| Belvedere | 0 | 23,117 | 24,556 | 21,343 | 26,051 | 95,067 |
| Blue Lake | 4,373 | 4,273 | 4,393 | 4,827 | 5,000 | 22,867 |
| California City | 60,200 | 70,613 | 70,359 | 76,271 | 74,644 | 352,087 |
| Calimesa | 8,697 | 7,548 | 11,107 | 16,088 | 17,850 | 61,290 |
| Calistoga | 43,653 | 51,179 | 55,448 | 61,827 | 62,500 | 274,607 |
| Citrus Heights | 179,185 | 193,393 | 187,907 | 191,839 | 199,350 | 951,674 |
| Clearlake | 28,152 | 34,649 | 37,885 | 42,208 | 40,709 | 183,603 |
| Cloverdale | 35,073 | 35,633 | 37,924 | 39,426 | 40,645 | 188,700 |
| Coalinga | 56,518 | 58,649 | 52,202 | 49,074 | 55,381 | 271,825 |
| Cotati | 27,470 | 17,262 | 30,701 | 34,881 | 38,095 | 148,409 |
| Eureka | 125,500 | 136,773 | 142,049 | 149,760 | 152,241 | 706,323 |
| Ferndale | 6,185 | 6,522 | 6,645 | 6,758 | 7,050 | 33,160 |
| Fort Bragg | 37,645 | 33,677 | 33,199 | 35,848 | 38,550 | 178,918 |
| Fortuna | 41,799 | 44,022 | 47,080 | 47,561 | 51,543 | 232,006 |
| Grass Valley | 69,869 | 63,843 | 67,902 | 75,159 | 77,796 | 354,569 |
| Healdsburg | 130,204 | 124,872 | 142,691 | 118,369 | 169,075 | 685,211 |
| Highland | 26,666 | 26,502 | 27,488 | 30,363 | 30,281 | 141,300 |
| Lakeport | 27,005 | 27,873 | 27,907 | 32,265 | 34,383 | 149,433 |
| Nevada City | 22,144 | 24,345 | 25,909 | 26,431 | 27,487 | 126,316 |
| Placentia | 109,183 | 114,731 | 119,378 | 122,748 | 126,648 | 592,688 |
| Placerville | 60,769 | 60,844 | 62,790 | 66,870 | 66,614 | 317,888 |
| Plymouth | 4,698 | 5,480 | 5,518 | 6,272 | 5,854 | 27,823 |
| Point Arena | 2,650 | 3,186 | 3,291 | 3,807 | 3,492 | 16,425 |
| Rancho Cucamonga | 299,089 | 301,035 | 305,981 | 312,716 | 324,615 | 1,543,436 |
| Rancho Cucamonga FD | 0 | 167,850 | 182,899 | 174,883 | 182,832 | 708,463 |
| Rancho Santa Margarita | 28,862 | 27,076 | 26,272 | 26,876 | 27,197 | 136,282 |
| Rohnert Park | 145,009 | 157,898 | 183,400 | 201,280 | 213,405 | 900,993 |
| San Juan Bautista | 5,104 | 4,998 | 5,158 | 6,818 | 5,472 | 27,550 |
| Sebastopol | 45,662 | 47,314 | 49,190 | 54,067 | 55,158 | 251,391 |
| Sierra Madre | 52,085 | 53,648 | 55,257 | 56,915 | 58,622 | 276,526 |
| Sonoma | 26,599 | 27,391 | 28,990 | 28,466 | 32,215 | 143,660 |
| South Lake Tahoe | 169,660 | 172,216 | 177,770 | 188,099 | 192,031 | 899,776 |
| St. Helena | 54,048 | 58,436 | 63,243 | 68,491 | 72,581 | 316,800 |
| Tehama | 420 | 323 | 312 | 324 | 400 | 1,779 |
| Trinidad | 3,103 | 3,271 | 3,466 | 3,580 | 3,677 | 17,096 |
| Truckee | 91,364 | 90,551 | 92,904 | 99,940 | 102,000 | 476,760 |
| Twentynine Palms | 20,389 | 22,601 | 24,771 | 26,272 | 27,779 | 121,812 |
| Ukiah | 155,033 | 157,185 | 138,371 | 155,892 | 193,045 | 799,526 |
| Watsonville | 304,146 | 276,908 | 296,107 | 306,207 | 314,140 | 1,497,508 |
| Wheatland | 12,643 | 15,112 | 15,366 | 17,249 | 17,352 | 77,722 |
| Wildomar | 10,188 | 11,170 | 12,242 | 12,601 | 16,083 | 62,284 |
| Willits | 27,940 | 27,345 | 27,613 | 30,496 | 33,723 | 147,117 |
| Windsor | 83,863 | 64,048 | 86,269 | 85,609 | 95,280 | 415,070 |
| Yountville | 26,250 | 20,178 | 30,418 | 35,331 | 32,271 | 144,448 |
| Yucaipa | 41,568 | 44,038 | 46,310 | 52,067 | 60,718 | 244,702 |
| Yucca Valley | 25,245 | 27,783 | 27,846 | 28,227 | 36,295 | 145,396 |
| All Current Members | \$2,867,120 | \$3,094,728 | \$3,257,552 | \$3,388,726 | \$3,613,371 | \$16,221,497 |

California Intergovernmental Risk Authority - Liability
Experience Modification Data

| Incurred Losses Limited to \$250,000 Per Occurrence |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Member | 2015-16 <br> (A) | 2016-17 <br> (B) | 2017-18 <br> (C) | 2018-19 <br> (D) | $\begin{aligned} & \text { 2019-20 } \\ & \text { (E) } \end{aligned}$ | $\begin{aligned} & 2015-16 \\ & \text { to } \\ & 2019-20 \end{aligned}$ <br> (F) |
| Amador City | \$0 | \$0 | \$0 | \$0 | \$0 | \$0 |
| Arcata | 17,093 | 384,053 | 34,632 | 106,169 | 357,566 | 899,512 |
| Avalon | 1,300 | 41,280 | 657,032 | 116,941 | 10,772 | 827,325 |
| Belvedere | 0 | 0 | 1,387 | 3,500 | 358 | 5,245 |
| Blue Lake | 0 | 0 | 8,749 | 0 | 0 | 8,749 |
| California City | 8,608 | 137,379 | 157,608 | 1,408 | 176,027 | 481,030 |
| Calimesa | 0 | 0 | 0 | 0 | 10,000 | 10,000 |
| Calistoga | 0 | 1,486 | 34,911 | 0 | 0 | 36,397 |
| Citrus Heights | 106,408 | 275,103 | 307,986 | 10,695 | 79,437 | 779,629 |
| Clearlake | 71,672 | 305 | 8,686 | 65,000 | 25,000 | 170,663 |
| Cloverdale | 5,357 | 250,763 | 9,865 | 5,000 | 0 | 270,985 |
| Coalinga | 302,094 | 0 | 21,824 | 0 | 0 | 323,918 |
| Cotati | 0 | 11,163 | 4,489 | 306,390 | 565,697 | 887,739 |
| Eureka | 133,585 | 123,127 | 151,216 | 256,120 | 123,356 | 787,405 |
| Ferndale | 0 | 0 | 0 | 0 | 0 | 0 |
| Fort Bragg | 17,529 | 79,414 | 0 | 22,788 | 95,883 | 215,613 |
| Fortuna | 25,343 | 29,756 | 6,543 | 90,000 | 62,850 | 214,492 |
| Grass Valley | 297,149 | 436,688 | 115,138 | 47,717 | 25,071 | 921,763 |
| Healdsburg | 181,010 | 58,176 | 275,729 | 200,656 | 377,658 | 1,093,228 |
| Highland | 66,935 | 250,000 | 100,000 | 79,962 | 63,156 | 560,053 |
| Lakeport | 60,000 | 56,923 | 259,445 | 0 | 36,416 | 412,783 |
| Nevada City | 24,744 | 460 | 55,000 | 4,358 | 0 | 84,562 |
| Placentia | 3,635 | 10,340 | 3,701 | 245,948 | 45,372 | 308,996 |
| Placerville | 319,549 | 298,997 | 13,179 | 679 | 1,505 | 633,909 |
| Plymouth | 0 | 0 | 10,162 | 0 | 0 | 10,162 |
| Point Arena | 0 | 142,609 | 0 | 0 | 0 | 142,609 |
| Rancho Cucamonga | 223,191 | 276,205 | 157,276 | 66,148 | 100,560 | 823,380 |
| Rancho Cucamonga FD | 0 | 1,400 | 4,027 | 400 | 804 | 6,631 |
| Rancho Santa Margarita | 0 | 0 | 1,787 | 0 | 850 | 2,637 |
| Rohnert Park | 701,126 | 800,581 | 307,156 | 54,612 | 189,131 | 2,052,606 |
| San Juan Bautista | 0 | 0 | 0 | 0 | 0 | 0 |
| Sebastopol | 226,229 | 7,990 | 164,248 | 15,000 | 266,207 | 679,675 |
| Sierra Madre | 9,758 | 11,974 | 18,983 | 451,211 | 8,241 | 500,167 |
| Sonoma | 43,762 | 93,033 | 52,668 | 30,000 | 3,237 | 222,700 |
| South Lake Tahoe | 239,576 | 22,969 | 269,155 | 115,703 | 54,758 | 702,161 |
| St. Helena | 1,626 | 85,232 | 2,100 | 2,115 | 24,423 | 115,497 |
| Tehama | 2,499 | 0 | 0 | 0 | 0 | 2,499 |
| Trinidad | 0 | 0 | 0 | 0 | 2,007 | 2,007 |
| Truckee | 15,884 | 18,032 | 11,319 | 28,939 | 17,943 | 92,117 |
| Twentynine Palms | 252,604 | 2,741 | 166,116 | 2,613 | 12,637 | 436,711 |
| Ukiah | 80,044 | 88,266 | 83,315 | 258,739 | 80,647 | 591,011 |
| Watsonville | 794,236 | 98,112 | 287,095 | 202,052 | 126,212 | 1,507,707 |
| Wheatland | 12,347 | 1,000 | 1,908 | 0 | 0 | 15,255 |
| Wildomar | 38,515 | 11,741 | 3,217 | 0 | 0 | 53,473 |
| Willits | 254,933 | 233,974 | 2,657 | 2,103 | 0 | 493,667 |
| Windsor | 260,031 | 97,226 | 136,163 | 125,000 | 48,500 | 666,920 |
| Yountville | 900 | 1,873 | 0 | 0 | 0 | 2,773 |
| Yucaipa | 0 | 84,762 | 121,723 | 52,100 | 232,500 | 491,085 |
| Yucca Valley | 0 | 3,718 | 263,062 | 100,000 | 5,367 | 372,147 |
| All Current Members | \$4,799,269 | \$4,528,851 | \$4,291,257 | \$3,070,066 | \$3,230,149 | \$19,919,592 |











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\begin{aligned}
& \text { Notes } \\
& \text { (A) } \\
& \text { Provided by CIRA } \\
& \text { (B) } \\
& \text { Exhibit 3, Page } 1 \\
& \text { (C) } \\
& \text { Based on CIRA Data } \\
& \text { (D) } \\
& \text { From Rates Exhibit } 1 \text { Page } 1 \text { (I) } \\
& \text { (E) } \\
& \text { Provided by CIRA } \\
& \text { (F) } \\
& \text { (B) } \times \text { (C) } \times \text { (D) } \times \text { (E) } \\
& \text { (Galanced (F) } \\
& \text { (H) } \\
& \text { (I) }
\end{aligned} \text { Allocated based on experience rated pooled expected losses. } .
$$

$$
\begin{aligned}
& \text { Member } \\
& \\
& \text { Ukiah } \\
& \text { Watsonville } \\
& \text { Wheatland } \\
& \text { Wildomar } \\
& \text { Willits } \\
& \text { Windsor } \\
& \text { Yountville } \\
& \text { Yucaipa } \\
& \text { Yucca Valley } \\
& \text { All Current Members } \\
& \text { Menifee } \\
& \text { Pacific Grove } \\
& \text { West Hollywood } \\
& \text { All Members }
\end{aligned}
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## DRAFT

## California Intergovernmental Risk Authority - Liability

Funding Options for Program Year 2021-2022 (SIR = \$1,000,000)

| (A) | Estimated Ultimate Losses Incurred in Accident Year 2021-2022: <br> (From Not Included) |  |  | Dollar Amount | Payroll <br> Rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | \$8,446,729 | \$2.190 |  |
| (B) | Estimated Claims Administration Fees Incurred in Accident Year 2021-2022: (From Exhibit 3, Page 1, (L)) |  |  | 820,000 | 0.213 |  |
| (C) | Total Claims Costs Incurred in Accident Year 2021-2022: $((\mathrm{A})+(\mathrm{B}))$ |  |  | \$9,266,729 | \$2.403 |  |
| (D) | Average Deductible Factor |  |  | 0.583 |  |  |
| (E) | Loss Discount Factor (Based on a Discoun (Appendix F, Page 2, (G)) |  |  | 0.959 |  |  |
| (F) | Discounted Pool Total Claims Costs Incurred in Accident Year 2021-2022: $((A) \times(D) \times(E))+((B) \times(E))$ |  |  | \$5,511,832 | \$1.429 |  |
|  |  | Marginally Acceptable |  | commended |  | Conservative |
|  |  | 70\% | 75\% | 80\% | 85\% | 90\% |
| (G) | Confidence Level Factor: <br> (From Appendix G) | 1.157 | 1.232 | 1.320 | 1.430 | 1.577 |
| (H) | Margin for Adverse Experience: $((F) \times[(G)-1])$ | 865,358 | 1,278,745 | 1,763,786 | 2,370,088 | 3,180,327 |
| (1) | Recommended Funding in 2021-2022 for Claims Costs and Other Expenses: $((\mathrm{F})+(\mathrm{H}))$ | \$6,377,190 | \$6,790,577 | \$7,275,618 | \$7,881,920 | \$8,692,159 |
| (J) | Budgeted Non Claims Related Expenses: for Claims Costs, Other Expenses, and Non Claims Related Expenses: $((I)+(I))$ | $\begin{array}{r} 1,262,814 \\ \hline \$ 7,640,004 \end{array}$ | 1,262,814 | 1,262,814 \$8,538,432 | $1,262,814$ $\$ 9,144,734$ | $1,262,814$ $\$ 9,954,973$ |
| (K) | Rate per \$100 of Payroll: <br> ((J) / \$3,856,954) | \$1.981 | \$2.088 | \$2.214 | \$2.371 | \$2.581 |

Payroll rates are per hundred dollars of 2021-2022 payroll of \$385,695,400.

> California Intergovernmental Risk Authority - Liability

Estimated Ultimate Limited Losses Capped at \$100,000 per Claim

|  | Reported | Paid | Exposure Method | Exposure Method |  | Selected |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loss | Loss | Based on | Based on | Frequency- | Ultimate |
| Accident | Development | Development | Reported | Paid | Severity | Limited |
| Year | Method <br> (A) | Method <br> (B) | Losses (C) | Losses (D) | Method <br> (E) | Losses <br> (F) |
| 2010-2011 | 3,092,000 | 3,092,000 | 3,092,000 | 3,092,000 | 3,092,000 | 3,092,000 |
| 2011-2012 | 2,556,000 | 2,381,000 | 2,556,000 | 2,381,000 | 2,556,000 | 2,556,000 |
| 2012-2013 | 2,905,000 | 2,900,000 | 2,905,000 | 2,900,000 | 2,905,000 | 2,905,000 |
| 2013-2014 | 2,430,000 | 2,418,000 | 2,430,000 | 2,418,000 | 2,430,000 | 2,430,000 |
| 2014-2015 | 3,181,000 | 3,139,000 | 3,182,000 | 3,141,000 | 3,182,000 | 3,181,000 |
| 2015-2016 | 3,186,000 | 3,129,000 | 3,180,000 | 3,118,000 | 3,028,000 | 3,186,000 |
| 2016-2017 | 3,105,000 | 2,973,000 | 3,102,000 | 2,981,000 | 3,450,000 | 3,105,000 |
| 2017-2018 | 3,367,000 | 2,943,000 | 3,359,000 | 3,012,000 | 3,102,000 | 3,367,000 |
| 2018-2019 | 2,816,000 | 2,790,000 | 2,894,000 | 3,139,000 | 3,175,000 | 3,016,000 |
| 2019-2020 | 3,834,000 | 2,472,000 | 3,779,000 | 3,465,000 | 3,865,000 | 3,622,000 |

Totals
\$30,461,000
Projected Losses for the Year 2020-2021 (G)
\$3,818,000
Projected Losses for the Year 2021-2022 (H)
\$4,092,000

Notes:
(A) From Appendix A, Page 1, Column (D).
(B) From Appendix B, Page 1, Column (D).
(C) Based on results in Appendix C, Page 1.
(D) Based on results in Appendix C, Page 2.
(E) Based on results in Appendix D, Page 1.
(F) Selected averages of (A), (B), (C), (D), and (E).
(G) From Exhibit 3, Page 1, Line (K) / Line (G).
(H) From Exhibit 3, Page 1, Line (K) / Line (G).

This exhibit summarizes the results of the actuarial methods we have applied to estimate limited losses for each year. These results are used to select a limited loss rate for future years.

California Intergovernmental Risk Authority - Liability

Selection of Projected Limited Loss Rate and Projection of Program Losses and ULAE
$\left.\begin{array}{cccccc} & \text { Ultimate } & & \text { Trended } & \text { Trended } & \text { Trended } \\ \text { Accident } & \text { Limited } \\ \text { Year } & \text { Losses } \\ \text { (A) }\end{array} \quad \begin{array}{c}\text { Trend } \\ \text { Factor } \\ \text { Limited }\end{array}\right)$

Notes appear on the next page.

## Notes:

(A) From Exhibit 2, Page 2, Column (F).

For purposes of projecting future losses, losses
are capped at $\$ 100,000$ per occurrence.
(B) From Appendix E, Page 1, Column (B).
(C) $(A) \times(B)$.
(D) Appendix I, Column (C).
(E) (C)/(D).
(F) Selected based on (E).
(G) Based on a Burr distribution, a mathematical model of claims sizes.
(H) From Appendix E.
(I) $(\mathrm{F}) \times(\mathrm{G}) \times(\mathrm{H})$.
(J) Appendix I, Column (C).
(K) (I) $x(J)$.
(L) Based on an estimated claim closing pattern and the CIRA's historical claims administration expenses.
(M) $(\mathrm{K})+(\mathrm{L})$.

This exhibit shows the calculation of future loss costs based on the past loss rates. The projections will be accurate only to the extent that what has happened in the past is representative of what will happen in the future.

Reported Loss Development


Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA. These losses exclude amounts over $\$ 100,000$ per occurrence.
(C) From Appendix A, Page 2.
(D) (B) $\times(C)$. These estimated losses exclude amounts over $\$ 100,000$ per occurrence.
(E) Losses capped at the CIRA's SIR. Amounts are provided by the CIRA.
(F) Derived from factors on Appendix A, Page 3.
(G) (E) $\times(\mathrm{F})$.

This method tends to understate ultimate losses for the most recent several years because the large losses for those years generally have not yet emerged at the time of our review.

This exhibit shows the calculation of estimated ultimate losses for each year based on paid losses and case reserves as reported by the claims administrator. These losses tend to "develop" or change from period to period as more information becomes available about the cases. This development tends to follow quantifiable patterns over time.

|  |  | Paid |  | Program |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Paid | Loss | Ultimate | Paid | Loss | Ultimate |
| Accident | Losses as | Development | Limited | Losses as | Development | Program |
| Year <br> (A) | of 9/30/20 <br> (B) | Factor <br> (C) | Losses (D) | of $9 / 30 / 20$ <br> (E) | Factor (F) | Losses <br> (G) |
| 2010-2011 | 3,091,920 | 1.000 | 3,091,920 | 5,256,720 | 1.004 | 5,277,747 |
| 2011-2012 | 2,381,333 | 1.000 | 2,381,333 | 4,366,387 | 1.010 | 4,410,051 |
| 2012-2013 | 2,891,330 | 1.003 | 2,900,004 | 4,805,365 | 1.020 | 4,901,472 |
| 2013-2014 | 2,398,791 | 1.008 | 2,417,981 | 5,344,028 | 1.047 | 5,595,197 |
| 2014-2015 | 3,083,820 | 1.018 | 3,139,329 | 5,560,329 | 1.086 | 6,038,517 |
| 2015-2016 | 3,014,537 | 1.038 | 3,129,089 | 7,198,218 | 1.139 | 8,198,770 |
| 2016-2017 | 2,727,540 | 1.090 | 2,973,019 | 4,823,875 | 1.267 | 6,111,850 |
| 2017-2018 | 2,250,066 | 1.308 | 2,943,086 | 3,784,082 | 1.710 | 6,470,780 |
| 2018-2019 | 1,216,412 | 2.294 | 2,790,449 | 1,295,812 | 3.335 | 4,321,533 |
| 2019-2020 | 414,072 | 5.969 | 2,471,596 | 414,072 | 9.608 | 3,978,404 |
| Totals | \$23,469,821 |  | \$28,237,806 | \$42,848,888 |  | \$55,304,322 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA. These losses exclude amounts over \$100,000 per occurrence.
(C) From Appendix B, Page 2.
(D) (B) $\times(C)$. These estimated losses exclude amounts over $\$ 100,000$ per occurrence.
(E) Losses capped at the CIRA's SIR. Amounts are provided by the CIRA.
(F) Derived from factors on Appendix B, Page 3.
(G) $(\mathrm{E}) \times(\mathrm{F})$.

This method tends to understate ultimate losses for the most recent several years because the large losses for those years generally have not yet emerged at the time of our review.

This exhibit shows the calculation of estimated ultimate losses for each year based on paid losses as reported by the claims administrator. These losses tend to "develop" or change from period to period as more information becomes available about the cases. This development tends to follow quantifiable patterns over time.

California Intergovernmental Risk Authority - Liability

| Exposure and Development Method Based on Reported Losses |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | Trended Payroll (\$00) (A) | Reported Losses as of $9 / 30 / 20$ <br> (B) | Reported Loss Development Factor (C) | Percentage of Losses Yet to Be Reported (D) | Program Rate (E) | Incurred but not Reported (IBNR) (F) | Ultimate Program Losses (G) |
| 2010-2011 | 3,390,353 | 5,256,720 | 1.002 | 0.002 | 1.552 | 10,524 | 5,267,244 |
| 2011-2012 | 3,328,962 | 4,541,369 | 1.004 | 0.004 | 1.330 | 17,710 | 4,559,079 |
| 2012-2013 | 3,218,390 | 4,816,150 | 1.008 | 0.008 | 1.592 | 40,989 | 4,857,139 |
| 2013-2014 | 3,070,489 | 5,367,638 | 1.015 | 0.015 | 1.419 | 65,355 | 5,432,993 |
| 2014-2015 | 3,124,937 | 6,480,840 | 1.032 | 0.031 | 1.859 | 180,087 | 6,660,927 |
| 2015-2016 | 3,245,580 | 7,527,860 | 1.057 | 0.054 | 1.603 | 280,944 | 7,808,804 |
| 2016-2017 | 3,416,580 | 7,559,313 | 1.110 | 0.099 | 1.689 | 571,290 | 8,130,603 |
| 2017-2018 | 3,508,384 | 5,627,871 | 1.194 | 0.162 | 1.779 | 1,011,109 | 6,638,980 |
| 2018-2019 | 3,561,551 | 3,427,660 | 1.430 | 0.301 | 1.876 | 2,011,122 | 5,438,782 |
| 2019-2020 | 3,703,705 | 3,940,649 | 2.098 | 0.523 | 1.974 | 3,823,712 | 7,764,361 |
| Totals | 33,568,931 | \$54,546,070 |  |  |  | \$8,012,843 | \$62,558,913 |

Notes:
(A) Appendix I, Column (C).
(B) Provided by the CIRA. These losses exclude amounts incurred above the CIRA's SIR for each year.
(C) From Appendix A, Page 1, Column (F).
(D) 1-1/(C).
(E) From Appendix C, Page 3, Column (H).
(F) $(\mathrm{A}) \times(\mathrm{D}) \times(\mathrm{E})$.
(G) $(B)+(F)$.

This exhibit shows the calculation of ultimate losses based on the assumption that there is an underlying relationship between losses and exposure that changes in regular ways over time. The method relies on the premise that the losses that are currently unreported will cost what this relationship would suggest.

| Exposure and Development Method Based on Paid Losses |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | Trended Payroll (\$00) (A) | Paid Losses as of $9 / 30 / 20$ (B) | Paid <br> Loss <br> Development Factor (C) | Percentage of Losses Yet to Be Paid (D) | Program Rate (E) | Incurred but not Paid (F) | Ultimate Program Losses (G) |
| 2010-2011 | 3,390,353 | 5,256,720 | 1.004 | 0.004 | 1.552 | 21,047 | 5,277,767 |
| 2011-2012 | 3,328,962 | 4,366,387 | 1.010 | 0.010 | 1.330 | 44,275 | 4,410,662 |
| 2012-2013 | 3,218,390 | 4,805,365 | 1.020 | 0.020 | 1.592 | 102,474 | 4,907,839 |
| 2013-2014 | 3,070,489 | 5,344,028 | 1.047 | 0.045 | 1.419 | 196,066 | 5,540,094 |
| 2014-2015 | 3,124,937 | 5,560,329 | 1.086 | 0.079 | 1.859 | 458,931 | 6,019,260 |
| 2015-2016 | 3,245,580 | 7,198,218 | 1.139 | 0.122 | 1.603 | 634,725 | 7,832,943 |
| 2016-2017 | 3,416,580 | 4,823,875 | 1.267 | 0.211 | 1.689 | 1,217,597 | 6,041,472 |
| 2017-2018 | 3,508,384 | 3,784,082 | 1.710 | 0.415 | 1.779 | 2,590,187 | 6,374,269 |
| 2018-2019 | 3,561,551 | 1,295,812 | 3.335 | 0.700 | 1.876 | 4,677,029 | 5,972,841 |
| 2019-2020 | 3,703,705 | 414,072 | 9.608 | 0.896 | 1.974 | 6,550,758 | 6,964,830 |
| Totals | 33,568,931 | \$42,848,888 |  |  |  | \$16,493,090 | \$59,341,978 |

Notes:
(A) Appendix I, Column (C).
(B) Provided by the CIRA. These losses exclude amounts paid above the CIRA's SIR for each year.
(C) From Appendix B, Page 1, Column (F).
(D) 1-1/(C).
(E) From Appendix C, Page 3, Column (H).
(F) (A) $\times(\mathrm{D}) \times(\mathrm{E})$.
(G) $(B)+(F)$.

This exhibit shows the calculation of ultimate losses based on the assumption that there is an underlying relationship between losses and exposure that changes in regular ways over time. The method relies on the premise that the losses that are currently unpaid will cost what this relationship would suggest.

California Intergovernmental Risk Authority - Liability

Exposure and Development Method

| Accident | Trended <br> Payroll <br> (\$00) | Ultimate <br> Limited <br> Losses <br> (B) | Trend <br> Factor <br> (C) | Trended <br> Limited <br> Losses <br> (D) | Trended <br> Limited <br> Loss Rate <br> (E) | Limited <br> Loss Rate <br> (F) | Factor to <br> SIR <br> (G) | Program <br> Loss Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| (H) |  |  |  |  |  |  |  |  |

Notes:
(A) Appendix I, Column (C).
(B) Selected average of results from Appendices $A$ and $B$.
(C) From Appendix E, Page 1, Column (B).
(D) $(B) \times(C)$.
(E) (D) $/(\mathrm{A})$.
(F) Selected Limited Rate / (C). For 2014-2015 and prior (B) / (A).
(G) Based on a Burr distribution, a mathematical model of claim sizes.
(H) $(\mathrm{F}) \times(\mathrm{G})$.

This exhibit shows the calculation of the underlying historical relationship between losses and exposure that is needed to apply the estimation methods shown on pages 1 and 2 of this Appendix.

California Intergovernmental Risk Authority - Liability

Frequency and Severity Method
$\left.\begin{array}{cccc}\text { Accident } & \begin{array}{c}\text { Ultimate } \\ \text { Program } \\ \text { Severity } \\ \text { (A) }\end{array} & \begin{array}{c}\text { Adjusted } \\ \text { Ultimate } \\ \text { Claims }\end{array} & \begin{array}{c}\text { Cltimate } \\ \text { Program } \\ \text { (B) }\end{array} \\ \text { (B) } & & \text { (C) }\end{array}\right\}$

## Notes:

(A) From Appendix D, Page 2, Column (H).
(B) From Appendix D, Page 2, Column (B).
(C) $(A) x(B)$.

This exhibit shows the calculation of the estimated ultimate losses for each year based on the observed average frequency and severity of claims.

Frequency and Severity Method

| Accident Year | Ultimate | Adjusted Ultimate Claims (B) | Ultimate Limited Severity (C) | Trend Factor (D) | Trended Limited Severity (E) | Limited Severity (F) | Factor to SIR (G) | Program Severity (H) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Limited |  |  |  |  |  |  |  |
|  | Losses <br> (A) |  |  |  |  |  |  |  |
| 2010-2011 | 3,091,920 | 305 | 10,137 | 1.412 | 14,313 | 10,137 | 1.701 | 17,247 |
| 2011-2012 | 2,556,315 | 256 | 9,986 | 1.364 | 13,621 | 9,986 | 1.732 | 17,298 |
| 2012-2013 | 2,905,018 | 251 | 11,574 | 1.318 | 15,255 | 11,574 | 1.763 | 20,405 |
| 2013-2014 | 2,429,669 | 222 | 10,944 | 1.273 | 13,932 | 10,944 | 1.794 | 19,631 |
| 2014-2015 | 3,181,394 | 225 | 14,140 | 1.230 | 17,392 | 14,140 | 1.826 | 25,820 |
| 2015-2016 | 3,186,218 | 180 | 17,701 | 1.189 | 21,046 | 16,821 | 1.860 | 31,280 |
| 2016-2017 | 3,105,434 | 198 | 15,684 | 1.148 | 18,005 | 17,422 | 1.892 | 32,959 |
| 2017-2018 | 3,366,971 | 172 | 19,575 | 1.109 | 21,709 | 18,034 | 1.925 | 34,723 |
| 2018-2019 | 3,016,322 | 170 | 17,743 | 1.071 | 19,003 | 18,674 | 1.960 | 36,609 |
| 2019-2020 | 3,621,945 | 200 | 18,110 | 1.035 | 18,744 | 19,324 | 1.994 | 38,532 |
|  |  | Average Limited Severity: |  |  | \$17,302 |  |  |  |
|  |  | Average 14/15-18/19 Limited Severity: |  |  | 19,431 |  |  |  |
|  |  | Average 15/16-19/20 Limited Severity: |  |  | 19,701 |  |  |  |
|  |  | Selected Limited Severity: <br> Prior: |  |  | \$20,000 |  |  |  |

Notes:
(A) Selected average of results from Appendices A, B, and C.
(B) Appendix D, Page 3, Column (C).
(C) $(\mathrm{A}) /(\mathrm{B})$.
(D) From Appendix E, Page 1, Column (J).
(E) (C) $\times(\mathrm{D})$.
(F) Selected Limited Severity / (D).
(G) Based on a Burr distribution, a mathematical model of claim sizes.
(H) $(\mathrm{F}) \times(\mathrm{G})$.

This exhibit shows the calculation of the historical average cost per claim, or severity. The observed average severity is used in the method shown on page 1 of this Appendix.

Frequency and Severity Method
Projection of Ultimate Claims

| Accident Year | Reported Claim Development <br> (A) | Closed Claim Development (B) | Selected Ultimate Claims (C) | $\begin{aligned} & \text { Trended } \\ & \text { Payroll } \\ & (\$ 000,000) \\ & \text { (D) } \end{aligned}$ | Claim Frequency (E) | Trend Factor (F) | Trended Claim Frequency (G) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010-2011 | 305 | 310 | 305 | 339.0 | 0.900 | 1.000 | 0.900 |
| 2011-2012 | 256 | 255 | 256 | 332.9 | 0.769 | 1.000 | 0.769 |
| 2012-2013 | 251 | 258 | 251 | 321.8 | 0.780 | 1.000 | 0.780 |
| 2013-2014 | 222 | 227 | 222 | 307.0 | 0.723 | 1.000 | 0.723 |
| 2014-2015 | 225 | 231 | 225 | 312.5 | 0.720 | 1.000 | 0.720 |
| 2015-2016 | 180 | 183 | 180 | 324.6 | 0.555 | 1.000 | 0.555 |
| 2016-2017 | 198 | 192 | 198 | 341.7 | 0.580 | 1.000 | 0.580 |
| 2017-2018 | 172 | 151 | 172 | 350.8 | 0.490 | 1.000 | 0.490 |
| 2018-2019 | 170 | 136 | 170 | 356.2 | 0.477 | 1.000 | 0.477 |
| 2019-2020 | 329 | 170 | 200 | 370.4 | 0.540 | 1.000 | 0.540 |
| Total | 2,308 | 2,113 | 2,179 | 3,356.9 |  |  | 0.649 |
| 14/15-18/19 | 945 | 893 | 945 | 1,685.7 |  |  | 0.561 |
|  |  |  |  |  | (H) Selected Frequency: Prior: |  | 0.550 |


|  | Program Year: | $2020-2021$ | $2021-2022$ |
| :--- | :--- | ---: | ---: |
| (I) | Trend Factor: | 1.000 | 1.000 |
| (J) | Selected Frequency: | 0.550 | 0.550 |
| (K) Est. Payroll (\$000,000): | 372.4 | 385.7 |  |
| (L) Ultimate Claims: | 205 | 212 |  |

Notes:
(A) Appendix D, Page 4, (C).
(G) $(\mathrm{E}) \times(\mathrm{F})$.
(B) Appendix D, Page 5, (C).
(H) The selected frequency of 0.550 is based on (G).
(C) Selected from (A) and (B).
(I) Appendix E, Page 1, Column (F).
(D) Appendix I, Column (C) / 10,000.
(J) $(\mathrm{H}) \times(\mathrm{I})$.
(E) (C) $/(\mathrm{D})$.
(K) Appendix I, Column (C) / 10,000.
(F) Appendix E, Page 1, Column (F).
(L) $(\mathrm{J}) \times(\mathrm{K})$.

This exhibit summarizes the estimated numbers of claims and shows the estimated frequencies per $\$ 1,000,000$ of trended payroll.

California Intergovernmental Risk Authority - Liability

Frequency and Severity Method
Reported Claim Count Development


Notes:
(A) Provided by the CIRA.
(B) Based upon Comparative Claim Development Factors.
(C) $(A) \times(B)$.
(D) (C) / Appendix D, Page 3, (D)] $x$
[Appendix D, Page 3, (F)].

This exhibit shows the calculation of estimated ultimate claims for each year based on reported claims as provided by the CIRA. These numbers of claims tend to "develop" or change from period to period as more claims are filed. This development tends to follow quantifiable patterns over time.

California Intergovernmental Risk Authority - Liability

Frequency and Severity Method
Closed Claim Count Development

| Accident Year | Claims <br> Closed as of 9/30/2020 <br> (A) | Closed Claim Development Factor (B) | Ultimate Claims (C) | Trended Claim Frequency (D) |
| :---: | :---: | :---: | :---: | :---: |
| 2010-2011 | 305 | 1.015 | 310 | 0.914 |
| 2011-2012 | 250 | 1.021 | 255 | 0.766 |
| 2012-2013 | 250 | 1.031 | 258 | 0.802 |
| 2013-2014 | 218 | 1.043 | 227 | 0.739 |
| 2014-2015 | 219 | 1.054 | 231 | 0.739 |
| 2015-2016 | 171 | 1.069 | 183 | 0.564 |
| 2016-2017 | 176 | 1.090 | 192 | 0.562 |
| 2017-2018 | 133 | 1.136 | 151 | 0.430 |
| 2018-2019 | 109 | 1.252 | 136 | 0.382 |
| 2019-2020 | 84 | 2.028 | 170 | 0.459 |
| Total | 1,915 |  | 2,113 | 0.629 |

Notes:
(A) Provided by the CIRA.
(B) Based upon Comparative Claim Development Factors.
(C) $(A) x(B)$.
(D) (C) / [Appendix D, Page 3, (D)] $x$
[Appendix D, Page 3, (F)].

This exhibit shows the calculation of estimated ultimate claims for each year based on closed claims as provided by the CIRA. These numbers of closed claims tend to "develop" or change from period to period as more claims are closed. This development tends to follow quantifiable patterns over time.

## Loss Trend Factors

|  |  | Factor to | Factor to | Factor to | Factor to | Factor to | Factor to | Factor to | Factor to | Factor to |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Benefit | 2020-2021 | 2021-2022 | 2022-2023 | 2023-2024 | 2020-2021 | 2021-2022 | 2022-2023 | 2023-2024 | 2020-2021 |
| Accident | Level | Loss Rate | Loss Rate | Loss Rate | Loss Rate | Frequency | Frequency | Frequency | Frequency | Severity |
| Year | Factor <br> (A) | Level <br> (B) | Level <br> (C) | Level (D) | Level (E) | Level <br> (F) | Level <br> (G) | Level <br> (H) | Level <br> (I) | Level <br> (J) |
| 1999-2000 | 1.000 | 2.062 | 2.134 | 2.208 | 2.285 | 1.000 | 1.000 | 1.000 | 1.000 | 2.062 |
| 2000-2001 | 1.000 | 1.993 | 2.062 | 2.133 | 2.208 | 1.000 | 1.000 | 1.000 | 1.000 | 1.993 |
| 2001-2002 | 1.000 | 1.925 | 1.992 | 2.061 | 2.133 | 1.000 | 1.000 | 1.000 | 1.000 | 1.925 |
| 2002-2003 | 1.000 | 1.860 | 1.924 | 1.991 | 2.061 | 1.000 | 1.000 | 1.000 | 1.000 | 1.860 |
| 2003-2004 | 1.000 | 1.797 | 1.859 | 1.924 | 1.991 | 1.000 | 1.000 | 1.000 | 1.000 | 1.797 |
| 2004-2005 | 1.000 | 1.736 | 1.796 | 1.859 | 1.924 | 1.000 | 1.000 | 1.000 | 1.000 | 1.736 |
| 2005-2006 | 1.000 | 1.678 | 1.736 | 1.796 | 1.859 | 1.000 | 1.000 | 1.000 | 1.000 | 1.678 |
| 2006-2007 | 1.000 | 1.621 | 1.677 | 1.735 | 1.796 | 1.000 | 1.000 | 1.000 | 1.000 | 1.621 |
| 2007-2008 | 1.000 | 1.566 | 1.620 | 1.676 | 1.735 | 1.000 | 1.000 | 1.000 | 1.000 | 1.566 |
| 2008-2009 | 1.000 | 1.513 | 1.565 | 1.619 | 1.676 | 1.000 | 1.000 | 1.000 | 1.000 | 1.513 |
| 2009-2010 | 1.000 | 1.461 | 1.512 | 1.564 | 1.619 | 1.000 | 1.000 | 1.000 | 1.000 | 1.461 |
| 2010-2011 | 1.000 | 1.412 | 1.460 | 1.511 | 1.564 | 1.000 | 1.000 | 1.000 | 1.000 | 1.412 |
| 2011-2012 | 1.000 | 1.364 | 1.411 | 1.460 | 1.511 | 1.000 | 1.000 | 1.000 | 1.000 | 1.364 |
| 2012-2013 | 1.000 | 1.318 | 1.363 | 1.411 | 1.460 | 1.000 | 1.000 | 1.000 | 1.000 | 1.318 |
| 2013-2014 | 1.000 | 1.273 | 1.317 | 1.363 | 1.411 | 1.000 | 1.000 | 1.000 | 1.000 | 1.273 |
| 2014-2015 | 1.000 | 1.230 | 1.273 | 1.317 | 1.363 | 1.000 | 1.000 | 1.000 | 1.000 | 1.230 |
| 2015-2016 | 1.000 | 1.189 | 1.230 | 1.272 | 1.317 | 1.000 | 1.000 | 1.000 | 1.000 | 1.189 |
| 2016-2017 | 1.000 | 1.148 | 1.188 | 1.229 | 1.272 | 1.000 | 1.000 | 1.000 | 1.000 | 1.148 |
| 2017-2018 | 1.000 | 1.109 | 1.148 | 1.187 | 1.229 | 1.000 | 1.000 | 1.000 | 1.000 | 1.109 |
| 2018-2019 | 1.000 | 1.071 | 1.108 | 1.147 | 1.187 | 1.000 | 1.000 | 1.000 | 1.000 | 1.071 |
| 2019-2020 | 1.000 | 1.035 | 1.071 | 1.108 | 1.147 | 1.000 | 1.000 | 1.000 | 1.000 | 1.035 |
| 2020-2021 | 1.000 | 1.000 | 1.035 | 1.071 | 1.108 | 1.000 | 1.000 | 1.000 | 1.000 | 1.000 |
| 2021-2022 | 1.000 | -- | 1.000 | 1.035 | 1.071 | -- | 1.000 | 1.000 | 1.000 | -- |
| 2022-2023 | 1.000 | -- | -- | 1.000 | 1.035 | -- | -- | 1.000 | 1.000 | -- |
| 2023-2024 | 1.000 | -- | -- | -- | 1.000 | -- | -- | -- | 1.000 | -- |

## Notes:

(A) No benefit level adjustment applied.
(B) - (E) (A) adjusted for a $3.5 \%$ annual loss rate trend.
(F) - (I) (A) adjusted for a $0.0 \%$ annual frequency trend.
(J) (A) adjusted for a $3.5 \%$ annual severity trend.

This exhibit shows the calculation of the ways in which we expect claims costs to have changed over the past twenty years due to changes in inflation.

California Intergovernmental Risk Authority - Liability

Residual Trend Factors


|  | Severity Trend Factors |  | Frequency Trend Factors |
| :---: | :---: | :---: | :---: |
|  | Mvg 5-Yr Wtd Latest $9 \times 2019-2020$ | 1.068 | 0.946 |
|  | Latest $5 \times 2019-2020$ | 1.042 | 0.910 |
|  | Mvg 5-Yr Wtd Latest $5 \times 2019-2020$ | 1.102 | 0.922 |
|  | Prior | 1.025 | 0.980 |
|  | PARSAC Prior | 1.035 | 1.000 |
|  | Default | 1.030 | 0.975 |
|  | Selected Residual Trend | 1.035 | 1.000 |
| Notes: | REMIF | 1.020 | 1.000 |

(A) Selected average of results from Appendix A and Appendix B.
(B) Appendix D, Page 3, Column (C).
(C) Appendix E, Page 1, Column (A).
(D) $(\mathrm{A}) \times(\mathrm{C}) /(\mathrm{B})$.
(E) Appendix I, Column (C).

Calculation of Discount Factors

| Payment Year <br> (A) | Payment Pattern (B) | Return on Investment (C) | Discounted Reserves (D) | Undiscounted Reserves (E) | Discoun Factor (F) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | 0.1\% | 1.50\% | 0.001 | 0.001 | 0.993 |
| 21 | 0.0\% | 1.50\% | 0.001 | 0.001 | 0.978 |
| 20 | 0.0\% | 1.50\% | 0.001 | 0.001 | 0.963 |
| 19 | 0.0\% | 1.50\% | 0.001 | 0.001 | 0.949 |
| 18 | 0.1\% | 1.50\% | 0.002 | 0.002 | 0.964 |
| 17 | 0.0\% | 1.50\% | 0.002 | 0.002 | 0.950 |
| 16 | 0.1\% | 1.50\% | 0.003 | 0.003 | 0.955 |
| 15 | 0.0\% | 1.50\% | 0.003 | 0.003 | 0.940 |
| 14 | 0.1\% | 1.50\% | 0.004 | 0.004 | 0.943 |
| 13 | 0.0\% | 1.50\% | 0.004 | 0.004 | 0.929 |
| 12 | 0.1\% | 1.50\% | 0.005 | 0.005 | 0.931 |
| 11 | 0.2\% | 1.50\% | 0.007 | 0.007 | 0.938 |
| 10 | 0.8\% | 1.50\% | 0.014 | 0.015 | 0.961 |
| 9 | 1.5\% | 1.50\% | 0.029 | 0.030 | 0.970 |
| 8 | 3.0\% | 1.50\% | 0.059 | 0.060 | 0.974 |
| 7 | 3.8\% | 1.50\% | 0.096 | 0.098 | 0.972 |
| 6 | 5.6\% | 1.50\% | 0.150 | 0.155 | 0.971 |
| 5 | 12.0\% | 1.50\% | 0.267 | 0.274 | 0.972 |
| 4 | 22.4\% | 1.50\% | 0.485 | 0.498 | 0.973 |
| 3 | 25.7\% | 1.50\% | 0.733 | 0.755 | 0.970 |
| 2 | 16.8\% | 1.50\% | 0.889 | 0.923 | 0.963 |
| 1 | 7.7\% | 1.50\% | 0.952 | 1.000 | 0.952 |
| (G) Discount Factor for Future Funding: |  |  |  | 2020-2021 | 0.959 |
|  |  |  |  | 2021-2022 | 0.959 |

Notes:
(A) This is the year of payment relative to the accident year. For example, year 7 refers to payments made in the seventh year after the inception of the accident year. We assume that payments are made at midyear.
(B) Percent of ultimate loss paid this year. This payment pattern is based on the paid loss development pattern selected in Appendix B, Page 2.
(C) Assumed Investment Income Rates.
(D) Discounted Reserves at the beginning of this year is next year's Discounted Reserves discounted one year plus this year's payments discounted six months. For example, in year 2, 88.9\% $=[73.3 \% / 1.015]+[16.8 \% /(1.007)]$.
(E) Summation of future (B) values. This is the percent of ultimate loss unpaid at the beginning of the year.
(F) (D) / (E).
(G) (F) at year 1, with interest accumulated for six months. We assume that the required funding is deposited at the middle of the first year.

This exhibit shows the calculation of the effect of anticipated investment income on future claims costs. Thus, if the discount factor in item ( $F$ ) is 0.96 , on a discounted basis, $\$ 0.96$ must be budgeted for every $\$ 1$ that will actually be paid on claims that will be incurred in the next fiscal year.

California Intergovernmental Risk Authority - Liability

Confidence Level Table

| Probability | Projected Losses | Outstanding Losses |
| :---: | :---: | :---: |
|  |  |  |
| $95 \%$ | 1.818 | 1.578 |
| $90 \%$ | 1.577 | 1.389 |
| $85 \%$ | 1.430 | 1.290 |
| $80 \%$ | 1.320 | 1.219 |
| $75 \%$ | 1.232 | 1.163 |
| $70 \%$ | 1.157 | 1.116 |
| $65 \%$ | 1.091 | 1.076 |
| $60 \%$ | 1.031 | 1.039 |
| $55 \%$ | 0.976 | 1.005 |
| $50 \%$ | 0.924 | 0.973 |
| $45 \%$ | 0.875 | 0.943 |
| $40 \%$ | 0.826 | 0.814 |
| $35 \%$ | 0.779 | 0.854 |
| $30 \%$ | 0.731 |  |
| $25 \%$ |  |  |
|  |  |  |
| To read table: | For the above retention, there is a $90 \%$ chance |  |
|  | that final loss settlements will be less than |  |
|  | 1.577 times the average expected amount of losses. |  |

This exhibit shows the loads that must be applied to bring estimated losses at the expected level to the various indicated confidence levels.

California Intergovernmental Risk Authority - Liability

Incurred Losses as of 9/30/20

| Accident Year <br> (A) | Unlimited Incurred (B) | Additions to Losses (C) | Subtractions from Losses (D) | Adjusted Incurred (E) | Incurred Over SIR (F) | Incurred Over \$100,000 (G) | Incurred Capped at \$100,000 <br> (H) | Incurred \$100,000 to SIR Layer <br> (I) | Incurred Capped at SIR <br> (J) | Incurred Capped at SIR \& Aggregate (K) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010-2011 | 8,575,083 | 0 | 67,619 | 8,507,464 | 3,250,744 | 5,415,544 | 3,091,920 | 2,164,800 | 5,256,720 | 5,256,720 |
| 2011-2012 | 5,420,226 | 0 | 445,231 | 4,974,995 | 433,626 | 2,418,680 | 2,556,315 | 1,985,054 | 4,541,369 | 4,541,369 |
| 2012-2013 | 5,873,478 | 0 | 20,877 | 5,852,602 | 1,036,452 | 2,950,487 | 2,902,115 | 1,914,035 | 4,816,150 | 4,816,150 |
| 2013-2014 | 5,859,414 | 0 | 0 | 5,859,414 | 491,776 | 3,437,013 | 2,422,401 | 2,945,237 | 5,367,638 | 5,367,638 |
| 2014-2015 | 7,176,860 | 0 | 0 | 7,176,860 | 696,021 | 4,020,716 | 3,156,144 | 3,324,696 | 6,480,840 | 6,480,840 |
| 2015-2016 | 9,592,765 | 0 | 0 | 9,592,765 | 2,064,906 | 6,462,886 | 3,129,880 | 4,397,980 | 7,527,860 | 7,527,860 |
| 2016-2017 | 9,292,507 | 0 | 0 | 9,292,507 | 1,733,194 | 6,315,101 | 2,977,405 | 4,581,907 | 7,559,313 | 7,559,313 |
| 2017-2018 | 5,630,371 | 0 | 2,500 | 5,627,871 | 0 | 2,492,889 | 3,134,982 | 2,492,889 | 5,627,871 | 5,627,871 |
| 2018-2019 | 3,427,660 | 0 | 0 | 3,427,660 | 0 | 976,863 | 2,450,797 | 976,863 | 3,427,660 | 3,427,660 |
| 2019-2020 | 3,940,649 | 0 | 0 | 3,940,649 | 0 | 1,360,500 | 2,580,149 | 1,360,500 | 3,940,649 | 3,940,649 |
| 2020-2021 | 250,276 | 0 | 0 | 250,276 | 0 | 0 | 250,276 | 0 | 250,276 | 250,276 |
| Total | \$65,039,291 | \$0 | \$536,226 | \$64,503,065 | \$9,706,719 | \$35,850,681 | \$28,652,383 | \$26,143,963 | \$54,796,346 | \$54,796,346 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA.
(C)
(D) REMIF EPL Claim
(E) $(B)+(C)-(D)$.
(F) Sum of incurred losses in excess of SIR.
(G) Sum of incurred losses in excess of \$100,000.
(H) (E) - (G).
(I) (G) - (F).
(J) (E) - (F).
(K) Minimum of (J) and the aggregate stop loss. See Not Included.

California Intergovernmental Risk Authority - Liability

Paid Losses as of 9/30/20

| Accident Year (A) | Unlimited Paid (B) | Additions to Losses (C) | Subtractions from Losses (D) | Adjusted Paid (E) | Paid <br> Over SIR <br> (F) | Paid <br> Over \$100,000 <br> (G) | Paid Capped at \$100,000 <br> (H) | Paid \$100,000 to SIR Layer <br> (I) | Paid <br> Capped at SIR <br> (J) | Paid Capped at SIR \& Aggregate (K) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2010-2011 | 8,575,083 | 0 | 67,619 | 8,507,464 | 3,250,744 | 5,415,544 | 3,091,920 | 2,164,800 | 5,256,720 | 5,256,720 |
| 2011-2012 | 5,245,244 | 0 | 445,231 | 4,800,013 | 433,626 | 2,418,680 | 2,381,333 | 1,985,054 | 4,366,387 | 4,366,387 |
| 2012-2013 | 5,862,693 | 0 | 20,877 | 5,841,817 | 1,036,452 | 2,950,487 | 2,891,330 | 1,914,035 | 4,805,365 | 4,805,365 |
| 2013-2014 | 5,835,804 | 0 | 0 | 5,835,804 | 491,776 | 3,437,013 | 2,398,791 | 2,945,237 | 5,344,028 | 5,344,028 |
| 2014-2015 | 6,256,349 | 0 | 0 | 6,256,349 | 696,021 | 3,172,529 | 3,083,820 | 2,476,509 | 5,560,329 | 5,560,329 |
| 2015-2016 | 9,263,124 | 0 | 0 | 9,263,124 | 2,064,906 | 6,248,587 | 3,014,537 | 4,183,681 | 7,198,218 | 7,198,218 |
| 2016-2017 | 5,156,769 | 0 | 0 | 5,156,769 | 332,894 | 2,429,228 | 2,727,540 | 2,096,334 | 4,823,875 | 4,823,875 |
| 2017-2018 | 3,786,582 | 0 | 2,500 | 3,784,082 | 0 | 1,534,016 | 2,250,066 | 1,534,016 | 3,784,082 | 3,784,082 |
| 2018-2019 | 1,295,812 | 0 | 0 | 1,295,812 | 0 | 79,400 | 1,216,412 | 79,400 | 1,295,812 | 1,295,812 |
| 2019-2020 | 414,072 | 0 | 0 | 414,072 | 0 | 0 | 414,072 | 0 | 414,072 | 414,072 |
| 2020-2021 | 29,657 | 0 | 0 | 29,657 | 0 | 0 | 29,657 | 0 | 29,657 | 29,657 |
| Total | \$51,721,189 | \$0 | \$536,226 | \$51,184,963 | \$8,306,419 | \$27,685,486 | \$23,499,477 | \$19,379,067 | \$42,878,544 | \$42,878,544 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA.
(C)
(D) REMIF EPL Claim
(E) $(B)+(C)-(D)$.
(F) Sum of paid losses in excess of SIR.
(G) Sum of paid losses in excess of \$100,000.
(H) (E) - (G).
(I) (G) - (F).
(J) $(E)-(F)$.
(K) Minimum of (J) and the aggregate stop loss. See Not Included.

California Intergovernmental Risk Authority - Liability

Case Reserves as of 9/30/20


Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Appendix H, Page 1, Column (B) - Appendix H, Page 2, Column (B).
(C) Appendix H, Page 1, Column (C) - Appendix H, Page 2, Column (C).
(D) Appendix H, Page 1, Column (D) - Appendix H, Page 2, Column (D).
(E) $(B)+(C)-(D)$.
(F) Sum of case reserves in excess of SIR.
(G) Sum of case reserves in excess of \$100,000.
(H) $(E)-(G)$.
(I) $(\mathrm{G})-(\mathrm{F})$.
(J) (E) - (F).
(K) Minimum of (J) and the aggregate stop loss. See Not Included.

California Intergovernmental Risk Authority - Liability

|  |  | Additions to | Subtractions from | Adjusted |  | Additions to | Subtractions from | Adjusted |  | Adjusted |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year <br> (A) | Reported Claims (B) | Reported Claims <br> (C) | Reported Claims (D) | Reported Claims (E) | Closed Claims (F) | Closed Claims (G) | Closed <br> Claims <br> (H) | Closed Claims <br> (I) | Open <br> Claims <br> (J) | Open <br> Claims (K) |
| 2010-2011 | 435 | 0 | 130 | 305 | 435 | 0 | 130 | 305 | 0 | 0 |
| 2011-2012 | 376 | 0 | 121 | 255 | 371 | 0 | 121 | 250 | 5 | 5 |
| 2012-2013 | 382 | 0 | 132 | 250 | 382 | 0 | 132 | 250 | 0 | 0 |
| 2013-2014 | 383 | 0 | 163 | 220 | 381 | 0 | 163 | 218 | 2 | 2 |
| 2014-2015 | 331 | 0 | 108 | 223 | 327 | 0 | 108 | 219 | 4 | 4 |
| 2015-2016 | 302 | 0 | 124 | 178 | 295 | 0 | 124 | 171 | 7 | 7 |
| 2016-2017 | 394 | 0 | 199 | 195 | 375 | 0 | 199 | 176 | 19 | 19 |
| 2017-2018 | 321 | 0 | 153 | 168 | 286 | 0 | 153 | 133 | 35 | 35 |
| 2018-2019 | 393 | 0 | 229 | 164 | 338 | 0 | 229 | 109 | 55 | 55 |
| 2019-2020 | 349 | 0 | 73 | 276 | 157 | 0 | 73 | 84 | 192 | 192 |
| 2020-2021 | 37 | 0 | 3 | 34 | 10 | 0 | 3 | 7 | 27 | 27 |
| Total | 3,703 | 0 | 1,435 | 2,268 | 3,357 | 0 | 1,435 | 1,922 | 346 | 346 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA.
(C)
(D) REMIF EPL Claims and Claims closed without payment
(E) $(\mathrm{B})+(\mathrm{C})-(\mathrm{D})$.
(F) Provided by the CIRA.
(G)
(H) REMIF EPL Claims and Claims closed without payment
(I) $(\mathrm{F})+(\mathrm{G})-(\mathrm{H})$.
(J) (B) - (F).
(K) (E) - (I).

| Accident | Total <br> Payroll <br> (\$00) | Inflation <br> Trend <br> Factor <br> (B) | Trended <br> Payroll |
| :---: | :---: | :---: | :---: |
| (A) |  | $(\$ 00)$ |  |
| (C) |  |  |  |

Notes:
(A) Provided by the CIRA.
(B) Based on industry factors.
(C) $\quad(A) \times(B)$.

# Bickmore Actuarial 

# Actuarial Review of the Self-Insured <br> Employment Practices Liability Program 

Forecast for Program Year 2021-22

Presented to
California Intergovernmental Risk Authority

February 12, 2021 - DRAFT Actuarial

Friday, February 12, 2021

Mr. Kin Ong<br>General Manager<br>Public Agency Risk Sharing Authority of California<br>1525 Response Road, Suite 1<br>Sacramento, CA 95815<br>Ms. Amy Northam<br>General Manager<br>Redwood Empire Municipal Insurance Fund 414 West Napa Street<br>Sonoma, California 95476

## RE: Actuarial Review of the Self-Insured Employment Practices Liability Program

Dear Kin and Amy:
As requested, we have completed our estimates of employment practices liability (EPL) claim costs, experience modification calculations, and premium allocation for the newly formed California Intergovernmental Risk Authority (CIRA). Assuming an SIR of $\$ 250,000$ per occurrence, we estimate the ultimate cost of claims and expenses in the pooled layer (i.e. above member deductibles and below pool SIR) for claims incurred during the 2021-22 program year to be $\$ 883,866$. This amount includes allocated loss adjustment expenses (ALAE), and a discount for anticipated investment income but excludes unallocated loss adjustment expenses (ULAE). ALAE is the direct cost associated with the defense of individual claims (e.g. legal fees, investigation fees, court charges). ULAE is the cost to administer all claims to final settlement, which may be years into the future (e.g. claims adjusters' salaries, taxes). The discount for investment income is calculated based on the likely payout pattern of the Authority's claims, assuming a $1.5 \%$ return on investments per year. For budgeting purposes, the expected costs of 2021-22 claims translate to rates of $\$ 0.229$ per $\$ 100$ of payroll.

The estimates in this report do not include any provision for the potential impact on the cost of claims because of the coronavirus (COVID-19) pandemic.

The table below shows our funding recommendations for CIRA for the 2021-22 fiscal year.

California Intergovernmental Risk Authority
Self-Insured Employment Practices Liability Program
Loss and LAE Funding Guidelines for 2021-22
Self-Insured Retention (SIR) of \$250,000

|  | Expected | Marginally Acceptable 70\% CL | Recommended Range |  |  | Conservative 90\% CL |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $\begin{gathered} \text { Low } \\ 75 \% \mathrm{CL} \end{gathered}$ | Target 80\% CL | $\begin{gathered} \text { High } \\ 85 \% \text { CL } \end{gathered}$ |  |
| Loss and ALAE | \$1,764,556 | \$2,032,769 | \$2,158,052 | \$2,306,275 | \$2,491,553 | \$2,738,591 |
| ULAE | 0 | 0 | 0 | 0 | 0 | 0 |
| Investment Income Offset | $(880,690)$ | $(1,014,555)$ | $(1,077,084)$ | $(1,151,062)$ | $(1,243,534)$ | $(1,366,831)$ |
| Discounted Loss and LAE | \$883,866 | \$1,018,214 | \$1,080,968 | \$1,155,213 | \$1,248,019 | \$1,371,760 |
| Non-Claims Related Expenses | 0 | 0 | 0 | 0 | 0 | 0 |
| Indicated Funding | \$883,866 | \$1,018,214 | \$1,080,968 | \$1,155,213 | \$1,248,019 | \$1,371,760 |
| Rate per \$100 of 2021-22 Payroll | \$0.229 | \$0.264 | \$0.280 | \$0.300 | \$0.324 | \$0.356 |

The funding recommendations shown in the table above do not include any recognition of the existing funding margin (surplus or deficit) at June 30, 2021.

Note that the figures in the above table are for loss and ALAE in the pool layer. They exclude claims administration costs, excess insurance premiums, and general administration costs.

We provide the following allocation of premiums based on Claim Frequency Adjustment Method, which include ultimate loss and ALAE for loss and ALAE in the pool layer ( $\$ 1,155,213$ ) assuming a $\$ 250,000$ retention per occurrence at the $80 \%$ confidence level on a discounted basis at $1.5 \%$ and ERMA excess insurance ( $\$ 1,353,696$ ). (see Rates Exhibit 2).

| Member | $\frac{\text { Frequency }}{\text { Mod }}$ | $\begin{gathered} 80 \% \text { CL } \\ \text { Loss \& ALAE } \end{gathered}$ | Claims <br> Admin Costs | Admin Costs | Excess Insurance Costs | Total Premium |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amador City | 0.945 | \$164 | \$0 | \$0 | \$123 | \$287 |
| Arcata | 0.945 | 50,971 | 0 | 0 | 35,112 | 86,084 |
| Avalon | 1.045 | 21,507 | 0 | 0 | 18,426 | 39,934 |
| Belvedere | 1.045 | 12,059 | 0 | 0 | 10,331 | 22,390 |
| Blue Lake | 0.945 | 2,567 | 0 | 0 | 1,768 | 4,336 |
| California City | 1.094 | 12,704 | 0 | 0 | 25,046 | 37,750 |
| Calimesa | 0.945 | 9,970 | 0 | 0 | 7,465 | 17,434 |
| Calistoga | 1.094 | 30,952 | 0 | 0 | 20,015 | 50,967 |
| Citrus Heights | 1.045 | 36,558 | 0 | 0 | 75,509 | 112,067 |
| Clearlake | 1.094 | 20,484 | 0 | 0 | 16,751 | 37,235 |
| Cloverdale | 0.945 | 21,970 | 0 | 0 | 15,134 | 37,104 |
| Coalinga | 1.094 | 29,721 | 0 | 0 | 24,306 | 54,028 |
| Cotati | 1.045 | 22,759 | 0 | 0 | 14,185 | 36,944 |
| Eureka | 1.045 | 66,166 | 0 | 0 | 56,687 | 122,853 |
| Ferndale | 1.045 | 3,905 | 0 | 0 | 2,434 | 6,339 |
| Fort Bragg | 0.945 | 20,837 | 0 | 0 | 14,354 | 35,191 |
| Fortuna | 0.945 | 27,860 | 0 | 0 | 19,192 | 47,052 |
| Grass Valley | 1.045 | 29,189 | 0 | 0 | 25,007 | 54,196 |
| Healdsburg | 0.945 | 91,390 | 0 | 0 | 62,955 | 154,345 |
| Highland | 0.945 | 11,911 | 0 | 0 | 11,279 | 23,190 |
| Lakeport | 1.045 | 18,899 | 0 | 0 | 12,803 | 31,702 |
| Nevada City | 1.094 | 12,026 | 0 | 0 | 9,835 | 21,861 |
| Placentia | 1.045 | 28,915 | 0 | 0 | 59,723 | 88,638 |
| Placerville | 0.945 | 18,507 | 0 | 0 | 27,351 | 45,858 |
| Plymouth | 0.945 | 3,363 | 0 | 0 | 2,316 | 5,679 |
| Point Arena | 0.945 | 1,503 | 0 | 0 | 1,035 | 2,538 |
| Rancho Cucamonga | 1.094 | 0 | 0 | 0 | 109,885 | 109,885 |
| Rancho Cucamonga FD | 0.945 | 29,209 | 0 | 0 | 53,685 | 82,894 |
| Rancho Santa Margarita | 0.945 | 12,231 | 0 | 0 | 9,158 | 21,388 |
| Rohnert Park | 1.045 | 92,749 | 0 | 0 | 79,461 | 172,210 |
| San Juan Bautista | 0.945 | 4,226 | 0 | 0 | 2,911 | 7,137 |
| Sebastopol | 1.045 | 32,953 | 0 | 0 | 20,538 | 53,491 |
| Sierra Madre | 0.945 | 23,051 | 0 | 0 | 21,828 | 44,879 |
| Sonoma | 0.945 | 17,413 | 0 | 0 | 11,995 | 29,408 |
| South Lake Tahoe | 1.045 | 36,557 | 0 | 0 | 75,508 | 112,066 |
| St. Helena | 0.945 | 36,095 | 0 | 0 | 27,025 | 63,120 |
| Tehama | 0.945 | 331 | 0 | 0 | 228 | 559 |
| Trinidad | 0.945 | 1,819 | 0 | 0 | 1,253 | 3,072 |
| Truckee | 0.945 | 44,685 | 0 | 0 | 42,313 | 86,998 |
| Twentynine Palms | 1.094 | 13,417 | 0 | 0 | 8,676 | 22,093 |
| Ukiah | 1.045 | 83,900 | 0 | 0 | 71,880 | 155,780 |
| Watsonville | 1.045 | 0 | 0 | 0 | 142,398 | 142,398 |
| Wheatland | 1.045 | 9,708 | 0 | 0 | 6,051 | 15,759 |
| Wildomar | 0.945 | 7,303 | 0 | 0 | 5,031 | 12,334 |
| Willits | 0.945 | 18,228 | 0 | 0 | 12,557 | 30,785 |
| Windsor | 0.945 | 47,383 | 0 | 0 | 35,478 | 82,861 |
| Yountville | 0.945 | 18,216 | 0 | 0 | 13,639 | 31,854 |
| Yucaipa | 0.945 | 12,487 | 0 | 0 | 18,454 | 30,941 |
| Yucca Valley | 0.945 | 6,396 | 0 | 0 | 14,602 | 20,999 |
| Total |  | \$1,155,213 | \$0 | \$0 | \$1,353,696 | \$2,508,909 |

The report that follows outlines the scope of our study, its background, and our conclusions, recommendations, and assumptions. Judgments regarding the appropriateness of our conclusions and recommendations should be made only after studying the report in its entirety, including the graphs, attachments, exhibits and appendices. Our report has been developed for the Authority's internal use. It is not intended for general circulation.

We appreciate the opportunity to be of service to CIRA in preparing this report. Please feel free to call Mike Harrington at (916) 244-1162, Becky Richard at (916) 244-1183, or David Kim at (916) 244-1166 with any questions you may have concerning this report.

Sincerely,
Bickmore Actuarial

## DRAFT

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## I. BACKGROUND

The California Intergovernmental Risk Authority (CIRA) will be formed to provide pooled insurance coverage to cities in the State of California. CIRA will begin its self-insured liability program on July 1, 2021. Its self-insured retention will be $\$ 250,000$, and excess coverage for claims exceeding that level. Claims administration services are provided by various third-party claims administrators.

The members of CIRA and their deductibles are shown in the table below.

| Member | Deductible | Member | Deductible |
| :---: | ---: | :---: | ---: |
| Amador City |  |  |  |
| Arcata | 10,000 | Point Arena | 5,000 |
| Avalon | 5,000 | Rancho Cucamonga | 250,000 |
| Belvedere | 25,000 | Rancho Cucamonga FD | 75,000 |
| Blue Lake | 25,000 | Rancho Santa Margarita | 10,000 |
| California City | 5,000 | Rohnert Park | 25,000 |
| Calimesa | 100,000 | San Juan Bautista | 5,000 |
| Calistoga | 10,000 | Sebastopol | 5,000 |
| Citrus Heights | 10,000 | Sierra Madre | 25,000 |
| Clearlake | 100,000 | Sonoma | 5,000 |
| Cloverdale | 25,000 | South Lake Tahoe | 100,000 |
| Coalinga | 5,000 | St. Helena | 10,000 |
| Cotati | 25,000 | Tehama | 5,000 |
| Eureka | 5,000 | Trinidad | 5,000 |
| Ferndale | 25,000 | Truckee | 25,000 |
| Fort Bragg | 5,000 | Twentynine Palms | 10,000 |
| Fortuna | 5,000 | Ukiah | 25,000 |
| Grass Valley | 5,000 | Watsonville | 250,000 |
| Healdsburg | 25,000 | 5,000 |  |
| Highland | 5,000 | Wheatland | 5,000 |
| Lakeport | 25,000 | Wildomar | 5,000 |
| Nevada City | 10,000 | Willits | 10,000 |
| Placentia | 25,000 | Windsor | 10,000 |
| Placerville | 100,000 | 50,000 |  |
| Plymouth | 50,000 | Yountville | 100,000 |
|  | 5,000 | Yucaipa |  |

The purpose of this review is to provide a guide to CIRA to determine reasonable funding levels for its self-insurance program in compliance with Governmental Accounting Standards Board Statements \#10 and \#30. The specific objective of the study is to estimate CIRA's project ultimate loss costs for 2021-22 and provide funding guidelines to meet future costs.

## II. CONCLUSIONS AND RECOMMENDATIONS

## A. COSTS OF 2021-22 CLAIMS

We estimate the ultimate cost of claims and allocated loss adjustment expenses (ALAE) for claims incurred in the pool layer during the 2021-22 program year to be $\$ 896,394$, assuming a SIR of $\$ 250,000$. This figure excludes claims administrative costs, excess insurance premiums and general administrative costs.
If the program is fully funded, CIRA can earn investment income on its funding for the coming year's claims before all payments come due. We estimate the impact of this investment income to be about $1.4 \%$, or $\$ 12,528$ for 2021-22. Thus the total expected cost of claims for program year 2021-22, including recognition of future investment income, is $\$ 883,866$.
We provide the following estimates of the costs of 2021-22 claims at various confidence levels, after recognition of investment income.

|  | $2021-22$ |
| :---: | ---: |
| Expected | $\$ 883,866$ |
| $70 \%$ Confidence | $1,018,214$ |
| $75 \%$ | $1,080,968$ |
| $80 \%$ | $1,155,213$ |
| $85 \%$ | $1,248,019$ |

For budgeting purposes, these translate to the following contribution rates per $\$ 100$ payroll:

2021-22

| Expected | $\$ 0.229$ |
| :---: | ---: |
| $70 \%$ Confidence | 0.264 |
| $75 \%$ | 0.280 |
| $80 \%$ | 0.300 |
| $85 \%$ | 0.324 |

Again, we generally recommend funding to the $75 \%$ to $85 \%$ confidence levels. We consider funding to the $70 \%$ confidence level to be marginally acceptable, and to the 90\% confidence level to be conservative.

The claim costs and rates shown above do not include any recognition of the existing funding margin. They are for losses and loss adjustment expenses in the pooled layer only, and do not include a provision for loss control, overhead, excess insurance premiums, and other expenses associated with the program.

## B. PROGRAM FUNDING: GOALS AND OBJECTIVES

As self-insurance programs have proliferated among public entities, it has become apparent that there is a large measure of inconsistency in the way in which these programs recognize and account for their claims costs. This is the result of the fact that there have been several different sources of guidance available, none of which has been completely relevant to public entity self-insurance programs.

According to the Governmental Accounting Standards Board (GASB), the most relevant source of guidance on the subject is Financial Accounting Standards Board Statement \#60. A liability for unpaid claim costs, including all loss adjustment expenses, should be accrued at the time the self-insured events occur. This liability should include an allowance for incurred but not reported claims. It may be discounted for investment income at an appropriate rate of return, provided the discounting is disclosed. The regulations detailing the way in which this must be done are outlined in GASB's statements \#10 and \#30. These regulations are required to be applied by the Authority.
GASB \#10 and \#30 do not address asset requirements. They do, however, allow a range of amounts to be recognized for accounting purposes; specifically, GASB \#10 and \#30 allow recognition of a risk margin for unexpectedly adverse loss experience. Thus, for accounting purposes, it is possible to formulate a funding policy from a range of alternatives. The uncertainty in any estimate of the program's liability for outstanding claims should be taken into consideration in determining funding policy, but it may be offset by recognizing anticipated investment income earnings. This usually means developing a funding program based on discounted claims costs with some risk margin for unexpected adverse loss experience.
The amount of the risk margin should be a question of long-term funding policy. We recommend that the risk margin be determined by thinking in terms of the probability that a given level of assets will prove to be adequate. For example, a reasonable goal might be to maintain assets at the $85 \%$ confidence level.

A key factor to consider in determining funding policy is the degree to which stability is required in the level of contributions to the program from year to year. If you elect to maintain assets at a low confidence level, the chances are much greater that future events will prove that additional contributions should have been made for old claims. The additional contributions for old claims may be required at the same time that costs are increasing dramatically on new claims. The burden of funding for increases on past years as well as on current years, may well be prohibitive.

## DRAFT

We generally recommend maintaining program assets at the 80\% confidence level, after recognition of investment income, with a recommended range of the $75 \%$ to $85 \%$ confidence levels. We tend to think of the $70 \%$ confidence level as marginally acceptable and of the $90 \%$ confidence level as conservative. We recommend the $75 \%$ to $85 \%$ confidence level range because the probabilities are reasonably high that resulting assets will be sufficient to meet claim liabilities, yet the required risk margins are not so large that they will cause most self-insured entities to experience undue financial hardship. In addition, within this range, anticipated investment income generally offsets the required risk margin for the most part, which means that assets are likely sufficient on an undiscounted basis.

We also strongly believe, however, that the confidence level to which any future year is funded should be evaluated considering the relative certainty of the assumptions underlying the actuarial analysis, the Authority's other budgetary constraints, and the relative level of risk it is believed appropriate to assume. This means formulating both short and long-term funding goals, which may be the same in some years, but different in others.

In general, we recommend funding each year's claims costs in that year. When surpluses or deficits have developed on outstanding liabilities and funding adjustments are necessary, they should be clearly identified as such so that the habit of funding each year's claims costs that year is maintained. We also recommend that you reduce a surplus more slowly than you would accumulate funding to reduce a deficit.

## C. HISTORICAL TRENDS IN THE SELF-INSURANCE PROGRAM

## Loss Rate

We have evaluated the trend in the Authority's projected ultimate loss \& ALAE rate. This rate equals projected ultimate loss and ALAE (limited to $\$ 50,000$ per occurrence) divided by payroll in $\$ 100$ s, as displayed in the following graph.

Graph 2
Loss \& ALAE Rate Trend ${ }^{1}$ Ultimate Loss \& ALAE / Payroll (\$100s)


1 Losses are at expected (no risk margin) and are not discounted to reflect net present value.

## Severity

We have evaluated the trend in the Authority's projected ultimate claim size (or "severity"). The ultimate claim size equals projected ultimate loss \& ALAE (limited to $\$ 50,000$ per occurrence) divided by the projected ultimate number of reported claims, as displayed in the following graph.

Graph 3
Average Claim Size Trend ${ }^{1}$
Ultimate Loss \& ALAE / Ultimate Reported Claims


Losses are at expected (no risk margin) and are not discounted to reflect net present value.

## Frequency

We have evaluated the trend in the Authority's claim frequency. The claim frequency equals projected ultimate number of reported claims divided by payroll in $\$$ millions, as displayed in the following graph.

Graph 4
Claim Frequency Trend Ultimate Reported Claims / Payroll (\$ Millions)


## D. DATA PROVIDED FOR THE ANALYSIS

Overall, the data utilized in preparing this report appears to be accurate.
Comments and issues regarding the data are as follows:

- We have assumed that the program's self-insured retention will be at $\$ 250,000$ per occurrence for 2021-21 (See Appendix K).
- Detailed claim-level loss run with first-dollar unlimited loss information valued as of 9/30/20 was provided in PARSAC and REMIF member loss data. (See Appendix M).
- We also utilized the data from PARSAC and REMIF's most recent actuarial study for our assessment of loss development.
- We have assumed that CIRA's payroll for 2021-22 will be \$385,695,000 (See Appendix N).
The data provided for the analysis appears to be reasonable for use in this actuarial valuation of liabilities and projection of loss costs.


## III. ASSUMPTIONS AND LIMITATIONS

Any quantitative analysis is developed within a very specific framework of assumptions about conditions in the outside world, and actuarial analysis is no exception. We believe that it is important to review the assumptions we have made in developing the estimates presented in this report. By doing so, we hope you will gain additional perspective on the nature of the uncertainties involved in maintaining a self-insurance program. Our assumptions, and some observations about them, are as follows:

- Our analysis is based on loss experience, exposure data, and other general and specific information provided to us by PARSAC and REMIF. While we have not independently audited or verified this information, we have reviewed it for reasonableness and internal consistency.
- We have also made use of loss statistics that have been developed from the information gathered and compiled from other California public entities with selfinsured employment practices liability program.
- We have assumed that the future development of incurred and paid losses can be reasonably predicted on the basis of development of such losses in the recent past. We have also assumed that the historical development patterns for the participants of other California public entities with self-insured employment practices liability programs in the aggregate form a reasonable basis of comparison to the patterns from the Employment Risk Management Authority's data.
- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial review of other California public entities with selfinsured employment practices liability programs.
- We have assumed that there is a continuing relationship between past and future loss costs.
- It is not possible to predict future claim costs precisely. Most of the costs of employment practices liability claims arise from a small number of incidents involving serious injury. A relatively small number of such claims could generate enough loss dollars to significantly reduce, or even deplete, the self-insurance fund.
- We cannot predict and have not attempted to predict the impact of future law changes and court rulings on claims costs. This is one major reason why we believe our funding recommendations are reasonable now, but should not be extrapolated into the future.
- We have assumed that the loss rate trend associated with claim costs increases at $5.0 \%$ per year. We have assumed that claim severity increases at $4.0 \%$ per year, and that claim frequency increases at 1.0\% per year.
- We have assumed that historical payroll and other inflation-sensitive exposure measures increase $2.5 \%$ annually due to inflation.
- We have assumed that assets held for investment will generate an average annual return of $2.5 \%$ over the duration of payment of the loss liabilities. It should be noted that actual future investment returns may vary significantly from this assumption, depending upon the prevailing investment market conditions.
- The claims costs we have estimated include indemnity and medical payments, and all loss adjustment expenses. We have not included estimates for excess insurance costs and other expenses associated with the program.
- Our funding recommendations do not include provisions for catastrophic events not in PARSAC and REMIF's history, such as earthquakes, flooding, mass civil disorder, or mass occupational disease.
- Our estimates assume that all excess insurance is valid and collectible. Further, our funding recommendations do not include a provision for losses greater than CIRA's excess coverage.


## IV. GLOSSARY OF ACTUARIAL TERMS

Accident Year - Year during which the accidents that generate a group of claims occurs, regardless of when the claims are reported, payments are made, or reserves are established.

Allocated Loss Adjustment Expenses (ALAE) - Expense incurred in settling claims that can be directly attributed to specific individual claims (e.g., legal fees, investigative fees, court charges, etc.)

Benefit Level Factor - Factor used to adjust historical losses to the current level of workers' compensation benefits.

Case Reserve - The amount left to be paid on a claim, as estimated by the claims administrator.

Claim Count Development Factor - A factor that is applied to the number of claims reported in a particular accident period in order to estimate the number of claims that will ultimately be reported.

Claim Frequency - Number of claims per \$1 million of payroll.
Confidence Level - An estimated probability that a given level of funding will be adequate to pay actual claims costs. For example, the $85 \%$ confidence level refers to an estimate for which there is an $85 \%$ chance that the amount will be sufficient to pay loss costs.

Discount Factor - A factor to adjust estimated loss costs to reflect anticipated investment income from assets held prior to actual claim payout.

Expected Losses - The best estimate of the full, ultimate value of loss costs.
Incurred but not Reported (IBNR) Losses - Losses for which the accident has occurred but the claim has not yet been reported. This is the ultimate value of losses, less any amount that has been set up as reported losses by the claims adjuster. It includes both amounts for claims incurred but not yet received by the administrator and loss development on already reported claims.

Loss Development Factor - A factor applied to losses for a particular accident period to reflect the fact that reported and paid losses do not reflect final values until all claims are settled (see Section IV).

Loss Rate - Ultimate losses per \$100 of payroll.

Non-Claims Related Expenses - Program expenses not directly associated with claims settlement and administration, such as excess insurance, safety program expenses, and general overhead. These exclude expenses associated with loss settlements (Indemnity/Medical, BI/PD), legal expenses associated with individual claims (ALAE), and claims administration (ULAE).

Outstanding Losses - Losses that have been incurred but not paid. This is the ultimate value of losses less any amount that has been paid.

Paid Losses - Losses actually paid on all reported claims.
Program Losses - Losses, including ALAE, limited to the SIR for each occurrence.
Reported Losses - The total expected value of losses as estimated by the claims administrator. This is the sum of paid losses and case reserves.

Self-Insured Retention (SIR) - The level at which an excess insurance policy is triggered to begin payments on a claim. Financially, this is similar to an insurance deductible.

Severity - Average claim cost.
Ultimate Losses - The value of claim costs at the time when all claims have been settled. This amount must be estimated until all claims are actually settled.

Unallocated Loss Adjustment Expenses (ULAE) - Claim settlement expenses that cannot be directly attributed to individual claims (e.g., claims adjusters' salaries, taxes, etc.)
Rate Exhibit 1
Page 1



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California Intergovernmental Risk Authority (CIRA) - Employee Practices Liability 2021-22 Estimated Premiums $\$ 250,000$ Pool Limit $\qquad$
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California Intergovernmental Risk Authority（CIRA）－Employee Practices Liability
2021 $\$ 350,000$ Pool Limit
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## Funding Options for Program Year 2021-2022 (SIR = \$250,000)



Payroll rates are per hundred dollars of 2021-2022 payroll of \$385,695,400.

Funding Options for Program Year 2021-2022 (SIR $=\$ 350,000)$


Payroll rates are per hundred dollars of 2021-2022 payroll of \$385,695,400.

California Intergovernmental Risk Authority - Employee Practices Liability

Estimated Ultimate Limited Losses Capped at \$50,000 per Claim

|  | Reported | Paid | Exposure Method | Exposure Method |  | Selected |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Loss | Loss | Based on | Based on | Frequency- | Ultimate |
| Accident | Development | Development | Reported | Paid | Severity | Limited |
| Year | Method <br> (A) | Method <br> (B) | Losses <br> (C) | Losses <br> (D) | Method (E) | Losses <br> (F) |
| 2012-2013 | 142,000 | 122,000 | 142,000 | 122,000 | 142,000 | 142,000 |
| 2013-2014 | 123,000 | 110,000 | 123,000 | 108,000 | 126,000 | 126,000 |
| 2014-2015 | 37,000 | 33,000 | 37,000 | 33,000 | 37,000 | 37,000 |
| 2015-2016 | 250,000 | 169,000 | 248,000 | 90,000 | 345,000 | 250,000 |
| 2016-2017 | 239,000 | 227,000 | 249,000 | 212,000 | 307,000 | 234,000 |
| 2017-2018 | 511,000 | 430,000 | 530,000 | 423,000 | 533,000 | 498,000 |
| 2018-2019 | 343,000 | 183,000 | 474,000 | 388,000 | 610,000 | 420,000 |
| 2019-2020 | 1,217,000 | 505,000 | 959,000 | 822,000 | 548,000 | 891,000 |
| Totals |  |  |  |  |  | \$2,598,000 |
|  |  | Projected Losses | the Year 2020-20 | 1 (G) |  | \$931,000 |
|  |  | Projected Losses | the Year 2021-20 |  |  | \$1,012,000 |

Notes:
(A) From Appendix A, Page 1, Column (D).
(B) From Appendix B, Page 1, Column (D).
(C) Based on results in Appendix C, Page 1.
(D) Based on results in Appendix C, Page 2.
(E) Based on results in Appendix D, Page 1.
(F) Selected averages of (A), (B), (C), (D), and (E).
(G) From Exhibit 3, Page 1, Line (K) / Line (G).
(H) From Exhibit 3, Page 1, Line (K) / Line (G).

This exhibit summarizes the results of the actuarial methods we have applied to estimate limited losses for each year. These results are used to select a limited loss rate for future years.

Selection of Projected Limited Loss Rate and Projection of Program Losses and ULAE


Notes appear on the next page.

## Notes:

(A) From Exhibit 2, Page 2, Column (F).

For purposes of projecting future losses, losses
are capped at $\$ 50,000$ per occurrence.
(B) From Appendix E, Page 1, Column (B).
(C) $(A) \times(B)$.
(D) Appendix I, Column (C).
(E) (C)/(D).
(F) Selected based on (E).
(G) Based on a Burr distribution, a mathematical model of claims sizes.
(H) From Appendix E.
(I) $(\mathrm{F}) \times(\mathrm{G}) \times(\mathrm{H})$.
(J) Appendix I, Column (C).
(K) (I) $x(J)$.
(L) Based on an estimated claim closing pattern and the CIRA's historical claims administration expenses.
(M) $(\mathrm{K})+(\mathrm{L})$.

This exhibit shows the calculation of future loss costs based on the past loss rates. The projections will be accurate only to the extent that what has happened in the past is representative of what will happen in the future.

Reported Loss Development

| Accident | Limited Reported Losses as | Reported Loss Development | Ultimate <br> Limited | Program Reported Losses as | Reported Loss Development | Ultimate Program |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> (A) | of $9 / 30 / 20$ <br> (B) | Factor <br> (C) | Losses <br> (D) | of $9 / 30 / 20$ <br> (E) | Factor <br> (F) | Losses (G) |
| 2012-2013 | 142,004 | 1.000 | 142,004 | 142,004 | 1.000 | 142,004 |
| 2013-2014 | 126,415 | 0.974 | 123,128 | 126,415 | 0.974 | 123,128 |
| 2014-2015 | 37,280 | 0.981 | 36,572 | 37,280 | 0.981 | 36,572 |
| 2015-2016 | 250,532 | 0.996 | 249,530 | 250,532 | 0.996 | 249,530 |
| 2016-2017 | 234,117 | 1.021 | 239,033 | 234,117 | 1.021 | 239,033 |
| 2017-2018 | 471,152 | 1.084 | 510,729 | 471,152 | 1.084 | 510,729 |
| 2018-2019 | 246,365 | 1.391 | 342,694 | 246,365 | 1.391 | 342,694 |
| 2019-2020 | 282,127 | 4.315 | 1,217,378 | 282,127 | 4.315 | 1,217,378 |
| Totals | \$1,789,992 |  | \$2,861,068 | \$1,789,992 |  | \$2,861,068 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA. These losses exclude amounts over $\$ 50,000$ per occurrence.
(C) From Appendix A, Page 2.
(D) (B) $\times$ (C). These estimated losses exclude amounts over $\$ 50,000$ per occurrence.
(E) Losses capped at the CIRA's SIR. Amounts are provided by the CIRA.
(F) Derived from factors on Appendix A, Page 3.
(G) (E) $\times(\mathrm{F})$.

This method tends to understate ultimate losses for the most recent several years because the large losses for those years generally have not yet emerged at the time of our review.

This exhibit shows the calculation of estimated ultimate losses for each year based on paid losses and case reserves as reported by the claims administrator. These losses tend to "develop" or change from period to period as more information becomes available about the cases. This development tends to follow quantifiable patterns over time.

|  |  |  |  | Program |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Paid | Loss | Ultimate | Paid | Loss | Ultimate |
| Accident | Losses as | Development | Limited | Losses as | Development | Program |
| Year <br> (A) | of $9 / 30 / 20$ <br> (B) | Factor (C) | Losses (D) | of 9/30/20 <br> (E) | Factor (F) | Losses <br> (G) |
| 2012-2013 | 121,858 | 1.000 | 121,858 | 121,858 | 1.000 | 121,858 |
| 2013-2014 | 126,415 | 0.871 | 110,107 | 126,415 | 0.871 | 110,107 |
| 2014-2015 | 37,280 | 0.893 | 33,291 | 37,280 | 0.893 | 33,291 |
| 2015-2016 | 197,867 | 0.855 | 169,176 | 197,867 | 0.855 | 169,176 |
| 2016-2017 | 234,117 | 0.969 | 226,859 | 234,117 | 0.969 | 226,859 |
| 2017-2018 | 438,305 | 0.980 | 429,539 | 438,305 | 0.980 | 429,539 |
| 2018-2019 | 123,244 | 1.487 | 183,264 | 123,244 | 1.487 | 183,264 |
| 2019-2020 | 79,793 | 6.323 | 504,531 | 79,793 | 6.323 | 504,531 |
| Totals | \$1,358,879 |  | \$1,778,626 | \$1,358,879 |  | \$1,778,626 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA. These losses exclude amounts over $\$ 50,000$ per occurrence.
(C) From Appendix B, Page 2.
(D) (B) $\times$ (C). These estimated losses exclude amounts over $\$ 50,000$ per occurrence.
(E) Losses capped at the CIRA's SIR. Amounts are provided by the CIRA.
(F) Derived from factors on Appendix B, Page 3.
(G) (E) $\times(\mathrm{F})$.

This method tends to understate ultimate losses for the most recent several years because the large losses for those years generally have not yet emerged at the time of our review.

This exhibit shows the calculation of estimated ultimate losses for each year based on paid losses as reported by the claims administrator. These losses tend to "develop" or change from period to period as more information becomes available about the cases. This development tends to follow quantifiable patterns over time.

| Exposure and Development Method Based on Reported Losses |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | Trended Payroll (\$00) (A) | Reported Losses as of $9 / 30 / 20$ <br> (B) | Reported Loss Development Factor (C) | Percentage of Losses Yet to Be Reported (D) | Program Rate (E) | Incurred but not Reported (IBNR) (F) | Ultimate Program Losses (G) |
| 2012-2013 | 3,218,390 | 142,004 | 1.000 | 0.000 | 0.044 | 0 | 142,004 |
| 2013-2014 | 3,070,489 | 126,415 | 0.974 | (0.027) | 0.041 | $(3,399)$ | 123,016 |
| 2014-2015 | 3,124,937 | 37,280 | 0.981 | (0.019) | 0.012 | (712) | 36,568 |
| 2015-2016 | 3,245,580 | 250,532 | 0.996 | (0.004) | 0.196 | $(2,545)$ | 247,987 |
| 2016-2017 | 3,416,580 | 234,117 | 1.021 | 0.021 | 0.206 | 14,780 | 248,897 |
| 2017-2018 | 3,508,384 | 471,152 | 1.084 | 0.077 | 0.216 | 58,351 | 529,503 |
| 2018-2019 | 3,561,551 | 246,365 | 1.391 | 0.281 | 0.227 | 227,181 | 473,546 |
| 2019-2020 | 3,703,705 | 282,127 | 4.315 | 0.768 | 0.238 | 676,978 | 959,105 |
| Totals | 26,849,616 | \$1,789,992 |  |  |  | \$970,634 | \$2,760,626 |

Notes:
(A) Appendix I, Column (C).
(B) Provided by the CIRA. These losses exclude amounts incurred above the CIRA's SIR for each year.
(C) From Appendix A, Page 1, Column (F).
(D) $1-1 /(\mathrm{C})$.
(E) From Appendix C, Page 3, Column (H).
(F) $(\mathrm{A}) \times(\mathrm{D}) \times(\mathrm{E})$.
(G) $(B)+(F)$.

This exhibit shows the calculation of ultimate losses based on the assumption that there is an underlying relationship between losses and exposure that changes in regular ways over time. The method relies on the premise that the losses that are currently unreported will cost what this relationship would suggest.

Exposure and Development Method
Based on Paid Losses

| Accident Year | Trended Payroll (\$00) (A) | Paid Losses as of $9 / 30 / 20$ (B) | Paid <br> Loss <br> Development Factor (C) | Percentage of Losses Yet to Be Paid (D) | Program Rate (E) | Incurred but not Paid (F) | Ultimate Program Losses (G) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012-2013 | 3,218,390 | 121,858 | 1.000 | 0.000 | 0.044 | 0 | 121,858 |
| 2013-2014 | 3,070,489 | 126,415 | 0.871 | (0.148) | 0.041 | $(18,632)$ | 107,783 |
| 2014-2015 | 3,124,937 | 37,280 | 0.893 | (0.120) | 0.012 | $(4,500)$ | 32,780 |
| 2015-2016 | 3,245,580 | 197,867 | 0.855 | (0.170) | 0.196 | $(108,143)$ | 89,724 |
| 2016-2017 | 3,416,580 | 234,117 | 0.969 | (0.032) | 0.206 | $(22,522)$ | 211,595 |
| 2017-2018 | 3,508,384 | 438,305 | 0.980 | (0.020) | 0.216 | $(15,156)$ | 423,149 |
| 2018-2019 | 3,561,551 | 123,244 | 1.487 | 0.328 | 0.227 | 265,179 | 388,423 |
| 2019-2020 | 3,703,705 | 79,793 | 6.323 | 0.842 | 0.238 | 742,208 | 822,001 |
| Totals | 26,849,616 | \$1,358,879 |  |  |  | \$838,434 | \$2,197,313 |

Notes:
(A) Appendix I, Column (C).
(B) Provided by the CIRA. These losses exclude amounts paid above the CIRA's SIR for each year.
(C) From Appendix B, Page 1, Column (F).
(D) 1-1/(C).
(E) From Appendix C, Page 3, Column (H).
(F) (A) $\times(\mathrm{D}) \times(\mathrm{E})$.
(G) $(B)+(F)$.

This exhibit shows the calculation of ultimate losses based on the assumption that there is an underlying relationship between losses and exposure that changes in regular ways over time. The method relies on the premise that the losses that are currently unpaid will cost what this relationship would suggest.

Exposure and Development Method

| Accident | Trended <br> Payroll <br> (\$00) | Ultimate <br> Limited <br> Losses <br> (B) | Trend <br> Factor <br> (C) | Trended <br> Limited <br> Losses <br> (D) | Trended <br> Limited <br> Loss Rate <br> (E) | Limited <br> Loss Rate <br> (F) | Factor to <br> SIR <br> (G) | Program <br> Loss Rate |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  |  |
| (H) |  |  |  |  |  |  |  |  |

Notes:
(A) Appendix I, Column (C).
(B) Selected average of results from Appendices A and B.
(C) From Appendix E, Page 1, Column (B).
(D) (B) $\times(\mathrm{C})$.
(E) (D) / (A).
(F) Selected Limited Rate / (C). For 2014-2015 and prior (B) / (A).
(G) Based on a Burr distribution, a mathematical model of claim sizes.
(H) $(\mathrm{F}) \times(\mathrm{G})$.

This exhibit shows the calculation of the underlying historical relationship between losses and exposure that is needed to apply the estimation methods shown on pages 1 and 2 of this Appendix.

Frequency and Severity Method

|  | Ultimate | Adjusted | Ultimate |
| :---: | :---: | :---: | :---: |
| Accident | Program | Ultimate | Program |
| Year | Severity <br> (A) | Claims <br> (B) | Losses (C) |
| 2012-2013 | 11,834 | 12 | 142,008 |
| 2013-2014 | 21,069 | 6 | 126,414 |
| 2014-2015 | 9,320 | 4 | 37,280 |
| 2015-2016 | 24,631 | 14 | 344,834 |
| 2016-2017 | 25,619 | 12 | 307,428 |
| 2017-2018 | 26,667 | 20 | 533,340 |
| 2018-2019 | 27,726 | 22 | 609,972 |
| 2019-2020 | 28,846 | 19 | 548,074 |
| Total |  | 109 | \$2,649,350 |

Notes:
(A) From Appendix D, Page 2, Column (H).
(B) From Appendix D, Page 2, Column (B).
(C) $(A) \times(B)$.

This exhibit shows the calculation of the estimated ultimate losses for each year based on the observed average frequency and severity of claims.

Frequency and Severity Method

| Accident Year | Ultimate | Adjusted Ultimate Claims (B) | Ultimate Limited Severity (C) | Trend Factor <br> (D) | Trended Limited Severity (E) | Limited Severity (F) | Factor to SIR <br> (G) | Program Severity (H) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Limited |  |  |  |  |  |  |  |
|  | Losses <br> (A) |  |  |  |  |  |  |  |
| 2012-2013 | 142,004 | 12 | 11,834 | 1.370 | 16,213 | 11,834 | 1.000 | 11,834 |
| 2013-2014 | 126,415 | 6 | 21,069 | 1.317 | 27,748 | 21,069 | 1.000 | 21,069 |
| 2014-2015 | 37,280 | 4 | 9,320 | 1.267 | 11,808 | 9,320 | 1.000 | 9,320 |
| 2015-2016 | 249,530 | 14 | 17,824 | 1.218 | 21,710 | 24,631 | 1.000 | 24,631 |
| 2016-2017 | 234,117 | 12 | 19,510 | 1.171 | 22,846 | 25,619 | 1.000 | 25,619 |
| 2017-2018 | 498,221 | 20 | 24,911 | 1.125 | 28,025 | 26,667 | 1.000 | 26,667 |
| 2018-2019 | 419,553 | 22 | 19,071 | 1.082 | 20,635 | 27,726 | 1.000 | 27,726 |
| 2019-2020 | 890,553 | 19 | 46,871 | 1.040 | 48,746 | 28,846 | 1.000 | 28,846 |
|  |  | Average Limited Severity: |  |  | \$24,716 |  |  |  |
|  |  | Average 14/15-18/19 Limited Severity: |  |  | 21,005 |  |  |  |
|  |  | Average 15/16-19/20 Limited Severity: |  |  | 28,392 |  |  |  |
|  |  | Selected Limited Severity: Prior: |  |  | \$30,000 |  |  |  |

Notes:
(A) Selected average of results from Appendices A, B, and C.
(B) Appendix D, Page 3, Column (C).
(C) $(\mathrm{A}) /(\mathrm{B})$.
(D) From Appendix E, Page 1, Column (J).
(E) (C) $x(D)$.
(F) Selected Limited Severity / (D).
(G) Based on a Burr distribution, a mathematical model of claim sizes.
(H) $(\mathrm{F}) \times(\mathrm{G})$.

This exhibit shows the calculation of the historical average cost per claim, or severity. The observed average severity is used in the method shown on page 1 of this Appendix.

Frequency and Severity Method
Projection of Ultimate Claims

| Accident Year | Reported Claim Development (A) | Closed Claim Development (B) | Selected Ultimate Claims (C) | Trended Payroll (\$000,000) <br> (D) | Claim Frequency (E) | Trend Factor (F) | Trended Claim Frequency (G) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012-2013 | 12 | 12 | 12 | 321.8 | 0.037 | 1.083 | 0.040 |
| 2013-2014 | 6 | 6 | 6 | 307.0 | 0.020 | 1.073 | 0.021 |
| 2014-2015 | 4 | 4 | 4 | 312.5 | 0.013 | 1.062 | 0.014 |
| 2015-2016 | 14 | 12 | 14 | 324.6 | 0.043 | 1.051 | 0.045 |
| 2016-2017 | 12 | 14 | 12 | 341.7 | 0.035 | 1.041 | 0.036 |
| 2017-2018 | 20 | 18 | 20 | 350.8 | 0.057 | 1.030 | 0.059 |
| 2018-2019 | 22 | 18 | 22 | 356.2 | 0.062 | 1.019 | 0.063 |
| 2019-2020 | 14 | 5 | 19 | 370.4 | 0.050 | 1.010 | 0.051 |
| Total | 104 | 89 | 109 | 2,685.0 |  |  | 0.042 |
| 14/15-18/19 | 72 | 66 | 72 | 1,685.7 |  |  | 0.044 |
|  |  |  |  |  | (H) Selected Frequency: |  | 0.060 |
|  | Program Year: |  |  | 2020-2021 | 2021-2022 |  |  |
| (I) | Trend Factor: |  |  | 1.000 | 1.010 |  |  |
| (J) | Selected Frequ | uency: |  | 0.060 | 0.061 |  |  |
| (K) | Est. Payroll (\$00 | 000,000): |  | 372.4 | 385.7 |  |  |
| (L) | Ultimate Claim |  |  | 22 | 24 |  |  |

Notes:
(A) Appendix D, Page 4, (C).
(G) $(\mathrm{E}) \times(\mathrm{F})$.
(B) Appendix D, Page 5, (C).
(H) The selected frequency of 0.060 is based on (G).
(C) Selected from (A) and (B).
(I) Appendix E, Page 1, Column (F).
(D) Appendix I, Column (C) / 10,000.
(J) $(\mathrm{H}) \times(\mathrm{I})$.
(E) (C) $/(\mathrm{D})$.
(K) Appendix I, Column (C) / 10,000.
(F) Appendix E, Page 1, Column (F).
(L) $(\mathrm{J}) \times(\mathrm{K})$.

This exhibit summarizes the estimated numbers of claims and shows the estimated frequencies per $\$ 1,000,000$ of trended payroll.

California Intergovernmental Risk Authority - Employee Practices Liability

Frequency and Severity Method
Reported Claim Count Development

|  | Claims | Reported |  | Trended |
| :---: | :---: | :---: | :---: | :---: |
|  | Reported | Claim |  | Claim |
| Accident | as of | Development | Ultimate | Frequency |
| Year | $9 / 30 / 2020$ | Factor | Claims | (D) |


| $2012-2013$ | 12 | 1.005 | 12 | 0.040 |
| :---: | ---: | ---: | ---: | ---: |
| $2013-2014$ | 6 | 1.008 | 6 | 0.021 |
| $2014-2015$ | 4 | 1.012 | 4 | 0.014 |
| $2015-2016$ | 14 | 1.017 | 14 | 0.045 |
| $2016-2017$ | 12 | 1.022 | 12 | 0.037 |
| $2017-2018$ | 19 | 1.030 | 20 | 0.059 |
| $2018-2019$ | 21 | 1.055 | 22 | 0.063 |
| $2019-2020$ | 10 | 1.372 | 14 | 0.038 |
| Total |  |  |  |  |
|  | 98 |  | 104 | 0.040 |

## Notes:

(A) Provided by the CIRA.
(B) Based upon Comparative Claim Development Factors.
(C) $(A) \times(B)$.
(D) (C) / [Appendix D, Page 3, (D)] x
[Appendix D, Page 3, (F)].

This exhibit shows the calculation of estimated ultimate claims for each year based on reported claims as provided by the CIRA. These numbers of claims tend to "develop" or change from period to period as more claims are filed. This development tends to follow quantifiable patterns over time.

California Intergovernmental Risk Authority - Employee Practices Liability

Frequency and Severity Method
Closed Claim Count Development


## Notes:

(A) Provided by the CIRA.
(B) Based upon Comparative Claim Development Factors.
(C) $(\mathrm{A}) \times(\mathrm{B})$.
(D) (C) / [Appendix D, Page 3, (D)] $x$ [Appendix D, Page 3, (F)].

This exhibit shows the calculation of estimated ultimate claims for each year based on closed claims as provided by the CIRA. These numbers of closed claims tend to "develop" or change from period to period as more claims are closed. This development tends to follow quantifiable patterns over time.

## Loss Trend Factors

|  | Benefit | $\begin{gathered} \text { Factor to } \\ 2020-2021 \end{gathered}$ | $\begin{aligned} & \text { Factor to } \\ & \text { 2021-2022 } \end{aligned}$ | $\begin{gathered} \text { Factor to } \\ \text { 2022-2023 } \end{gathered}$ | $\begin{gathered} \text { Factor to } \\ \text { 2023-2024 } \end{gathered}$ | $\begin{gathered} \text { Factor to } \\ \text { 2020-2021 } \end{gathered}$ | Factor to 2021-2022 | $\begin{gathered} \text { Factor to } \\ 2022-2023 \end{gathered}$ | $\begin{gathered} \text { Factor to } \\ \text { 2023-2024 } \end{gathered}$ | $\begin{aligned} & \text { Factor to } \\ & 2020-2021 \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident | Level | Loss Rate | Loss Rate | Loss Rate | Loss Rate | Frequency | Frequency | Frequency | Frequency | Severity |
| Year | Factor <br> (A) | Level (B) | Level (C) | Level (D) | Level (E) | Level (F) | Level (G) | Level (H) | Level (I) | Level (J) |
| 1999-2000 | 1.000 | 2.787 | 2.926 | 3.073 | 3.227 | 1.232 | 1.244 | 1.256 | 1.269 | 2.281 |
| 2000-2001 | 1.000 | 2.654 | 2.786 | 2.927 | 3.073 | 1.219 | 1.231 | 1.244 | 1.256 | 2.193 |
| 2001-2002 | 1.000 | 2.528 | 2.654 | 2.788 | 2.927 | 1.208 | 1.220 | 1.232 | 1.244 | 2.108 |
| 2002-2003 | 1.000 | 2.408 | 2.528 | 2.655 | 2.788 | 1.196 | 1.208 | 1.220 | 1.232 | 2.028 |
| 2003-2004 | 1.000 | 2.293 | 2.407 | 2.529 | 2.655 | 1.184 | 1.196 | 1.208 | 1.220 | 1.949 |
| 2004-2005 | 1.000 | 2.184 | 2.293 | 2.409 | 2.529 | 1.173 | 1.184 | 1.196 | 1.208 | 1.875 |
| 2005-2006 | 1.000 | 2.080 | 2.184 | 2.294 | 2.409 | 1.161 | 1.173 | 1.184 | 1.196 | 1.803 |
| 2006-2007 | 1.000 | 1.981 | 2.080 | 2.185 | 2.294 | 1.150 | 1.161 | 1.172 | 1.184 | 1.733 |
| 2007-2008 | 1.000 | 1.887 | 1.981 | 2.081 | 2.185 | 1.138 | 1.149 | 1.160 | 1.172 | 1.667 |
| 2008-2009 | 1.000 | 1.797 | 1.887 | 1.982 | 2.081 | 1.126 | 1.137 | 1.149 | 1.160 | 1.603 |
| 2009-2010 | 1.000 | 1.712 | 1.797 | 1.888 | 1.982 | 1.116 | 1.126 | 1.138 | 1.149 | 1.541 |
| 2010-2011 | 1.000 | 1.630 | 1.712 | 1.798 | 1.888 | 1.105 | 1.116 | 1.127 | 1.138 | 1.482 |
| 2011-2012 | 1.000 | 1.553 | 1.630 | 1.712 | 1.798 | 1.094 | 1.105 | 1.116 | 1.127 | 1.425 |
| 2012-2013 | 1.000 | 1.478 | 1.552 | 1.630 | 1.712 | 1.083 | 1.094 | 1.105 | 1.116 | 1.370 |
| 2013-2014 | 1.000 | 1.408 | 1.478 | 1.552 | 1.630 | 1.073 | 1.083 | 1.094 | 1.105 | 1.317 |
| 2014-2015 | 1.000 | 1.340 | 1.407 | 1.478 | 1.552 | 1.062 | 1.073 | 1.083 | 1.094 | 1.267 |
| 2015-2016 | 1.000 | 1.276 | 1.340 | 1.408 | 1.478 | 1.051 | 1.062 | 1.072 | 1.083 | 1.218 |
| 2016-2017 | 1.000 | 1.216 | 1.277 | 1.341 | 1.408 | 1.041 | 1.051 | 1.061 | 1.072 | 1.171 |
| 2017-2018 | 1.000 | 1.158 | 1.216 | 1.277 | 1.341 | 1.030 | 1.040 | 1.050 | 1.061 | 1.125 |
| 2018-2019 | 1.000 | 1.103 | 1.158 | 1.216 | 1.277 | 1.019 | 1.029 | 1.040 | 1.050 | 1.082 |
| 2019-2020 | 1.000 | 1.050 | 1.102 | 1.158 | 1.216 | 1.010 | 1.020 | 1.030 | 1.040 | 1.040 |
| 2020-2021 | 1.000 | 1.000 | 1.050 | 1.103 | 1.158 | 1.000 | 1.010 | 1.020 | 1.030 | 1.000 |
| 2021-2022 | 1.000 | -- | 1.000 | 1.050 | 1.103 | -- | 1.000 | 1.010 | 1.020 | -- |
| 2022-2023 | 1.000 | -- | -- | 1.000 | 1.050 | -- | -- | 1.000 | 1.010 | -- |
| 2023-2024 | 1.000 | -- | -- | -- | 1.000 | -- | -- | -- | 1.000 | -- |

## Notes:

(A) No benefit level adjustment applied.
(B) - (E) (A) adjusted for a $5.0 \%$ annual loss rate trend.
(F) - (I) (A) adjusted for a 1.0\% annual frequency trend.
(J) (A) adjusted for a 4.0\% annual severity trend.

This exhibit shows the calculation of the ways in which we expect claims costs to have changed over the past twenty years due to changes in inflation.

Residual Trend Factors

|  | Initial <br> Estimate of <br>  <br>  <br> Ultimate | Ultimate |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Accident | Limited | Reported |  | Adjusted | Trended |
| Year | Losses | Claims | BLF | Simited | Payroll | Ultimate


| 1999-2000 |  | 0 | 1.000 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2000-2001 |  | 0 | 1.000 |  |  |  |
| 2001-2002 |  | 0 | 1.000 |  |  |  |
| 2002-2003 |  | 0 | 1.000 |  |  |  |
| 2003-2004 |  | 0 | 1.000 |  |  |  |
| 2004-2005 |  | 0 | 1.000 |  |  |  |
| 2005-2006 |  | 0 | 1.000 |  |  |  |
| 2006-2007 |  | 0 | 1.000 |  |  |  |
| 2007-2008 |  | 0 | 1.000 |  |  |  |
| 2008-2009 |  | 0 | 1.000 |  |  |  |
| 2009-2010 |  | 0 | 1.000 |  |  |  |
| 2010-2011 |  | 0 | 1.000 |  |  |  |
| 2011-2012 |  | 0 | 1.000 |  |  |  |
| 2012-2013 | 142,004 | 12 | 1.000 | 11,834 | 3,218,390 | 0.037 |
| 2013-2014 | 126,415 | 6 | 1.000 | 21,069 | 3,070,489 | 0.020 |
| 2014-2015 | 37,280 | 4 | 1.000 | 9,320 | 3,124,937 | 0.013 |
| 2015-2016 | 249,530 | 14 | 1.000 | 17,824 | 3,245,580 | 0.043 |
| 2016-2017 | 234,117 | 12 | 1.000 | 19,510 | 3,416,580 | 0.035 |
| 2017-2018 | 490,432 | 20 | 1.000 | 24,522 | 3,508,384 | 0.057 |
| 2018-2019 | 302,837 | 22 | 1.000 | 13,765 | 3,561,551 | 0.062 |
| 2019-2020 | 1,039,167 | 19 | 1.000 | 54,693 | 3,703,705 | 0.051 |


|  | Severity Trend Factors |  | Frequency Trend Factors |
| ---: | ---: | ---: | ---: | ---: |
| Latest $10 \times 2019-2020$ | 1.055 |  | 1.181 |
| Mvg 5-Yr Wtd Latest $10 \times 2019-2020$ | 1.086 |  | 1.149 |
| Latest $5 \times 2019-2020$ | 1.116 |  | 1.409 |
| Mvg 5-Yr Wtd Latest $5 \times 2019-2020$ | 1.086 | 1.149 |  |
| Prior | 1.050 | 1.000 |  |
| Default | 1.030 | 0.975 |  |
|  |  | 1.040 | 1.010 |

Notes:
(A) Selected average of results from Appendix A and Appendix B.
(B) Appendix D, Page 3, Column (C).
(C) Appendix E, Page 1, Column (A).
(D) $(\mathrm{A}) \times(\mathrm{C}) /(\mathrm{B})$.
(E) Appendix I, Column (C).
(F) (B) $/(E) \times 10,000$.

Calculation of Discount Factors

| Payment Year <br> (A) | Payment Pattern (B) | Return on Investment <br> (C) | Discounted Reserves (D) | Undiscounted Reserves (E) | Discount Factor (F) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 22 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 21 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 20 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 19 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 18 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 17 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 16 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 15 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 14 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 13 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 12 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 11 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 10 | 0.0\% | 1.50\% | 0.000 | 0.000 | 1.000 |
| 9 | -3.7\% | 1.50\% | (0.037) | (0.037) | 0.993 |
| 8 | -10.4\% | 1.50\% | (0.140) | (0.142) | 0.989 |
| 7 | 0.9\% | 1.50\% | (0.129) | (0.133) | 0.973 |
| 6 | -0.3\% | 1.50\% | (0.130) | (0.135) | 0.959 |
| 5 | 10.6\% | 1.50\% | (0.022) | (0.029) | 0.769 |
| 4 | 9.5\% | 1.50\% | 0.073 | 0.066 | 1.095 |
| 3 | 39.0\% | 1.50\% | 0.459 | 0.456 | 1.005 |
| 2 | 41.9\% | 1.50\% | 0.868 | 0.875 | 0.991 |
| 1 | 12.5\% | 1.50\% | 0.979 | 1.000 | 0.979 |
| (G) Discount Factor for Future Funding: |  |  |  | 2020-2021 | 0.986 |
|  |  |  |  | 2021-2022 | 0.986 |

Notes:
(A) This is the year of payment relative to the accident year. For example, year 7 refers to payments made in the seventh year after the inception of the accident year. We assume that payments are made at midyear.
(B) Percent of ultimate loss paid this year. This payment pattern is based on the paid loss development pattern selected in Appendix B, Page 2.
(C) Assumed Investment Income Rates.
(D) Discounted Reserves at the beginning of this year is next year's Discounted Reserves discounted one year plus this year's payments discounted six months. For example, in year 2, 86.8\% = [45.9\% / 1.015] + [41.9\% / (1.007)].
(E) Summation of future (B) values. This is the percent of ultimate loss unpaid at the beginning of the year.
(F) (D) / (E).
(G) (F) at year 1, with interest accumulated for six months. We assume that the required funding is deposited at the middle of the first year.

This exhibit shows the calculation of the effect of anticipated investment income on future claims costs. Thus, if the discount factor in item ( $F$ ) is 0.99 , on a discounted basis, $\$ 0.99$ must be budgeted for every $\$ 1$ that will actually be paid on claims that will be incurred in the next fiscal year.

California Intergovernmental Risk Authority - Employee Practices Liability

Confidence Level Table

| Probability | Projected Losses | Outstanding Losses |
| :---: | :---: | :---: |
|  |  |  |
| $95 \%$ | 1.784 | 1.517 |
| $90 \%$ | 1.552 | 1.368 |
| $85 \%$ | 1.412 | 1.277 |
| $80 \%$ | 1.307 | 1.209 |
| $75 \%$ | 1.223 | 1.154 |
| $70 \%$ | 1.152 | 1.107 |
| $65 \%$ | 1.089 | 1.066 |
| $60 \%$ | 1.032 | 1.028 |
| $55 \%$ | 0.981 | 0.993 |
| $50 \%$ | 0.931 | 0.960 |
| $45 \%$ | 0.884 | 0.928 |
| $40 \%$ | 0.838 | 0.897 |
| $35 \%$ | 0.793 | 0.834 |
| $30 \%$ | 0.747 | 0.700 |
| $25 \%$ |  |  |
|  |  |  |
| To read table: | For the above retention, there is a $90 \%$ chance |  |
|  | that final loss settlements will be less than |  |
|  | 1.552 times the average expected amount of losses. |  |

This exhibit shows the loads that must be applied to bring estimated losses at the expected level to the various indicated confidence levels.

## DRAFT

California Intergovernmental Risk Authority - Employee Practices Liability

Incurred Losses as of 9/30/20

|  |  | Additions to | Subtractions from |  | Incurred | Incurred Over | Incurred Capped at | Incurred $\$ 50,000$ | Incurred Capped at |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> (A) | Incurred <br> (B) | Losses <br> (C) | Losses <br> (D) | Incurred <br> (E) | Over SIR <br> (F) | $\$ 50,000$ <br> (G) | $\begin{gathered} \$ 50,000 \\ (H) \end{gathered}$ | to SIR Layer <br> (I) | SIR <br> (J) | Aggregate <br> (K) |
| 2012-2013 | 1,060,504 | 10,495 | 29,321 | 1,041,679 | 899,675 | 899,675 | 142,004 | 0 | 142,004 | 142,004 |
| 2013-2014 | 472,595 | 26,415 | 0 | 499,009 | 372,595 | 372,595 | 126,415 | 0 | 126,415 | 126,415 |
| 2014-2015 | 37,280 | 0 | 0 | 37,280 | 0 | 0 | 37,280 | 0 | 37,280 | 37,280 |
| 2015-2016 | 475,874 | 810,947 | 0 | 1,286,821 | 1,036,288 | 1,036,288 | 250,532 | 0 | 250,532 | 250,532 |
| 2016-2017 | 450,916 | 753,140 | 0 | 1,204,056 | 969,940 | 969,940 | 234,117 | 0 | 234,117 | 234,117 |
| 2017-2018 | 1,025,850 | 990,803 | 0 | 2,016,653 | 1,545,502 | 1,545,502 | 471,152 | 0 | 471,152 | 471,152 |
| 2018-2019 | 854,460 | 0 | 0 | 854,460 | 608,094 | 608,094 | 246,365 | 0 | 246,365 | 246,365 |
| 2019-2020 | 532,127 | 0 | 0 | 532,127 | 250,000 | 250,000 | 282,127 | 0 | 282,127 | 282,127 |
| 2020-2021 | 35,000 | 0 | 0 | 35,000 | 0 | 0 | 35,000 | 0 | 35,000 | 35,000 |
| Total | \$4,944,606 | \$2,591,799 | \$29,321 | \$7,507,085 | \$5,682,094 | \$5,682,094 | \$1,824,991 | \$0 | \$1,824,991 | \$1,824,991 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA.
(C) REMIF members.
(D) Subrogation recoveries.
(E) $(B)+(C)-(D)$.
(F) Sum of incurred losses in excess of SIR.
(G) Sum of incurred losses in excess of \$50,000.
(H) (E) - (G).
(I) $(\mathrm{G})-(\mathrm{F})$.
(J) (E) - (F).
(K) Minimum of (J) and the aggregate stop loss. See Not Included.

California Intergovernmental Risk Authority - Employee Practices Liability

Paid Losses as of 9/30/20

| Accident Year (A) | Unlimited Paid (B) | Additions to Losses (C) | Subtractions from Losses (D) | Adjusted Paid (E) | Paid Over SIR (F) | Paid <br> Over \$50,000 <br> (G) | Paid Capped at \$50,000 <br> (H) | Paid \$50,000 to SIR Layer <br> (I) | Paid Capped at SIR <br> (J) | Paid Capped at SIR \& Aggregate (K) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012-2013 | 760,504 | 10,495 | 29,321 | 741,679 | 619,821 | 619,821 | 121,858 | 0 | 121,858 | 121,858 |
| 2013-2014 | 472,595 | 26,415 | 0 | 499,009 | 372,595 | 372,595 | 126,415 | 0 | 126,415 | 126,415 |
| 2014-2015 | 37,280 | 0 | 0 | 37,280 | 0 | 0 | 37,280 | 0 | 37,280 | 37,280 |
| 2015-2016 | 378,337 | 108,837 | 0 | 487,174 | 289,307 | 289,307 | 197,867 | 0 | 197,867 | 197,867 |
| 2016-2017 | 450,916 | 753,140 | 0 | 1,204,056 | 969,940 | 969,940 | 234,117 | 0 | 234,117 | 234,117 |
| 2017-2018 | 855,399 | 903,917 | 0 | 1,759,316 | 1,321,011 | 1,321,011 | 438,305 | 0 | 438,305 | 438,305 |
| 2018-2019 | 393,009 | 0 | 0 | 393,009 | 269,765 | 269,765 | 123,244 | 0 | 123,244 | 123,244 |
| 2019-2020 | 204,730 | 0 | 0 | 204,730 | 124,937 | 124,937 | 79,793 | 0 | 79,793 | 79,793 |
| 2020-2021 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Total | \$3,552,770 | \$1,802,804 | \$29,321 | \$5,326,254 | \$3,967,375 | \$3,967,375 | \$1,358,878 | \$0 | \$1,358,878 | \$1,358,878 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA.
(C) REMIF members.
(D) Subrogation recoveries.
(E) $(B)+(C)-(D)$.
(F) Sum of paid losses in excess of SIR.
(G) Sum of paid losses in excess of $\$ 50,000$.
(H) (E) - (G).
(I) (G) - (F).
(J) (E) - (F).
(K) Minimum of $(\mathrm{J})$ and the aggregate stop loss. See Not Included.

Case Reserves as of $9 / 30 / 20$


Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Appendix H, Page 1, Column (B) - Appendix H, Page 2, Column (B).
(C) Appendix H, Page 1, Column (C) - Appendix H, Page 2, Column (C).
(D) Appendix H, Page 1, Column (D) - Appendix H, Page 2, Column (D).
(E) $(B)+(C)-(D)$.
(F) Sum of case reserves in excess of SIR.
(G) Sum of case reserves in excess of $\$ 50,000$.
(H) (E) - (G).
(I) $(\mathrm{G})-(\mathrm{F})$.
(J) (E) - (F).
(K) Minimum of (J) and the aggregate stop loss. See Not Included.

California Intergovernmental Risk Authority - Employee Practices Liability

| Accident Year <br> (A) | Reported Claims (B) | Additions to Reported Claims (C) | Subtractions from Reported Claims (D) | Adjusted Reported Claims (E) | Closed Claims (F) | Additions to Closed Claims (G) | Subtractions from Closed Claims (H) | Adjusted Closed Claims (I) | Open <br> Claims <br> (J) | Adjusted Open Claims (K) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2012-2013 | 11 | 1 | 0 | 12 | 10 | 1 | 0 | 11 | 1 | 1 |
| 2013-2014 | 5 | 1 | 0 | 6 | 5 | 1 | 0 | 6 | 0 | 0 |
| 2014-2015 | 4 | 0 | 0 | 4 | 4 | 0 | 0 | 4 | 0 | 0 |
| 2015-2016 | 11 | 3 | 0 | 14 | 10 | 1 | 0 | 11 | 1 | 3 |
| 2016-2017 | 8 | 4 | 0 | 12 | 8 | 4 | 0 | 12 | 0 | 0 |
| 2017-2018 | 17 | 2 | 0 | 19 | 14 | 1 | 0 | 15 | 3 | 4 |
| 2018-2019 | 21 | 0 | 0 | 21 | 13 | 0 | 0 | 13 | 8 | 8 |
| 2019-2020 | 10 | 0 | 0 | 10 | 2 | 0 | 0 | 2 | 8 | 8 |
| 2020-2021 | 2 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 2 |
| Total | 89 | 11 | 0 | 100 | 66 | 8 | 0 | 74 | 23 | 26 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA.
(C) REMIF Members.
(D)
(E) $(\mathrm{B})+(\mathrm{C})-(\mathrm{D})$.
(F) Provided by the CIRA.
(G) REMIF Members.
(H)
(I) $(\mathrm{F})+(\mathrm{G})-(\mathrm{H})$.
(J) (B) $-(\mathrm{F})$.
(K) (E) - (I).

| Accident | Total <br> Payroll <br> (\$00) | Inflation <br> Trend <br> Factor <br> (B) | Trended <br> Payroll <br> $(\$ 00)$ |
| :---: | :---: | :---: | :---: |
| $2010-2011$ | (A) |  | (C) |

Notes:
(A) Provided by the CIRA.
(B) Based on industry factors.
(C) $\quad(A) \times(B)$.

# Bickmore Actuarial 

# Actuarial Review of the Self-Insured Workers' Compensation Program 

Forecast for Program Year 2021-22

## Presented to

California Intergovernmental Risk Authority

February 26, 2021 - DRAFT

Friday, February 26, 2021

Mr. Kin Ong<br>General Manager<br>Public Agency Risk Sharing Authority of California<br>1525 Response Road, Suite 1<br>Sacramento, CA 95815<br>Ms. Amy Northam<br>General Manager<br>Redwood Empire Municipal Insurance Fund 414 West Napa Street<br>Sonoma, California 95476

## RE: Actuarial Review of the Self-Insured Workers' Compensation Program

Dear Kin and Amy:
As requested, we have completed our estimates of workers' compensation claim costs, experience modification calculations, and premium allocation for the newly formed California Intergovernmental Risk Authority (CIRA). Assuming an SIR of \$500,000 per occurrence, we estimate the ultimate cost of claims and expenses in the pooled layer (i.e. above member deductibles and below pool SIR) for claims incurred during the 2021-22 program year to be $\$ 7,850,742$. This amount includes allocated loss adjustment expenses (ALAE), unallocated loss adjustment expenses (ULAE) and a discount for anticipated investment income. ALAE is the direct cost associated with the defense of individual claims (e.g. legal fees, investigation fees, court charges). ULAE is the cost to administer all claims to final settlement, which may be years into the future (e.g. claims adjusters' salaries, taxes). The discount for investment income is calculated based on the likely payout pattern of the Authority's claims, assuming a $2.5 \%$ return on investments per year. For budgeting purposes, the expected costs of 2021-22 claims translate to rates of $\$ 2.382$ per $\$ 100$ of payroll.

The estimates in this report do not include any provision for the potential impact on the cost of claims because of the coronavirus (COVID-19) pandemic.

## DRAFT

The tables below show our funding recommendations for CIRA for the 2021-22 fiscal year at various self-insured retentions.

California Intergovernmental Risk Authority
Self-Insured Workers' Compensation Program
Loss and ALAE Funding Guidelines for 2021-22
Self-Insured Retention (SIR) of \$500,000

|  | Expected | Marginally | Recommended Range |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Acceptable 70\% CL | $\begin{gathered} \text { Low } \\ 75 \% \text { CL } \end{gathered}$ | Target 80\% CL | $\begin{gathered} \text { High } \\ 85 \% \text { CL } \end{gathered}$ | Conservative 90\% CL |
| Loss and ALAE | \$8,304,133 | \$9,117,938 | \$9,507,600 | \$9,952,772 | \$10,490,197 | \$11,198,076 |
| ULAE | 890,000 | 977,220 | 1,011,930 | 1,051,980 | 1,100,040 | 1,165,010 |
| Investment Income Offset | $(1,217,525)$ | $(1,336,842)$ | $(1,393,039)$ | $(1,457,294)$ | $(1,534,827)$ | $(1,637,171)$ |
| Discounted Loss and LAE | \$7,976,608 | \$8,758,316 | \$9,126,491 | \$9,547,457 | \$10,055,410 | \$10,725,916 |
| Non-Claim <br> Related Expenses | 3,440,474 | 3,440,474 | 3,440,474 | 3,440,474 | 3,440,474 | 3,440,474 |
| Total Funding | \$11,417,082 | \$12,198,790 | \$12,566,965 | \$12,987,931 | \$13,495,884 | \$14,166,390 |
| Rate per \$100 of 2021-22 Payroll | \$3.464 | \$3.701 | \$3.813 | \$3.941 | \$4.095 | \$4.298 |


| Loss and ALAE | $\$ 9,366,639$ | $\$ 10,284,569$ | $\$ 10,731,426$ | $\$ 11,128,469$ | $\$ 11,857,773$ | $\$ 12,667,732$ |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| ULAE | 890,000 | 977,000 | $1,012,000$ | $1,052,000$ | $1,100,000$ | $1,165,000$ |  |
| Investment |  | $(1,358,226)$ | $(1,491,332)$ | $(1,555,103)$ | $(1,612,985)$ | $(1,715,927)$ | $(1,831,788)$ |
| Income Offset |  |  |  |  |  |  |  |
| Discounted Loss |  |  |  |  |  |  |  |
| and LAE |  |  |  |  |  |  |  |


|  | California Intergovernmental Risk Authority Self-Insured Workers' Compensation Program Loss and ALAE Funding Guidelines for 2021-22 <br> Self-Insured Retention (SIR) of \$1,000,000 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Expected | Marginally Acceptable 70\% CL | $\begin{gathered} \text { Low } \\ 75 \% \mathrm{CL} \end{gathered}$ | mmended R Target 80\% CL | ge $\begin{gathered} \text { High } \\ 85 \% \mathrm{CL} \end{gathered}$ | $\begin{aligned} & \text { Conservative } \\ & 90 \% \mathrm{CL} \end{aligned}$ |
| Loss and ALAE | \$9,532,660 | \$10,466,860 | \$10,925,029 | \$11,819,595 | \$12,079,683 | \$12,909,326 |
| ULAE | 890,000 | 977,000 | 1,012,000 | 1,052,000 | 1,100,000 | 1,165,000 |
| Investment Income Offset | $(1,380,211)$ | (\$1,515,472) | (\$1,580,741) | (\$1,704,507) | (\$1,745,313) | (\$1,863,781) |
| Discounted Loss and LAE | \$9,042,448 | \$9,928,608 | \$10,356,218 | \$11,167,068 | \$11,434,410 | \$12,210,555 |
| Non-Claim <br> Related Expenses | 2,420,849 | 2,420,849 | 2,420,849 | 2,420,849 | 2,420,849 | 2,420,849 |
| Total Funding | \$11,463,297 | \$12,349,457 | \$12,777,067 | \$13,587,917 | \$13,855,259 | \$14,631,404 |
| Rate per $\$ 100$ of 2021-22 Payroll | \$3.478 | \$3.747 | \$3.877 | \$4.123 | \$4.204 | \$4.439 |

The funding recommendations shown in the table above do not include any recognition of the existing funding margin (surplus or deficit) at June 30, 2021.

Note that the figures in the above table are for loss and ALAE in the pool layer, claims administration costs and general administration costs. They exclude excess insurance premiums.

We provide the following allocation of premiums, which include ultimate loss and ALAE for loss and ALAE in the pool layer $(\$ 8,121,556)$ assuming a $\$ 500,000$ retention per occurrence at the $75 \%$ confidence level on a discounted basis at $2.5 \%$, claims administration costs ( $\$ 1,004,935$ ), overhead expenses $(\$ 837,674)$, and excess insurance costs $(\$ 2,602,800)$, (see Rates Exhibit 2 for $\$ 750,000$ and $\$ 1,000,000$ retentions).

| Member | Xmod | 75\% CL Loss \& ALAE | Claims <br> Admin Costs | Admin Costs | Excess Insurance Costs | Total Premium |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Arcata | 1.018 | \$327,859 | \$36,128 | \$32,815 | \$79,004 | \$475,806 |
| Avalon | 1.24 | 196,685 | 24,169 | 19,686 | 41,460 | 281,999 |
| Belvedere | 1.432 | 73,059 | 15,644 | 6,153 | 23,246 | 118,102 |
| Blue Lake | 0.661 | 10,712 | 1,236 | 1,072 | 3,979 | 16,999 |
| Calimesa | 0.857 | 58,651 | 6,765 | 5,870 | 16,796 | 88,082 |
| Calistoga | 1.028 | 153,350 | 21,770 | 15,348 | 45,035 | 235,503 |
| CIRA Staff | 0.527 | 17,281 | 1,964 | 1,730 | 8,049 | 29,023 |
| Citrus Heights | 1.24 | 462,517 | 99,040 | 38,953 | 169,898 | 770,408 |
| Clearlake | 1.422 | 143,547 | 25,187 | 14,367 | 37,692 | 220,794 |
| Cloverdale | 1.482 | 205,674 | 22,664 | 20,585 | 34,052 | 282,976 |
| Coalinga | 1.301 | 235,523 | 33,436 | 23,573 | 54,690 | 347,221 |
| Cotati | 1.104 | 143,590 | 15,823 | 14,372 | 31,916 | 205,701 |
| Eureka | 1.008 | 491,940 | 57,749 | 49,237 | 127,548 | 726,474 |
| Ferndale | 1.17 | 26,100 | 3,010 | 2,612 | 5,476 | 37,198 |
| Fort Bragg | 0.909 | 119,574 | 13,176 | 11,968 | 32,297 | 177,015 |
| Fortuna | 1.001 | 176,065 | 19,401 | 17,622 | 43,183 | 256,270 |
| Grass Valley | 1.18 | 219,774 | 31,200 | 21,997 | 56,267 | 329,237 |
| Healdsburg | 0.897 | 517,799 | 57,058 | 51,825 | 141,652 | 768,334 |
| Highland | 0.602 | 62,267 | 7,182 | 6,232 | 25,378 | 101,059 |
| Lakeport | 1.291 | 151,501 | 16,695 | 15,163 | 28,807 | 212,166 |
| Plymouth | 0.527 | 11,190 | 1,291 | 1,120 | 5,212 | 18,812 |
| Point Arena | 0.527 | 5,001 | 577 | 501 | 2,330 | 8,409 |
| Rancho Cucamonga | 0.644 | 123,853 | 6,730 | 10,431 | 247,247 | 388,260 |
| Rancho Cucamonga FD | 1.28 | 120,332 | 673 | 10,134 | 120,793 | 251,933 |
| Rancho Santa Margarita | 0.499 | 41,929 | 4,836 | 4,197 | 20,605 | 71,567 |
| Rohnert Park | 1.116 | 812,764 | 89,562 | 81,348 | 178,792 | 1,162,465 |
| Sebastopol | 1.403 | 264,213 | 29,115 | 26,444 | 46,211 | 365,983 |
| Sierra Madre | 0.605 | 98,377 | 13,966 | 9,846 | 49,114 | 171,303 |
| Sonoma | 1.024 | 112,572 | 12,405 | 11,267 | 26,990 | 163,233 |
| St. Helena | 0.978 | 242,229 | 26,692 | 24,244 | 60,808 | 353,974 |
| Tehama | 0.544 | 1,137 | 131 | 114 | 513 | 1,895 |
| Trinidad | 0.527 | 6,053 | 698 | 606 | 2,819 | 10,176 |
| Truckee | 0.907 | 330,481 | 40,609 | 33,077 | 95,206 | 499,374 |
| Twentynine Palms | 0.499 | 39,724 | 4,582 | 3,976 | 19,522 | 67,804 |
| Ukiah | 1.415 | 875,132 | 102,733 | 87,590 | 161,734 | 1,227,189 |
| Watsonville | 1.22 | 606,095 | 27,593 | 51,044 | 320,401 | 1,005,134 |
| Wheatland | 1.049 | 58,177 | 6,711 | 5,823 | 13,615 | 84,325 |
| Wildomar | 0.518 | 23,916 | 2,759 | 2,394 | 11,320 | 40,388 |
| Willits | 1.343 | 154,627 | 17,039 | 15,476 | 28,253 | 215,396 |
| Windsor | 0.595 | 181,690 | 21,329 | 18,185 | 79,826 | 301,030 |
| Yountville | 0.499 | 62,446 | 7,203 | 6,250 | 30,688 | 106,586 |
| Yucaipa | 0.499 | 84,493 | 9,746 | 8,457 | 41,522 | 144,219 |
| Yucca Valley | 0.535 | 71,657 | 8,265 | 7,172 | 32,856 | 119,950 |
| Menifee |  | 0 | 37,376 | 36,131 | 0 | 73,507 |
| Pacific Grove |  | 0 | 11,681 | 5,414 | 0 | 17,095 |
| West Hollywood |  | 0 | 11,337 | 5,255 | 0 | 16,591 |
| Total |  | \$8,121,556 | \$1,004,935 | \$837,674 | \$2,602,800 | \$12,566,965 |

The loss projections in this report reflect the estimated impact of benefit legislation contained in AB749, AB227, SB228, SB899, SB863, and recent WCAB court decisions based upon information provided by the WCIRB. The ultimate impact on loss costs of legislated benefit adjustments are generally difficult to forecast in advance because the changes typically take place over a period of several years following enactment. Furthermore, actuarially derived benefit level evaluations often underestimate actual future cost levels. The shortfalls result from a variety of circumstances, including increases in utilization levels, unanticipated changes in administrative procedures, and cost shifting among benefit categories. Thus, actual cost increases could differ, perhaps substantially, from the WCIRB's estimates.
The report that follows outlines the scope of our study, its background, and our conclusions, recommendations, and assumptions. Judgments regarding the appropriateness of our conclusions and recommendations should be made only after studying the report in its entirety, including the graphs, attachments, exhibits and appendices. Our report has been developed for the Authority's internal use. It is not intended for general circulation.

We appreciate the opportunity to be of service to CIRA in preparing this report. Please feel free to call Mike Harrington at (916) 244-1162, Becky Richard at (916) 244-1183, or David Kim at (916) 244-1166 with any questions you may have concerning this report.

Sincerely,
Bickmore Actuarial

## DRAFT

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## I. BACKGROUND

The California Intergovernmental Risk Authority (CIRA) will be formed to provide pooled insurance coverage to cities in the State of California. CIRA will begin its self-insured workers' compensation program on July 1, 2021. Its self-insured retention will be $\$ 500,000$ and excess coverage for claims exceeding that level. Claims administration services are provided by various third-party claims administrators.

The members of CIRA and their deductibles are shown in the table below.

| Member | Deductible | Member | Deductible |
| :---: | :---: | :---: | :---: |
| Arcata | $\$ 5,000$ | Rancho Cucamonga | $\$ 250,000$ |
| Avalon | 10,000 | Rancho Cucamonga FD | 250,000 |
| Belvedere | 100,000 | Rancho Santa Margarita | 5,00 |
| Blue Lake | 5,000 | Rohnert Park | 5,000 |
| Calimesa | 5,000 | Sebastopol | 5,000 |
| Calistoga | 25,000 | Sierra Madre | 25,000 |
| CIRA Staff | 5,000 | Sonoma | 5,000 |
| Citrus Heights | 100,000 | St. Helena | 5,000 |
| Clearlake | 50,000 | Tehama | 5,000 |
| Cloverdale | 5,000 | Trinidad | 5,000 |
| Coalinga | 25,000 | Truckee | 10,000 |
| Cotati | 5,000 | Twentynine Palms | 5,000 |
| Eureka | 10,000 | Ukiah | 10,000 |
| Ferndale | 5,000 | Watsonville | 150,000 |
| Fort Bragg | 5,000 | Wheatland | 5,00 |
| Fortuna | 5,000 | Wildomar | 5,000 |
| Grass Valley | 25,000 | Willits | 5,000 |
| Healdsburg | 5,000 | Windsor | 10,000 |
| Highland | 5,000 | Yountville | 5,000 |
| Lakeport | 5,000 | Yucaipa | 5,00 |
| Plymouth | 5,000 | Yucca Valley | 5,000 |
| Point Arena | 5,000 |  |  |

The purpose of this review is to provide a guide to CIRA to determine reasonable funding levels for its self-insurance program in compliance with Governmental Accounting Standards Board Statements \#10 and \#30. The specific objective of the study is to estimate CIRA's project ultimate loss costs for 2021-22 and provide funding guidelines to meet future costs.

## II. CONCLUSIONS AND RECOMMENDATIONS

## A. COSTS OF 2021-22 CLAIMS

We estimate the ultimate cost of claims and loss adjustment expenses (LAE) for claims incurred in the pool layer during the 2021-22 program year to be $\$ 9,194,133$, which excludes excess insurance premiums and general administrative costs.
If the program is fully funded, CIRA can earn investment income on its funding for the coming year's claims before all payments come due. We estimate the impact of this investment income to be about $13.2 \%$, or $\$ 1,217,525$ for 2021-22. Thus the total expected cost of claims for program year 2021-22, including recognition of future investment income, is $\$ 7,976,608$.

We provide the following estimates of the costs of 2021-22 claims at various confidence levels, after recognition of investment income.

2021-22

| Expected | $\$ 7,976,608$ |
| :---: | ---: |
| $70 \%$ Confidence | $8,758,316$ |
| $75 \%$ | $9,126,491$ |
| $80 \%$ | $9,547,457$ |
| $85 \%$ | $10,055,410$ |

For budgeting purposes, these translate to the following contribution rates per \$100 payroll:

| Expected | $\$ 2.420$ |
| :---: | ---: |
| $70 \%$ Confidence | 2.657 |
| $75 \%$ | 2.769 |
| $80 \%$ | 2.897 |
| $85 \%$ | 3.051 |

Again, we generally recommend funding to the $75 \%$ to $85 \%$ confidence levels. We consider funding to the $70 \%$ confidence level to be marginally acceptable, and to the $90 \%$ confidence level to be conservative.

The claim costs and rates shown above do not include any recognition of the existing funding margin. They are for losses and loss adjustment expenses in the pooled layer only, and do not include a provision for loss control, overhead, excess insurance premiums, and other expenses associated with the program.

## B. PROGRAM FUNDING: GOALS AND OBJECTIVES

As self-insurance programs have proliferated among public entities, it has become apparent that there is a large measure of inconsistency in the way in which these programs recognize and account for their claims costs. This is the result of the fact that there have been several different sources of guidance available, none of which has been completely relevant to public entity self-insurance programs.

According to the Governmental Accounting Standards Board (GASB), the most relevant source of guidance on the subject is Financial Accounting Standards Board Statement \#60. A liability for unpaid claim costs, including all loss adjustment expenses, should be accrued at the time the self-insured events occur. This liability should include an allowance for incurred but not reported claims. It may be discounted for investment income at an appropriate rate of return, provided the discounting is disclosed. The regulations detailing the way in which this must be done are outlined in GASB's statements \#10 and \#30. These regulations are required to be applied by the Authority.
GASB \#10 and \#30 do not address asset requirements. They do, however, allow a range of amounts to be recognized for accounting purposes; specifically, GASB \#10 and \#30 allow recognition of a risk margin for unexpectedly adverse loss experience. Thus, for accounting purposes, it is possible to formulate a funding policy from a range of alternatives. The uncertainty in any estimate of the program's liability for outstanding claims should be taken into consideration in determining funding policy, but it may be offset by recognizing anticipated investment income earnings. This usually means developing a funding program based on discounted claims costs with some risk margin for unexpected adverse loss experience.
The amount of the risk margin should be a question of long-term funding policy. We recommend that the risk margin be determined by thinking in terms of the probability that a given level of assets will prove to be adequate. For example, a reasonable goal might be to maintain assets at the $85 \%$ confidence level.

A key factor to consider in determining funding policy is the degree to which stability is required in the level of contributions to the program from year to year. If you elect to maintain assets at a low confidence level, the chances are much greater that future events will prove that additional contributions should have been made for old claims. The additional contributions for old claims may be required at the same time that costs are increasing dramatically on new claims. The burden of funding for increases on past years as well as on current years, may well be prohibitive.

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We generally recommend maintaining program assets at the 80\% confidence level, after recognition of investment income, with a recommended range of the 75\% to 85\% confidence levels. We tend to think of the 70\% confidence level as marginally acceptable and of the $90 \%$ confidence level as conservative. We recommend the $75 \%$ to $85 \%$ confidence level range because the probabilities are reasonably high that resulting assets will be sufficient to meet claim liabilities, yet the required risk margins are not so large that they will cause most self-insured entities to experience undue financial hardship. In addition, within this range, anticipated investment income generally offsets the required risk margin for the most part, which means that assets are likely sufficient on an undiscounted basis.

We also strongly believe, however, that the confidence level to which any future year is funded should be evaluated considering the relative certainty of the assumptions underlying the actuarial analysis, the Authority's other budgetary constraints, and the relative level of risk it is believed appropriate to assume. This means formulating both short and long-term funding goals, which may be the same in some years, but different in others.

In general, we recommend funding each year's claims costs in that year. When surpluses or deficits have developed on outstanding liabilities and funding adjustments are necessary, they should be clearly identified as such so that the habit of funding each year's claims costs that year is maintained. We also recommend that you reduce a surplus more slowly than you would accumulate funding to reduce a deficit.

## C. HISTORICAL TRENDS IN THE SELF-INSURANCE PROGRAM

## Loss Rate

We have evaluated the trend in the Authority's projected ultimate loss \& ALAE rate. This rate equals projected ultimate loss and ALAE (limited to either $\$ 100,000$ per occurrence or the SIR) divided by payroll in $\$ 100$ s, as displayed in the following graph.

Loss \& ALAE Rate Trend ${ }^{1}$ Ultimate Loss \& ALAE / Payroll (\$100s)


1 Losses are at expected (no risk margin) and are not discounted to reflect net present value.

## Severity

We have evaluated the trend in the Authority's projected ultimate claim size (or "severity"). The ultimate claim size equals projected ultimate loss \& ALAE (limited to either \$100,000 per occurrence or the SIR) divided by the projected ultimate number of reported claims, as displayed in the following graph.

Graph 3
Average Claim Size Trend ${ }^{1}$
Ultimate Loss \& ALAE / Ultimate Reported Claims


Losses are at expected (no risk margin) and are not discounted to reflect net present value.

## Frequency

We have evaluated the trend in the Authority's claim frequency. The claim frequency equals projected ultimate number of reported claims divided by payroll in $\$$ millions, as displayed in the following graph.

Graph 4
Claim Frequency Trend Ultimate Reported Claims / Payroll (\$ Millions)


## D. DATA PROVIDED FOR THE ANALYSIS

Overall, the data utilized in preparing this report appears to be accurate.
Comments and issues regarding the data are as follows:

- We have assumed that the program's self-insured retention will be at $\$ 500,000$ per occurrence for 2021-21.
- We received loss data valued as of $9 / 30 / 20$ from six sources. Detailed claim-level loss run with first-dollar unlimited loss information was provided in Rancho Cucamonga, Rancho Cucamonga Fire District, Watsonville, and other PARSAC and REMIF member loss data (See Appendix I).
- This loss data, net of 4850 benefits and recoveries, was used for the rate analysis.
- We also utilized the data from PARSAC and REMIF's most recent actuarial study for our assessment of loss development.
- We have assumed that CIRA's payroll for 2021-22 will be $\$ 329,589,000$ (See Appendix J).
The data provided for the analysis appears to be reasonable for use in this actuarial valuation of liabilities and projection of loss costs.


## III. ASSUMPTIONS AND LIMITATIONS

Any quantitative analysis is developed within a very specific framework of assumptions about conditions in the outside world, and actuarial analysis is no exception. We believe that it is important to review the assumptions we have made in developing the estimates presented in this report. By doing so, we hope you will gain additional perspective on the nature of the uncertainties involved in maintaining a self-insurance program. Our assumptions, and some observations about them, are as follows:

- Our analysis is based on loss experience, exposure data, and other general and specific information provided to us by PARSAC and REMIF. While we have not independently audited or verified this information, we have reviewed it for reasonableness and internal consistency.
- We have also made use of loss statistics that have been developed from the information gathered and compiled from other California public entities with selfinsured workers' compensation program.
- We have assumed that the future development of incurred and paid losses can be reasonably predicted on the basis of development of such losses in the recent past. We have also assumed that the historical development patterns for the participants of other California public entities with self-insured workers' compensation programs in the aggregate form a reasonable basis of comparison to the patterns from the Public Agency Risk Sharing Authority of California's data.
- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial review of other California public entities with self-insured workers' compensation programs.
- We have assumed that there is a continuing relationship between past and future loss costs.
- It is not possible to predict future claim costs precisely. Most of the costs of workers' compensation claims arise from a small number of incidents involving serious injury. A relatively small number of such claims could generate enough loss dollars to significantly reduce, or even deplete, the self-insurance fund.
- We cannot predict and have not attempted to predict the impact of future law changes and court rulings on claims costs. This is one major reason why we believe our funding recommendations are reasonable now, but should not be extrapolated into the future.
- The changes in cost levels associated with benefit increases and administrative changes typically take place over a period of several years following their enactment, and these changes are very difficult to forecast in advance. We have based our benefit level factors on those produced by the Workers' Compensation

Insurance Rating Bureau of California (WCIRB). See Appendix E for a display of the benefit level cost indices by fiscal year.

- We have assumed that the loss rate trend associated with claim costs increases at $0.5 \%$ per year. We have assumed that claim severity increases at $2.5 \%$ per year, and that claim frequency decreases at 2.0\% per year.
- We have assumed that historical payroll and other inflation-sensitive exposure measures increase 2.5\% annually due to inflation.
- We have assumed that assets held for investment will generate an average annual return of $2.5 \%$ over the duration of payment of the loss liabilities. It should be noted that actual future investment returns may vary significantly from this assumption, depending upon the prevailing investment market conditions.
- The claims costs we have estimated include indemnity and medical payments, and all loss adjustment expenses. We have not included estimates for excess insurance costs and other expenses associated with the program.
- Our funding recommendations do not include provisions for catastrophic events not in PARSAC and REMIF's history, such as earthquakes, flooding, mass civil disorder, or mass occupational disease.
- Our estimates assume that all excess insurance is valid and collectible. Further, our funding recommendations do not include a provision for losses greater than CIRA's excess coverage.


## IV. GLOSSARY OF ACTUARIAL TERMS

Accident Year - Year during which the accidents that generate a group of claims occurs, regardless of when the claims are reported, payments are made, or reserves are established.

Allocated Loss Adjustment Expenses (ALAE) - Expense incurred in settling claims that can be directly attributed to specific individual claims (e.g., legal fees, investigative fees, court charges, etc.)

Benefit Level Factor - Factor used to adjust historical losses to the current level of workers' compensation benefits.

Case Reserve - The amount left to be paid on a claim, as estimated by the claims administrator.

Claim Count Development Factor - A factor that is applied to the number of claims reported in a particular accident period in order to estimate the number of claims that will ultimately be reported.

Claim Frequency - Number of claims per \$1 million of payroll.
Confidence Level - An estimated probability that a given level of funding will be adequate to pay actual claims costs. For example, the $85 \%$ confidence level refers to an estimate for which there is an $85 \%$ chance that the amount will be sufficient to pay loss costs.

Discount Factor - A factor to adjust estimated loss costs to reflect anticipated investment income from assets held prior to actual claim payout.

Expected Losses - The best estimate of the full, ultimate value of loss costs.
Incurred but not Reported (IBNR) Losses - Losses for which the accident has occurred but the claim has not yet been reported. This is the ultimate value of losses, less any amount that has been set up as reported losses by the claims adjuster. It includes both amounts for claims incurred but not yet received by the administrator and loss development on already reported claims.

Loss Development Factor - A factor applied to losses for a particular accident period to reflect the fact that reported and paid losses do not reflect final values until all claims are settled (see Section IV).

Loss Rate - Ultimate losses per \$100 of payroll.

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Non-Claims Related Expenses - Program expenses not directly associated with claims settlement and administration, such as excess insurance, safety program expenses, and general overhead. These exclude expenses associated with loss settlements (Indemnity/Medical, BI/PD), legal expenses associated with individual claims (ALAE), and claims administration (ULAE).

Outstanding Losses - Losses that have been incurred but not paid. This is the ultimate value of losses less any amount that has been paid.

Paid Losses - Losses actually paid on all reported claims.
Program Losses - Losses, including ALAE, limited to the SIR for each occurrence.
Reported Losses - The total expected value of losses as estimated by the claims administrator. This is the sum of paid losses and case reserves.

Self-Insured Retention (SIR) - The level at which an excess insurance policy is triggered to begin payments on a claim. Financially, this is similar to an insurance deductible.

Severity - Average claim cost.
Ultimate Losses - The value of claim costs at the time when all claims have been settled. This amount must be estimated until all claims are actually settled.

Unallocated Loss Adjustment Expenses (ULAE) - Claim settlement expenses that cannot be directly attributed to individual claims (e.g., claims adjusters' salaries, taxes, etc.)













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Rates Exhibit 1
Page 2
Discount 2.5\%

California Intergovernmental Risk Authority - Workers' Compensation
Experience Modification Data

| Payroll (00s) |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Member | 2015-16 <br> (A) | 2016-17 <br> (B) | 2017-18 <br> (C) | 2018-19 <br> (D) | $\begin{gathered} \text { 2019-20 } \\ \text { (E) } \end{gathered}$ | $\begin{aligned} & 2015-16 \\ & \text { to } \\ & 2019-20 \\ & (\mathrm{~F}) \end{aligned}$ |
| Arcata | \$82,871 | \$84,741 | \$86,199 | \$92,800 | \$94,299 | \$440,910 |
| Avalon | 47,771 | 62,231 | 66,475 | 63,118 | 70,524 | 310,118 |
| Belvedere | 23,486 | 23,117 | 24,556 | 21,343 | 26,051 | 118,553 |
| Blue Lake | 4,454 | 4,273 | 4,393 | 4,827 | 5,000 | 22,948 |
| Calimesa | 8,998 | 7,548 | 11,107 | 16,088 | 17,850 | 61,591 |
| Calistoga | 45,835 | 51,179 | 55,448 | 61,827 | 62,500 | 276,790 |
| CIRA Staff | 12,407 | 12,847 | 13,012 | 9,703 | 9,608 | 57,578 |
| Citrus Heights | 182,734 | 193,393 | 187,907 | 191,839 | 199,350 | 955,223 |
| Clearlake | 28,152 | 34,649 | 37,885 | 42,208 | 40,709 | 183,603 |
| Cloverdale | 35,073 | 35,633 | 37,924 | 39,426 | 40,645 | 188,700 |
| Coalinga | 58,214 | 58,649 | 52,202 | 49,074 | 55,381 | 273,520 |
| Cotati | 27,470 | 17,262 | 30,701 | 34,881 | 38,095 | 148,409 |
| Eureka | 125,500 | 136,773 | 142,049 | 149,760 | 152,241 | 706,323 |
| Ferndale | 6,160 | 6,522 | 6,645 | 6,758 | 7,050 | 33,135 |
| Fort Bragg | 37,645 | 33,677 | 33,199 | 35,848 | 38,550 | 178,918 |
| Fortuna | 41,799 | 44,022 | 47,080 | 47,561 | 51,543 | 232,006 |
| Grass Valley | 69,869 | 63,843 | 67,902 | 75,159 | 77,796 | 354,569 |
| Healdsburg | 130,204 | 124,872 | 142,691 | 118,369 | 169,075 | 685,211 |
| Highland | 27,190 | 26,502 | 27,488 | 30,363 | 30,281 | 141,824 |
| Lakeport | 27,005 | 27,873 | 27,907 | 32,265 | 34,383 | 149,433 |
| Plymouth | 4,933 | 5,480 | 5,518 | 6,272 | 5,854 | 28,058 |
| Point Arena | 2,700 | 3,186 | 3,291 | 3,807 | 3,492 | 16,475 |
| Rancho Cucamonga | 299,089 | 301,035 | 305,981 | 312,716 | 324,615 | 1,543,436 |
| Rancho Cucamonga FD | 157,020 | 167,850 | 182,899 | 174,883 | 182,832 | 865,483 |
| Rancho Santa Margarita | 28,862 | 27,076 | 26,272 | 26,876 | 27,197 | 136,282 |
| Rohnert Park | 151,717 | 164,876 | 190,362 | 204,753 | 213,405 | 925,113 |
| Sebastopol | 45,662 | 47,314 | 49,190 | 54,067 | 55,158 | 251,391 |
| Sierra Madre | 52,085 | 53,648 | 55,257 | 56,915 | 58,622 | 276,526 |
| Sonoma | 26,599 | 27,391 | 28,990 | 28,466 | 32,215 | 143,660 |
| St. Helena | 54,048 | 58,436 | 63,243 | 68,491 | 72,581 | 316,800 |
| Tehama | 440 | 323 | 312 | 324 | 400 | 1,799 |
| Trinidad | 3,227 | 3,271 | 3,466 | 3,580 | 3,677 | 17,221 |
| Truckee | 93,192 | 90,551 | 92,904 | 99,940 | 102,000 | 478,587 |
| Twentynine Palms | 22,750 | 22,601 | 24,771 | 26,272 | 27,779 | 124,173 |
| Ukiah | 155,033 | 157,185 | 138,371 | 155,892 | 193,045 | 799,526 |
| Watsonville | 298,740 | 276,908 | 296,107 | 306,207 | 314,140 | 1,492,103 |
| Wheatland | 14,000 | 15,112 | 15,366 | 17,249 | 17,352 | 79,079 |
| Wildomar | 11,207 | 11,170 | 12,242 | 12,601 | 16,083 | 63,303 |
| Willits | 27,940 | 27,345 | 27,613 | 30,496 | 33,723 | 147,117 |
| Windsor | 83,863 | 64,048 | 86,269 | 85,609 | 95,280 | 415,070 |
| Yountville | 24,950 | 20,178 | 30,418 | 35,331 | 32,271 | 143,148 |
| Yucaipa | 41,568 | 44,038 | 46,310 | 52,067 | 60,718 | 244,702 |
| Yucca Valley | 25,877 | 27,783 | 27,846 | 28,227 | 36,295 | 146,027 |
| All Current Members | \$2,648,340 | \$2,666,412 | \$2,815,767 | \$2,914,259 | \$3,129,664 | \$14,174,442 |

## California Intergovernmental Risk Authority - Workers' Compensation

Experience Modification Data

| Incurred Losses Limited to \$250,000 Per Occurrence |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Member | 2015-16 <br> (A) | 2016-17 <br> (B) | 2017-18 <br> (C) | 2018-19 <br> (D) | 2019-20 <br> (E) | $\begin{gathered} 2015-16 \\ \text { to } \\ 2019-20 \end{gathered}$ <br> (F) |
| Arcata | \$221,984 | \$172,740 | \$118,575 | \$207,765 | \$114,609 | \$835,674 |
| Avalon | 42,145 | 80,742 | 377,180 | 337,381 | 126,245 | 963,693 |
| Belvedere | 248,837 | 418,569 | 12,596 | 6,456 | 3,000 | 689,457 |
| Blue Lake | 0 | 1,573 | 28,642 | 5,728 | 0 | 35,942 |
| Calimesa | 0 | 444 | 0 | 10,374 | 447 | 11,265 |
| Calistoga | 15,456 | -89,502 | 239,603 | 265,365 | 44,847 | 475,769 |
| CIRA Staff | 0 | 0 | 5,596 | 0 | 943 | 6,539 |
| Citrus Heights | 474,442 | 849,818 | 633,205 | 508,218 | 388,490 | 2,854,172 |
| Clearlake | 349,458 | 192,502 | 65,688 | 248,232 | 36,436 | 892,317 |
| Cloverdale | 69,851 | 264,245 | 603,631 | 41,922 | 37,972 | 1,017,620 |
| Coalinga | 159,469 | 121,542 | 363,104 | 6,002 | 323,404 | 973,521 |
| Cotati | 58,856 | 8,493 | 201,669 | 49,286 | 9,767 | 328,070 |
| Eureka | 155,646 | 579,121 | 306,391 | 296,130 | 136,202 | 1,473,490 |
| Ferndale | 2,597 | 0 | 0 | 60,103 | 3,965 | 66,665 |
| Fort Bragg | 4,423 | 165,888 | 240,090 | 44,156 | 204,675 | 659,232 |
| Fortuna | 31,633 | 319,033 | 165,551 | 101,434 | 30,645 | 648,296 |
| Grass Valley | 76,576 | 268,859 | 396,678 | 219,244 | 2,713 | 964,071 |
| Healdsburg | 251,898 | 139,259 | 366,470 | 213,013 | 216,850 | 1,187,490 |
| Highland | 3,475 | 80,675 | 21,812 | 11,360 | -339 | 116,983 |
| Lakeport | 244,180 | 2,295 | 39,741 | 253,321 | 37,429 | 576,967 |
| Plymouth | 961 | 0 | 0 | 574 | 0 | 1,535 |
| Point Arena | 0 | 0 | 0 | 0 | 243 | 243 |
| Rancho Cucamonga | 592,772 | 296,419 | 599,777 | 418,554 | 109,635 | 2,017,156 |
| Rancho Cucamonga FD | 589,124 | 174,657 | 289,764 | 887,415 | 521,267 | 2,462,227 |
| Rancho Santa Margarita | 0 | 0 | 0 | 0 | 0 | 0 |
| Rohnert Park | 794,186 | 273,963 | 924,639 | 409,360 | 489,378 | 2,891,526 |
| Sebastopol | 258,700 | 20,982 | 537,605 | 333,596 | 38,580 | 1,189,462 |
| Sierra Madre | 263,618 | 43,675 | 14,846 | 30,830 | 93,844 | 446,813 |
| Sonoma | 110,615 | 66,226 | 39,170 | 174,576 | 785 | 391,372 |
| St. Helena | 1,748 | 71,316 | 263,592 | 105,718 | 214,543 | 656,919 |
| Tehama | 0 | 0 | 393 | 0 | 0 | 393 |
| Trinidad | 3,499 | 0 | 0 | 0 | 0 | 3,499 |
| Truckee | 128,248 | 295,823 | 182,755 | 49,050 | 22,437 | 678,313 |
| Twentynine Palms | 3,929 | 6,584 | 2,511 | 5,361 | 188 | 18,574 |
| Ukiah | 1,105,581 | 445,905 | 378,982 | 826,266 | 427,019 | 3,183,754 |
| Watsonville | 794,914 | 890,761 | 1,230,248 | 802,031 | 620,387 | 4,338,341 |
| Wheatland | 2,087 | 3,812 | 1,306 | 10 | 3,942 | 11,158 |
| Wildomar | 0 | 0 | 0 | 0 | 0 | 0 |
| Willits | 12,248 | 315,447 | 40,510 | 10,683 | 15,964 | 394,853 |
| Windsor | 54,697 | 191,755 | 5,180 | 8,050 | 145,839 | 405,520 |
| Yountville | 715 | 1,222 | 4,174 | -2,289 | 0 | 3,823 |
| Yucaipa | 25,669 | 0 | 0 | 0 | 0 | 25,669 |
| Yucca Valley | 8,850 | 54,548 | 12,602 | 270 | 11,496 | 87,765 |
| All Current Members | \$7,163,087 | \$6,729,391 | \$8,714,273 | \$6,945,546 | \$4,433,848 | \$33,986,147 |


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Fiscal Year 2021-22 Funding - Discounted 80\% Confidence Level - 500K Pool SIR





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Fiscal Year 2021-22 Funding - Discounted 85\% Confidence Level - 500K Pool SIR








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Fiscal Year 2021-22 Funding - Discounted 80\% Confidence Level - 750K Pool SIR

Public Agency Risk Sharing Authority of California - Workers' Compensation




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Fort Bragg
Fortuna
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Fiscal Year 2021-22 Funding - Discounted 85\% Confidence Level - 750K Pool SIR

Public Agency Risk Sharing Authority of California - Workers' Compensation




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California Intergovernmental Risk Authority - Workers' Compensation
Fiscal Year 2021-22 Funding - Discounted Expected Level - $\$ 1 \mathrm{M}$ Pool SIR

## Notes Provided by CIRA

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Funding Options for Program Year 2021-2022 (SIR = $500,000)
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Payroll rates are per hundred dollars of 2021-2022 payroll of \$329,589,100.

## Funding Options for Program Year 2021-2022 (SIR = \$750,000)

| (A) |  |  |  | Amount | Rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Estimated Ultimate Losses Incurred in Accident Year 2021-2022: <br> (From Not Included) |  |  | \$13,338,471 | \$4.047 |  |
| (B) | Estimated Claims Administration Fees Incurred in Accident Year 2021-2022: (From Exhibit 3, Page 1, (L)) |  |  | 890,000 | 0.270 |  |
| (C) | Total Claims Costs Incurred in Accident Year 2021-2022: $((\mathrm{A})+(\mathrm{B}))$ |  |  | \$14,228,000 | \$4.317 |  |
| (E) | Loss Discount Factor (Based on a Discou (Appendix F, Page 2, (G)) |  |  | 0.868 |  |  |
| (F) | Discounted Total Claims Costs Incurred in Accident Year 2021-2022: $((\mathrm{C}) \times(\mathrm{E}))$ |  |  | \$12,344,278 | \$3.745 |  |
|  |  | Marginally Acceptable |  | commended |  | Conservative |
|  |  | 70\% | 75\% | 80\% | 85\% | 90\% |
| (G) | Confidence Level Factor: (From Appendix G) | 1.098 | 1.137 | 1.182 | 1.236 | 1.309 |
| (H) | Margin for Adverse Experience: $((F) \times[(G)-1])$ | 872,044 | 1,227,608 | 1,627,139 | 2,146,509 | 2,832,922 |
| (I) | Recommended Funding in 2021-2022 for Claims Costs and Other Expenses: $((\mathrm{F})+(\mathrm{H}))$ | \$13,216,323 | \$13,571,887 | \$13,971,418 | \$14,490,788 | \$15,177,200 |
| (J) | Average Deductible Factor | 0.702 | 0.708 | 0.706 | 0.719 | 0.726 |
| (J) | Budgeted Non Claims Related Expenses: | 2,821,977 | 2,821,977 | 2,821,977 | 2,821,977 | 2,821,977 |
| (K) | Total Funding in 2021-22 $((I)+(J))$ | \$12,592,434 | \$13,010,229 | \$13,389,441 | \$14,063,863 | \$14,822,930 |
| (K) | Rate per \$100 of Payroll: ((K) / \$3,295,891) | \$3.821 | \$3.947 | \$4.062 | \$4.267 | \$4.497 | ( $(\mathrm{K}) / \$ 3,295,891)$

Payroll rates are per hundred dollars of 2021-2022 payroll of $\$ 329,589,100$.

|  |  |  |  | Amount | Rate |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| (A) | Estimated Ultimate Losses Incurred in Accident Year 2021-2022: <br> (From Not Included) |  |  | \$14,004,241 | \$4.249 |  |
| (B) | Estimated Claims Administration Fees Incurred in Accident Year 2021-2022: (From Exhibit 3, Page 1, (L)) |  |  | 890,000 | 0.270 |  |
| (C) | Total Claims Costs Incurred in Accident Year 2021-2022: $((\mathrm{A})+(\mathrm{B}))$ |  |  | \$14,894,000 | \$4.519 |  |
| (E) | Loss Discount Factor (Based on a Discou (Appendix F, Page 2, (G)) |  |  | 0.868 |  |  |
| (F) | Discounted Total Claims Costs Incurred in Accident Year 2021-2022: ((C) x (E)) |  |  | \$12,921,885 | \$3.921 |  |
|  |  | Marginally Acceptable |  | commended |  | Conservative |
|  |  | 70\% | 75\% | 80\% | 85\% | 90\% |
| (G) | Confidence Level Factor: (From Appendix G) | 1.098 | 1.137 | 1.182 | 1.236 | 1.309 |
| (H) | Margin for Adverse Experience: $((F) \times[(G)-1])$ | 886,160 | 1,247,847 | 1,719,464 | 2,183,269 | 2,882,400 |
| (I) | Recommended Funding in 2021-2022 for Claims Costs and Other Expenses: $((\mathrm{F})+(\mathrm{H}))$ | \$13,808,044 | \$14,169,731 | \$14,641,348 | \$15,105,154 | \$15,804,284 |
| (J) | Average Deductible Factor | 0.681 | 0.686 | 0.714 | 0.698 | 0.704 |
| (J) | Budgeted Non Claims Related Expenses: | 2,420,849 | 2,420,849 | 2,420,849 | 2,420,849 | 2,420,849 |
| (K) | Total Funding in 2021-22 $((\mathrm{I})+(\mathrm{J}))$ | \$12,349,457 | \$12,777,067 | \$13,587,917 | \$13,855,259 | \$14,631,404 |
| (K) | Rate per \$100 of Payroll: <br> ((J) / \$3,295,891) | \$3.747 | \$3.877 | \$4.123 | \$4.204 | \$4.439 |


| Accident Year | Reported Loss Development Method (A) | Paid <br> Loss Development Method (B) | Exposure Method Based on Reported Losses (C) | Exposure Method |  | Selected Ultimate Limited |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Based on | Frequency- |  |
|  |  |  |  | Paid | Severity |  |
|  |  |  |  | Losses (D) | Method (E) | Losses <br> (F) |
| 2007-2008 | 4,829,000 | 4,896,000 | 4,829,000 | 4,892,000 | 4,828,000 | 4,829,000 |
| 2008-2009 | 4,419,000 | 4,355,000 | 4,420,000 | 4,360,000 | 4,420,000 | 4,419,000 |
| 2009-2010 | 6,519,000 | 6,613,000 | 6,521,000 | 6,609,000 | 6,520,000 | 6,519,000 |
| 2010-2011 | 6,443,000 | 6,538,000 | 6,445,000 | 6,534,000 | 6,443,000 | 6,443,000 |
| 2011-2012 | 4,600,000 | 4,821,000 | 4,602,000 | 4,804,000 | 4,600,000 | 4,600,000 |
| 2012-2013 | 6,630,000 | 6,862,000 | 6,628,000 | 6,840,000 | 6,630,000 | 6,630,000 |
| 2013-2014 | 7,412,000 | 7,414,000 | 7,411,000 | 7,417,000 | 7,412,000 | 7,412,000 |
| 2014-2015 | 6,480,000 | 6,660,000 | 6,483,000 | 6,638,000 | 6,480,000 | 6,480,000 |
| 2015-2016 | 5,788,000 | 5,803,000 | 5,835,000 | 5,940,000 | 6,906,000 | 5,812,000 |
| 2016-2017 | 5,661,000 | 5,647,000 | 5,697,000 | 5,772,000 | 7,453,000 | 5,679,000 |
| 2017-2018 | 7,328,000 | 6,993,000 | 7,263,000 | 6,872,000 | 7,016,000 | 7,295,000 |
| 2018-2019 | 6,972,000 | 6,466,000 | 6,931,000 | 6,575,000 | 6,712,000 | 6,813,000 |
| 2019-2020 | 6,520,000 | 6,717,000 | 6,733,000 | 6,916,000 | 6,962,000 | 6,825,000 |
| Totals |  |  |  |  |  | \$79,756,000 |
|  |  | Projected Losses for the Year 2020-2021 (G) |  |  |  | \$7,097,000 |
|  |  | Projected Losses for the Year 2021-2022 (H) |  |  |  | \$7,288,000 |

Notes:
(A) From Appendix A, Page 1, Column (D).
(B) From Appendix B, Page 1, Column (D).
(C) Based on results in Appendix C, Page 1.
(D) Based on results in Appendix C, Page 2.
(E) Based on results in Appendix D, Page 1.
(F) Selected averages of (A), (B), (C), (D), and (E).
(G) From Exhibit 3, Page 1, Line (K) / Line (G).
(H) From Exhibit 3, Page 1, Line (K) / Line (G).

This exhibit summarizes the results of the actuarial methods we have applied to estimate limited losses for each year. These results are used to select a limited loss rate for future years.

Selection of Projected Limited Loss Rate and Projection of Program Losses and ULAE


Notes appear on the next page.

## Notes:

(A) From Exhibit 2, Page 2, Column (F).

For purposes of projecting future losses, losses
are capped at $\$ 100,000$ per occurrence.
(B) From Appendix E, Page 1, Column (B).
(C) $(A) \times(B)$.
(D) Appendix I, Column (C).
(E) (C)/(D).
(F) Selected based on (E).
(G) Based on a Weibull distribution, a mathematical model of claims sizes.
(H) From Appendix E.
(I) $(\mathrm{F}) \times(\mathrm{G}) \times(\mathrm{H})$.
(J) Appendix I, Column (C).
(K) (I) $x(J)$.
(L) Based on an estimated claim closing pattern and the CIRA's historical claims administration expenses.
(M) $(\mathrm{K})+(\mathrm{L})$.

This exhibit shows the calculation of future loss costs based on the past loss rates. The projections will be accurate only to the extent that what has happened in the past is representative of what will happen in the future.

California Intergovernmental Risk Authority - Workers' Compensation

Reported Loss Development


Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA. These losses exclude amounts over $\$ 100,000$ per occurrence.
(C) From Appendix A, Page 2.
(D) (B) $\times$ (C). These estimated losses exclude amounts over $\$ 100,000$ per occurrence.
(E) Losses capped at the CIRA's SIR. Amounts are provided by the CIRA.
(F) Derived from factors on Appendix A, Page 3.
(G) (E) $\times(\mathrm{F})$.

This method tends to understate ultimate losses for the most recent several years because the large losses for those years generally have not yet emerged at the time of our review.

This exhibit shows the calculation of estimated ultimate losses for each year based on paid losses and case reserves as reported by the claims administrator. These losses tend to "develop" or change from period to period as more information becomes available about the cases. This development tends to follow quantifiable patterns over time.

California Intergovernmental Risk Authority - Workers' Compensation

Paid Loss Development

|  |  |  |  | Program |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Paid | Loss | Ultimate | Paid | Loss | Ultimate |
| Accident | Losses as | Development | Limited | Losses as | Development | Program |
| Year <br> (A) | of 9/30/20 <br> (B) | Factor <br> (C) | Losses <br> (D) | of 9/30/20 <br> (E) | Factor (F) | Losses (G) |
| 2007-2008 | 4,693,892 | 1.043 | 4,895,729 | 6,074,240 | 1.185 | 7,197,974 |
| 2008-2009 | 4,148,072 | 1.050 | 4,355,476 | 5,783,618 | 1.208 | 6,986,611 |
| 2009-2010 | 6,250,133 | 1.058 | 6,612,641 | 8,828,970 | 1.236 | 10,912,607 |
| 2010-2011 | 6,127,693 | 1.067 | 6,538,248 | 9,073,274 | 1.269 | 11,513,985 |
| 2011-2012 | 4,472,567 | 1.078 | 4,821,427 | 6,513,649 | 1.307 | 8,513,339 |
| 2012-2013 | 6,289,339 | 1.091 | 6,861,669 | 8,770,618 | 1.358 | 11,910,499 |
| 2013-2014 | 6,697,803 | 1.107 | 7,414,468 | 8,887,735 | 1.425 | 12,665,022 |
| 2014-2015 | 5,899,269 | 1.129 | 6,660,275 | 7,945,648 | 1.508 | 11,982,037 |
| 2015-2016 | 4,959,592 | 1.170 | 5,802,723 | 6,249,412 | 1.632 | 10,199,040 |
| 2016-2017 | 4,550,385 | 1.241 | 5,647,028 | 5,580,824 | 1.814 | 10,123,615 |
| 2017-2018 | 5,168,199 | 1.353 | 6,992,573 | 6,365,733 | 2.075 | 13,208,896 |
| 2018-2019 | 3,796,807 | 1.703 | 6,465,962 | 4,041,968 | 2.705 | 10,933,523 |
| 2019-2020 | 2,049,257 | 3.278 | 6,717,464 | 2,135,161 | 5.317 | 11,352,651 |
| Totals | \$65,103,008 |  | \$79,785,683 | \$86,250,850 |  | \$137,499,800 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA. These losses exclude amounts over $\$ 100,000$ per occurrence.
(C) From Appendix B, Page 2.
(D) (B) $\times$ (C). These estimated losses exclude amounts over $\$ 100,000$ per occurrence.
(E) Losses capped at the CIRA's SIR. Amounts are provided by the CIRA.
(F) Derived from factors on Appendix B, Page 3.
(G) (E) $\times(\mathrm{F})$.

This method tends to understate ultimate losses for the most recent several years because the large losses for those years generally have not yet emerged at the time of our review.

This exhibit shows the calculation of estimated ultimate losses for each year based on paid losses as reported by the claims administrator. These losses tend to "develop" or change from period to period as more information becomes available about the cases. This development tends to follow quantifiable patterns over time.

| Exposure and Development Method <br> Based on Reported Losses |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | Trended Payroll (\$00) <br> (A) | Reported Losses as of 9/30/20 (B) | Reported Loss Development Factor (C) | Percentage of Losses Yet to Be Reported (D) | Program Rate (E) | Incurred but not Reported (IBNR) (F) | Ultimate Program Losses (G) |
| 2007-2008 | 3,060,456 | 6,399,256 | 1.058 | 0.055 | 2.297 | 386,643 | 6,785,899 |
| 2008-2009 | 3,061,236 | 6,538,894 | 1.070 | 0.065 | 2.123 | 422,435 | 6,961,329 |
| 2009-2010 | 3,011,602 | 9,989,650 | 1.083 | 0.077 | 3.215 | 745,537 | 10,735,187 |
| 2010-2011 | 3,053,190 | 9,580,826 | 1.100 | 0.091 | 3.166 | 879,642 | 10,460,468 |
| 2011-2012 | 3,049,195 | 6,985,203 | 1.118 | 0.106 | 2.287 | 739,192 | 7,724,395 |
| 2012-2013 | 3,005,792 | 9,520,550 | 1.141 | 0.124 | 3.378 | 1,259,042 | 10,779,592 |
| 2013-2014 | 2,803,928 | 10,275,626 | 1.169 | 0.145 | 4.088 | 1,662,056 | 11,937,682 |
| 2014-2015 | 2,873,691 | 9,160,865 | 1.202 | 0.168 | 3.524 | 1,701,317 | 10,862,182 |
| 2015-2016 | 2,997,921 | 7,743,204 | 1.246 | 0.197 | 3.562 | 2,103,683 | 9,846,887 |
| 2016-2017 | 2,943,719 | 7,145,069 | 1.317 | 0.241 | 3.413 | 2,421,306 | 9,566,375 |
| 2017-2018 | 3,032,581 | 9,411,283 | 1.421 | 0.296 | 3.470 | 3,114,825 | 12,526,108 |
| 2018-2019 | 3,062,886 | 7,195,546 | 1.688 | 0.408 | 3.575 | 4,467,526 | 11,663,072 |
| 2019-2020 | 3,207,906 | 4,523,705 | 2.645 | 0.622 | 3.590 | 7,163,190 | 11,686,895 |
| Totals | 39,164,103 | \$104,469,677 |  |  |  | \$27,066,394 | \$131,536,071 |

Notes:
(A) Appendix I, Column (C).
(B) Provided by the CIRA. These losses exclude amounts incurred above the CIRA's SIR for each year.
(C) From Appendix A, Page 1, Column (F).
(D) $1-1 /(\mathrm{C})$.
(E) From Appendix C, Page 3, Column (H).
(F) $(A) \times(D) \times(E)$.
(G) $(B)+(F)$.

This exhibit shows the calculation of ultimate losses based on the assumption that there is an underlying relationship between losses and exposure that changes in regular ways over time. The method relies on the premise that the losses that are currently unreported will cost what this relationship would suggest.

| Exposure and Development Method Based on Paid Losses |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident <br> Year | Trended Payroll (\$00) (A) | Paid Losses as of $9 / 30 / 20$ <br> (B) | Paid <br> Loss <br> Development Factor (C) | Percentage of Losses Yet to Be Paid (D) | Program Rate (E) | Incurred but not Paid (F) | Ultimate Program Losses (G) |
| 2007-2008 | 3,060,456 | 6,074,240 | 1.185 | 0.156 | 2.297 | 1,096,659 | 7,170,899 |
| 2008-2009 | 3,061,236 | 5,783,618 | 1.208 | 0.172 | 2.123 | 1,117,829 | 6,901,447 |
| 2009-2010 | 3,011,602 | 8,828,970 | 1.236 | 0.191 | 3.215 | 1,849,319 | 10,678,289 |
| 2010-2011 | 3,053,190 | 9,073,274 | 1.269 | 0.212 | 3.166 | 2,049,277 | 11,122,551 |
| 2011-2012 | 3,049,195 | 6,513,649 | 1.307 | 0.235 | 2.287 | 1,638,775 | 8,152,424 |
| 2012-2013 | 3,005,792 | 8,770,618 | 1.358 | 0.264 | 3.378 | 2,680,541 | 11,451,159 |
| 2013-2014 | 2,803,928 | 8,887,735 | 1.425 | 0.298 | 4.088 | 3,415,812 | 12,303,547 |
| 2014-2015 | 2,873,691 | 7,945,648 | 1.508 | 0.337 | 3.524 | 3,412,761 | 11,358,409 |
| 2015-2016 | 2,997,921 | 6,249,412 | 1.632 | 0.387 | 3.562 | 4,132,616 | 10,382,028 |
| 2016-2017 | 2,943,719 | 5,580,824 | 1.814 | 0.449 | 3.413 | 4,511,064 | 10,091,888 |
| 2017-2018 | 3,032,581 | 6,365,733 | 2.075 | 0.518 | 3.470 | 5,450,943 | 11,816,676 |
| 2018-2019 | 3,062,886 | 4,041,968 | 2.705 | 0.630 | 3.575 | 6,898,385 | 10,940,353 |
| 2019-2020 | 3,207,906 | 2,135,161 | 5.317 | 0.812 | 3.590 | 9,351,303 | 11,486,464 |
| Totals | 39,164,103 | \$86,250,850 |  |  |  | \$47,605,284 | \$133,856,134 |

Notes:
(A) Appendix I, Column (C).
(B) Provided by the CIRA. These losses exclude amounts paid above the CIRA's SIR for each year.
(C) From Appendix B, Page 1, Column (F).
(D) $1-1 /(\mathrm{C})$.
(E) From Appendix C, Page 3, Column (H).
(F) $(A) \times(D) \times(E)$.
(G) $(B)+(F)$.

This exhibit shows the calculation of ultimate losses based on the assumption that there is an underlying relationship between losses and exposure that changes in regular ways over time. The method relies on the premise that the losses that are currently unpaid will cost what this relationship would suggest.

Exposure and Development Method


Notes:
(A) Appendix I, Column (C).
(B) Selected average of results from Appendices A and B.
(C) From Appendix E, Page 1, Column (B).
(D) $(B) \times(C)$.
(E) (D)/(A).
(F) Selected Limited Rate / (C). For 2014-2015 and prior (B) / (A)
(G) Based on a Weibull distribution, a mathematical model of claim sizes.
(H) $(\mathrm{F}) \times(\mathrm{G})$.

This exhibit shows the calculation of the underlying historical relationship between losses and exposure that is needed to apply the estimation methods shown on pages 1 and 2 of this Appendix.

Frequency and Severity Method

| Accident | Ultimate <br> Program <br> Severity <br> (A) | Adjusted <br> Ultimate <br> Claims <br> (B) | Ultimate <br> Program <br> Losses |
| :---: | :---: | :---: | :---: |
|  |  |  | (C) |
| $2007-2008$ | 13,337 | 527 | $7,028,599$ |
| $2008-2009$ | 13,209 | 492 | $6,498,828$ |
| $2009-2010$ | 16,164 | 599 | $9,682,236$ |
| $2010-2011$ | 18,003 | 537 | $9,667,611$ |
| $2011-2012$ | 14,650 | 476 | $6,973,400$ |
| $2012-2013$ | 21,241 | 478 | $10,153,198$ |
| $2013-2014$ | 24,084 | 476 | $11,463,984$ |
| $2014-2015$ | 22,554 | 449 | $10,126,746$ |
| $2015-2016$ | 25,656 | 425 | $10,903,800$ |
| $2016-2017$ | 25,078 | 474 | $11,886,972$ |
| $2017-2018$ | 25,997 | 435 | $11,308,695$ |
| $2018-2019$ | 27,315 | 400 | $10,926,000$ |
| $2019-2020$ | 27,998 | 409 | $11,451,182$ |
|  |  |  |  |
| Total |  | 6,177 | $\$ 128,071,251$ |

Notes:
(A) From Appendix D, Page 2, Column (H).
(B) From Appendix D, Page 2, Column (B).
(C) $(A) \times(B)$.

This exhibit shows the calculation of the estimated ultimate losses for each year based on the observed average frequency and severity of claims.

Frequency and Severity Method

| Accident Year | Ultimate | Adjusted Ultimate Claims (B) | Ultimate Limited Severity (C) | Trend Factor (D) | Trended Limited Severity <br> (E) | Limited Severity (F) | Factor to SIR (G) | Program Severity (H) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Limited |  |  |  |  |  |  |  |
|  | Losses <br> (A) |  |  |  |  |  |  |  |
| 2007-2008 | 4,828,526 | 527 | 9,162 | 1.494 | 13,688 | 9,162 | 1.456 | 13,337 |
| 2008-2009 | 4,419,424 | 492 | 8,983 | 1.366 | 12,271 | 8,983 | 1.470 | 13,209 |
| 2009-2010 | 6,519,471 | 599 | 10,884 | 1.226 | 13,344 | 10,884 | 1.485 | 16,164 |
| 2010-2011 | 6,442,692 | 537 | 11,998 | 1.132 | 13,582 | 11,998 | 1.501 | 18,003 |
| 2011-2012 | 4,599,884 | 476 | 9,664 | 1.094 | 10,572 | 9,664 | 1.516 | 14,650 |
| 2012-2013 | 6,630,457 | 478 | 13,871 | 1.095 | 15,189 | 13,871 | 1.531 | 21,241 |
| 2013-2014 | 7,411,691 | 476 | 15,571 | 1.089 | 16,957 | 15,571 | 1.547 | 24,084 |
| 2014-2015 | 6,480,022 | 449 | 14,432 | 1.058 | 15,269 | 14,432 | 1.563 | 22,554 |
| 2015-2016 | 5,811,568 | 425 | 13,674 | 1.077 | 14,727 | 16,249 | 1.579 | 25,656 |
| 2016-2017 | 5,678,656 | 474 | 11,980 | 1.113 | 13,334 | 15,723 | 1.595 | 25,078 |
| 2017-2018 | 7,295,292 | 435 | 16,771 | 1.085 | 18,197 | 16,129 | 1.612 | 25,997 |
| 2018-2019 | 6,813,174 | 400 | 17,033 | 1.043 | 17,765 | 16,779 | 1.628 | 27,315 |
| 2019-2020 | 6,824,822 | 409 | 16,687 | 1.028 | 17,154 | 17,023 | 1.645 | 27,998 |
|  |  | Average Limited Severity: |  |  | \$14,773 |  |  |  |
|  |  | Average 14/15-18/19 Limited Severity: |  |  | 15,858 |  |  |  |
|  |  | Average 15/16-19/20 Limited Severity: |  |  | 16,235 |  |  |  |
|  |  | Selected Limited Severity: |  |  | \$17,500 |  |  |  |
|  |  |  |  |  | \$14,000 |  |  |  |

Notes:
(A) Selected average of results from Appendices A, B, and C.
(B) Appendix D, Page 3, Column (C).
(C) $(\mathrm{A}) /(\mathrm{B})$.
(D) From Appendix E, Page 1, Column (J).
(E) (C) $\times(\mathrm{D})$.
(F) Selected Limited Severity / (D).
(G) Based on a Weibull distribution, a mathematical model of claim sizes.
(H) (F) $\times(\mathrm{G})$.

This exhibit shows the calculation of the historical average cost per claim, or severity. The observed average severity is used in the method shown on page 1 of this Appendix.

Frequency and Severity Method
Projection of Ultimate Claims

| Accident Year | Reported Claim Development (A) | Closed Claim Development (B) | Selected Ultimate Claims (C) | Trended Payroll $(\$ 000,000)$ <br> (D) | Claim Frequency (E) | Trend Factor (F) | Trended Claim Frequency (G) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007-2008 | 527 | 529 | 527 | 306.0 | 1.722 | 0.769 | 1.324 |
| 2008-2009 | 492 | 490 | 492 | 306.1 | 1.607 | 0.785 | 1.261 |
| 2009-2010 | 599 | 599 | 599 | 301.2 | 1.989 | 0.801 | 1.593 |
| 2010-2011 | 537 | 540 | 537 | 305.3 | 1.759 | 0.817 | 1.437 |
| 2011-2012 | 476 | 490 | 476 | 304.9 | 1.561 | 0.834 | 1.302 |
| 2012-2013 | 478 | 485 | 478 | 300.6 | 1.590 | 0.851 | 1.353 |
| 2013-2014 | 476 | 477 | 476 | 280.4 | 1.698 | 0.868 | 1.474 |
| 2014-2015 | 449 | 462 | 449 | 287.4 | 1.562 | 0.886 | 1.384 |
| 2015-2016 | 425 | 445 | 425 | 299.8 | 1.418 | 0.904 | 1.282 |
| 2016-2017 | 474 | 505 | 474 | 294.4 | 1.610 | 0.922 | 1.484 |
| 2017-2018 | 435 | 450 | 435 | 303.3 | 1.434 | 0.942 | 1.351 |
| 2018-2019 | 400 | 422 | 400 | 306.3 | 1.306 | 0.961 | 1.255 |
| 2019-2020 | 379 | 438 | 409 | 320.8 | 1.275 | 0.980 | 1.250 |
| Total | 6,147 | 6,332 | 6,177 | 3,916.4 |  |  | 1.364 |
| 14/15-18/19 | 2,183 | 2,284 | 2,183 | 1,491.1 |  |  | 1.350 |
| (H) Selected Frequency: |  |  |  |  |  |  | 1.300 |
|  |  |  |  |  |  |  | 1.650 |


|  | Program Year: | 2020-2021 | 2021-2022 |
| :--- | :--- | ---: | :---: |
| (I) Trend Factor: | 1.000 | 0.980 |  |
| (J) Selected Frequency: | 1.300 | 1.274 |  |
| (K) Est. Payroll (\$000,000): | 322.6 | 329.6 |  |
| (L) Ultimate Claims: | 419 | 420 |  |

Notes:
(A) Appendix D, Page 4, (C).
(G) $(E) \times(F)$.
(B) Appendix D, Page 5, (C).
(H) The selected frequency of 1.300 is based on (G).
(C) Selected from (A) and (B).
(I) Appendix E, Page 1, Column (F).
(D) Appendix I, Column (C) / 10,000.
(J) $(\mathrm{H}) \times(\mathrm{I})$.
(E) (C) $/(\mathrm{D})$.
(K) Appendix I, Column (C) / 10,000.
(F) Appendix E, Page 1, Column (F).
(L) $(\mathrm{J}) \times(\mathrm{K})$.

This exhibit summarizes the estimated numbers of claims and shows the estimated frequencies per $\$ 1,000,000$ of trended payroll.

California Intergovernmental Risk Authority - Workers' Compensation

Frequency and Severity Method
Reported Claim Count Development

| Accident Year | Claims Reported as of 9/30/2020 (A) | Reported Claim Development Factor (B) | Ultimate Claims <br> (C) | Trended Claim Frequency (D) |
| :---: | :---: | :---: | :---: | :---: |
| 2007-2008 | 527 | 1.000 | 527 | 1.324 |
| 2008-2009 | 492 | 1.000 | 492 | 1.262 |
| 2009-2010 | 599 | 1.000 | 599 | 1.593 |
| 2010-2011 | 537 | 1.000 | 537 | 1.437 |
| 2011-2012 | 476 | 1.000 | 476 | 1.302 |
| 2012-2013 | 478 | 1.000 | 478 | 1.353 |
| 2013-2014 | 476 | 1.000 | 476 | 1.474 |
| 2014-2015 | 449 | 1.001 | 449 | 1.384 |
| 2015-2016 | 424 | 1.003 | 425 | 1.282 |
| 2016-2017 | 471 | 1.007 | 474 | 1.485 |
| 2017-2018 | 430 | 1.011 | 435 | 1.351 |
| 2018-2019 | 388 | 1.031 | 400 | 1.255 |
| 2019-2020 | 336 | 1.127 | 379 | 1.158 |
| Total | 6,083 |  | 6,147 | 1.356 |

## Notes:

(A) Provided by the CIRA.
(B) Based upon Comparative Claim Development Factors.
(C) $(\mathrm{A}) \times(\mathrm{B})$.
(D) (C) / [Appendix D, Page 3, (D)] $x$
[Appendix D, Page 3, (F)].

This exhibit shows the calculation of estimated ultimate claims for each year based on reported claims as provided by the CIRA. These numbers of claims tend to "develop" or change from period to period as more claims are filed. This development tends to follow quantifiable patterns over time.

California Intergovernmental Risk Authority - Workers' Compensation

Frequency and Severity Method
Closed Claim Count Development

| Accident Year | Claims <br> Closed as of 9/30/2020 <br> (A) | Closed Claim Development Factor (B) | Ultimate Claims <br> (C) | Trended Claim Frequency (D) |
| :---: | :---: | :---: | :---: | :---: |
| 2007-2008 | 519 | 1.019 | 529 | 1.329 |
| 2008-2009 | 479 | 1.024 | 490 | 1.257 |
| 2009-2010 | 582 | 1.030 | 599 | 1.593 |
| 2010-2011 | 521 | 1.037 | 540 | 1.445 |
| 2011-2012 | 469 | 1.045 | 490 | 1.340 |
| 2012-2013 | 460 | 1.055 | 485 | 1.373 |
| 2013-2014 | 446 | 1.069 | 477 | 1.477 |
| 2014-2015 | 423 | 1.092 | 462 | 1.424 |
| 2015-2016 | 394 | 1.129 | 445 | 1.342 |
| 2016-2017 | 424 | 1.192 | 505 | 1.582 |
| 2017-2018 | 354 | 1.270 | 450 | 1.398 |
| 2018-2019 | 302 | 1.396 | 422 | 1.324 |
| 2019-2020 | 252 | 1.738 | 438 | 1.338 |
| Total | 5,625 |  | 6,332 | 1.400 |

## Notes:

(A) Provided by the CIRA.
(B) Based upon Comparative Claim Development Factors.
(C) $(\mathrm{A}) \times(\mathrm{B})$.
(D) (C) / [Appendix D, Page 3, (D)] $x$
[Appendix D, Page 3, (F)].

This exhibit shows the calculation of estimated ultimate claims for each year based on closed claims as provided by the CIRA. These numbers of closed claims tend to "develop" or change from period to period as more claims are closed. This development tends to follow quantifiable patterns over time.

Loss Trend Factors

|  |  |  | Factor to | Factor to | Factor to | Factor to | Factor to | Factor to | Factor to | Factor to | Factor to |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Benefit | 2020-2021 | 2021-2022 | 2022-2023 | 2023-2024 | 2020-2021 | 2021-2022 | 2022-2023 | 2023-2024 | 2020-2021 |  |

## Notes:

(A) Based on WCIRB.
(B) - (E) (A) adjusted for a $0.5 \%$ annual loss rate trend.
(F) - (I) (A) adjusted for a - $2.0 \%$ annual frequency trend.
(J) (A) adjusted for a $2.5 \%$ annual severity trend.

This exhibit shows the calculation of the ways in which we expect claims costs to have changed over the past twenty years due to changes in statutory workers' compensation benefit levels and changes in actual claims costs in excess of changes in payroll. Changes in the ways in which claims are filed as a result of greater awareness of workers' compensation benefits are not generally reflected in the statutory benefit level factors shown above, but may be part of the reason for changes in actual claims costs in excess of payroll changes.

California Intergovernmental Risk Authority - Workers' Compensation

Residual Trend Factors

|  | Initial |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Accident Year | Estimate of Ultimate Limited Losses <br> (A) | Ultimate Reported Claims (B) | BLF <br> (C) | Adjusted Limited Severity (D) | Trended Payroll (\$00) (E) | Ultimate Frequency (F) |
| 1999-2000 |  | 0 | 0.708 |  |  |  |
| 2000-2001 |  | 0 | 0.668 |  |  |  |
| 2001-2002 |  | 0 | 0.668 |  |  |  |
| 2002-2003 |  | 0 | 0.701 |  |  |  |
| 2003-2004 |  | 0 | 0.868 |  |  |  |
| 2004-2005 |  | 0 | 1.125 |  |  |  |
| 2005-2006 |  | 0 | 1.223 |  |  |  |
| 2006-2007 |  | 0 | 1.161 |  |  |  |
| 2007-2008 | 4,828,526 | 527 | 1.084 | 9,934 | 3,060,456 | 1.722 |
| 2008-2009 | 4,419,424 | 492 | 1.016 | 9,125 | 3,061,236 | 1.607 |
| 2009-2010 | 6,519,471 | 599 | 0.934 | 10,168 | 3,011,602 | 1.989 |
| 2010-2011 | 6,442,692 | 537 | 0.884 | 10,611 | 3,053,190 | 1.759 |
| 2011-2012 | 4,599,884 | 476 | 0.876 | 8,467 | 3,049,195 | 1.561 |
| 2012-2013 | 6,630,457 | 478 | 0.899 | 12,474 | 3,005,792 | 1.590 |
| 2013-2014 | 7,411,691 | 476 | 0.916 | 14,269 | 2,803,928 | 1.698 |
| 2014-2015 | 6,480,022 | 449 | 0.912 | 13,168 | 2,873,691 | 1.562 |
| 2015-2016 | 5,792,730 | 425 | 0.952 | 12,972 | 2,997,921 | 1.418 |
| 2016-2017 | 5,656,094 | 474 | 1.008 | 12,026 | 2,943,719 | 1.610 |
| 2017-2018 | 7,244,024 | 435 | 1.007 | 16,777 | 3,032,581 | 1.434 |
| 2018-2019 | 6,805,267 | 400 | 0.992 | 16,879 | 3,062,886 | 1.306 |
| 2019-2020 | 6,519,844 | 409 | 1.003 | 15,987 | 3,207,906 | 1.275 |


| Latest $10 \times 2019-2020$ | 1.060 |  | 0.967 |
| ---: | ---: | ---: | ---: |
| Mverity Trend Factors $5-\mathrm{Yr}$ Wtd Latest $10 \times 2019-2020$ | 1.048 | 0.979 |  |
| Latest $5 \times 2019-2020$ | 1.078 | 0.966 |  |
| Mvg 5-Yr Wtd Latest $5 \times 2019-2020$ | 1.052 | 0.977 |  |
| Prior | 1.025 | 0.980 |  |
| Default | 1.025 | 0.980 |  |
|  |  | 1.025 | 0.980 |

Notes:
(A) Selected average of results from Appendix A and Appendix B .
(B) Appendix D, Page 3, Column (C).
(C) Appendix E, Page 1, Column (A).
(D) $(\mathrm{A}) \times(\mathrm{C}) /(\mathrm{B})$.
(E) Appendix I, Column (C).
(F) (B) $/(\mathrm{E}) \times 10,000$.

Calculation of Discount Factors

| Payment <br> Year | Payment <br> Pattern | Return on <br> Investment <br> (A) | (B) |
| :---: | :---: | :---: | :---: | :---: | :---: | | Discounted |
| :---: |
| Reserves |
| (D) | | Undiscounted |
| :---: |
| Reserves |
| (E) |$\quad$| Discount |
| :---: |
| Factor |
| (F) |

Notes:
(A) This is the year of payment relative to the accident year. For example, year 7 refers to payments made in the seventh year after the inception of the accident year. We assume that payments are made at midyear.
(B) Percent of ultimate loss paid this year. This payment pattern is based on the paid loss development pattern selected in Appendix B, Page 2.
(C) Assumed Investment Income Rates.
(D) Discounted Reserves at the beginning of this year is next year's Discounted Reserves discounted one year plus this year's payments discounted six months. For example, in year $2,73.6 \%=[57.7 \% / 1.025]+[17.5 \% /(1.012)]$.
(E) Summation of future (B) values. This is the percent of ultimate loss unpaid at the beginning of the year.
(F) (D) / (E).
(G) (F) at year 1, with interest accumulated for six months. We assume that the required funding is deposited at the middle of the first year.

This exhibit shows the calculation of the effect of anticipated investment income on future claims costs. Thus, if the discount factor in item ( $F$ ) is 0.87 , on a discounted basis, $\$ 0.87$ must be budgeted for every $\$ 1$ that will actually be paid on claims that will be incurred in the next fiscal year.

California Intergovernmental Risk Authority - Workers' Compensation

Confidence Level Table

| Probability | Projected Losses | Outstanding Losses |
| :---: | :---: | :---: |
|  |  |  |
| $95 \%$ | 1.423 | 1.348 |
| $90 \%$ | 1.309 | 1.254 |
| $85 \%$ | 1.236 | 1.195 |
| $80 \%$ | 1.182 | 1.149 |
| $75 \%$ | 1.137 | 1.113 |
| $70 \%$ | 1.098 | 1.081 |
| $65 \%$ | 1.063 | 1.052 |
| $60 \%$ | 1.030 | 1.026 |
| $55 \%$ | 1.000 | 1.002 |
| $50 \%$ | 0.972 | 0.978 |
| $45 \%$ | 0.944 | 0.956 |
| $40 \%$ | 0.916 | 0.933 |
| $35 \%$ | 0.888 | 0.911 |
| $30 \%$ | 0.860 | 0.888 |
| $25 \%$ | 0.830 | 0.863 |
|  |  |  |
| To read table: | For the above retention, there is a 90\% chance |  |
|  | that final loss settlements will be less than |  |
|  | 1.309 times the average expected amount of losses. |  |

This exhibit shows the loads that must be applied to bring estimated losses at the expected level to the various indicated confidence levels.

California Intergovernmental Risk Authority - Workers' Compensation

Incurred Losses as of 9/30/20

|  |  | Additions to | Subtractions from |  | Incurred | Incurred Over | Incurred Capped at | $\begin{array}{r} \text { Incurred } \\ \$ 100,000 \end{array}$ | Incurred Capped at |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> (A) | Incurred <br> (B) | Losses <br> (C) | Losses <br> (D) | Incurred <br> (E) | Over SIR <br> (F) | \$100,000 <br> (G) | $\$ 100,000$ <br> (H) | to SIR Layer <br> (I) | SIR <br> (J) | Aggregate <br> (K) |
| 2007-2008 | 6,487,847 | 0 | 78,138 | 6,409,709 | 10,453 | 1,638,439 | 4,771,270 | 1,627,986 | 6,399,256 | 6,399,256 |
| 2008-2009 | 6,682,547 | 0 | 45,636 | 6,636,910 | 98,017 | 2,278,505 | 4,358,406 | 2,180,488 | 6,538,894 | 6,538,894 |
| 2009-2010 | 11,981,690 | 0 | 282,777 | 11,698,912 | 1,709,263 | 5,282,110 | 6,416,802 | 3,572,847 | 9,989,650 | 9,989,650 |
| 2010-2011 | 10,258,615 | 0 | 7,841 | 10,250,775 | 669,948 | 3,928,211 | 6,322,563 | 3,258,263 | 9,580,826 | 9,580,826 |
| 2011-2012 | 7,057,095 | 0 | 46,536 | 7,010,559 | 25,356 | 2,509,695 | 4,500,864 | 2,484,339 | 6,985,203 | 6,985,203 |
| 2012-2013 | 9,605,228 | 0 | 64,016 | 9,541,212 | 20,662 | 3,078,779 | 6,462,433 | 3,058,117 | 9,520,550 | 9,520,550 |
| 2013-2014 | 19,013,075 | 0 | 132,594 | 18,880,482 | 8,604,855 | 11,691,645 | 7,188,837 | 3,086,789 | 10,275,626 | 10,275,626 |
| 2014-2015 | 9,410,960 | 0 | 5,281 | 9,405,680 | 244,815 | 3,162,885 | 6,242,795 | 2,918,070 | 9,160,865 | 9,160,865 |
| 2015-2016 | 7,819,407 | 0 | 53,187 | 7,766,220 | 23,016 | 2,248,768 | 5,517,452 | 2,225,752 | 7,743,204 | 7,743,204 |
| 2016-2017 | 7,704,524 | 0 | 84,641 | 7,619,883 | 474,814 | 2,294,804 | 5,325,079 | 1,819,990 | 7,145,069 | 7,145,069 |
| 2017-2018 | 9,912,822 | 0 | 4,691 | 9,908,131 | 496,847 | 3,148,130 | 6,760,000 | 2,651,283 | 9,411,283 | 9,411,283 |
| 2018-2019 | 7,296,503 | 0 | 2,289 | 7,294,214 | 98,668 | 1,493,561 | 5,800,654 | 1,394,893 | 7,195,546 | 7,195,546 |
| 2019-2020 | 4,528,940 | 0 | 5,236 | 4,523,705 | 0 | 850,554 | 3,673,151 | 850,554 | 4,523,705 | 4,523,705 |
| 2020-2021 | 380,944 | 0 | 0 | 380,944 | 0 | 0 | 380,944 | 0 | 380,944 | 380,944 |
| Total | \$118,140,198 | \$0 | \$812,862 | \$117,327,335 | \$12,476,714 | \$43,606,084 | \$73,721,251 | \$31,129,370 | \$104,850,621 | \$104,850,621 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA.
(C)
(D) Subrogation recoveries.
(E) $(B)+(C)-(D)$.
(F) Sum of incurred losses in excess of SIR.
(G) Sum of incurred losses in excess of $\$ 100,000$.
(H) (E) - (G).
(I) $(\mathrm{G})-(\mathrm{F})$.
(J) (E) - (F).
(K) Minimum of (J) and the aggregate stop loss. See Not Included.

California Intergovernmental Risk Authority - Workers' Compensation

Paid Losses as of 9/30/20

| Accident Year (A) | Unlimited Paid (B) | Additions to Losses (C) | Subtractions from Losses (D) | Adjusted Paid (E) | Paid Over SIR (F) | Paid <br> Over \$100,000 <br> (G) | Paid Capped at \$100,000 <br> (H) | Paid \$100,000 to SIR Layer <br> (I) | Paid <br> Capped at SIR <br> (J) | Paid Capped at SIR \& Aggregate (K) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007-2008 | 6,162,831 | 0 | 78,138 | 6,084,694 | 10,453 | 1,390,802 | 4,693,892 | 1,380,348 | 6,074,240 | 6,074,240 |
| 2008-2009 | 5,890,869 | 0 | 45,636 | 5,845,233 | 61,615 | 1,697,161 | 4,148,072 | 1,635,546 | 5,783,618 | 5,783,618 |
| 2009-2010 | 9,549,657 | 0 | 282,777 | 9,266,880 | 437,910 | 3,016,747 | 6,250,133 | 2,578,836 | 8,828,970 | 8,828,970 |
| 2010-2011 | 9,480,073 | 0 | 7,841 | 9,472,232 | 398,958 | 3,344,539 | 6,127,693 | 2,945,581 | 9,073,274 | 9,073,274 |
| 2011-2012 | 6,585,541 | 0 | 46,536 | 6,539,005 | 25,356 | 2,066,438 | 4,472,567 | 2,041,082 | 6,513,649 | 6,513,649 |
| 2012-2013 | 8,834,634 | 0 | 64,016 | 8,770,618 | 0 | 2,481,279 | 6,289,339 | 2,481,279 | 8,770,618 | 8,770,618 |
| 2013-2014 | 13,356,574 | 0 | 132,594 | 13,223,981 | 4,336,246 | 6,526,178 | 6,697,803 | 2,189,932 | 8,887,735 | 8,887,735 |
| 2014-2015 | 7,950,929 | 0 | 5,281 | 7,945,648 | 0 | 2,046,380 | 5,899,269 | 2,046,380 | 7,945,648 | 7,945,648 |
| 2015-2016 | 6,302,600 | 0 | 53,187 | 6,249,412 | 0 | 1,289,820 | 4,959,592 | 1,289,820 | 6,249,412 | 6,249,412 |
| 2016-2017 | 5,827,434 | 0 | 84,641 | 5,742,792 | 161,968 | 1,192,408 | 4,550,385 | 1,030,439 | 5,580,824 | 5,580,824 |
| 2017-2018 | 6,386,678 | 0 | 4,691 | 6,381,986 | 16,253 | 1,213,787 | 5,168,199 | 1,197,534 | 6,365,733 | 6,365,733 |
| 2018-2019 | 4,044,256 | 0 | 2,289 | 4,041,968 | 0 | 245,160 | 3,796,807 | 245,160 | 4,041,968 | 4,041,968 |
| 2019-2020 | 2,140,396 | 0 | 5,236 | 2,135,161 | 0 | 85,903 | 2,049,257 | 85,903 | 2,135,161 | 2,135,161 |
| 2020-2021 | 99,776 | 0 | 0 | 99,776 | 0 | 0 | 99,776 | 0 | 99,776 | 99,776 |
| Total | \$92,612,248 | \$0 | \$812,862 | \$91,799,386 | \$5,448,761 | \$26,596,601 | \$65,202,784 | \$21,147,841 | \$86,350,625 | \$86,350,625 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA.
(C)
(D) Subrogation recoveries.
(E) $(\mathrm{B})+(\mathrm{C})-(\mathrm{D})$.
(F) Sum of paid losses in excess of SIR.
(G) Sum of paid losses in excess of \$100,000.
(H) (E) - (G).
(I) $(\mathrm{G})-(\mathrm{F})$.
(J) (E) - (F).
(K) Minimum of (J) and the aggregate stop loss. See Not Included.

California Intergovernmental Risk Authority - Workers' Compensation

Case Reserves as of 9/30/20

|  | Unlimited | Additions to | Subtractions from |  | Reserves | Reserves Over | Reserves Capped at | Reserves $\$ 100,000$ | Reserves Capped at |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year <br> (A) | Reserves <br> (B) | Losses <br> (C) | Losses <br> (D) | Reserves <br> (E) | Over SIR <br> (F) | \$100,000 <br> (G) | $\begin{gathered} \$ 100,000 \\ (\mathrm{H}) \end{gathered}$ | to SIR Layer <br> (I) | SIR <br> (J) | Aggregate <br> (K) |
| 2007-2008 | 325,016 | 0 | 0 | 325,016 | 0 | 247,637 | 77,379 | 247,637 | 325,016 | 325,016 |
| 2008-2009 | 791,677 | 0 | 0 | 791,677 | 36,402 | 581,344 | 210,333 | 544,942 | 755,275 | 755,275 |
| 2009-2010 | 2,432,032 | 0 | 0 | 2,432,032 | 1,271,352 | 2,265,363 | 166,669 | 994,011 | 1,160,680 | 1,160,680 |
| 2010-2011 | 778,543 | 0 | 0 | 778,543 | 270,990 | 583,672 | 194,871 | 312,682 | 507,553 | 507,553 |
| 2011-2012 | 471,554 | 0 | 0 | 471,554 | 0 | 443,257 | 28,297 | 443,257 | 471,554 | 471,554 |
| 2012-2013 | 770,594 | 0 | 0 | 770,594 | 20,662 | 597,500 | 173,094 | 576,838 | 749,932 | 749,932 |
| 2013-2014 | 5,656,501 | 0 | 0 | 5,656,501 | 4,268,609 | 5,165,467 | 491,034 | 896,858 | 1,387,891 | 1,387,891 |
| 2014-2015 | 1,460,031 | 0 | 0 | 1,460,031 | 244,815 | 1,116,505 | 343,526 | 871,691 | 1,215,217 | 1,215,217 |
| 2015-2016 | 1,516,807 | 0 | 0 | 1,516,807 | 23,016 | 958,947 | 557,860 | 935,931 | 1,493,791 | 1,493,791 |
| 2016-2017 | 1,877,091 | 0 | 0 | 1,877,091 | 312,846 | 1,102,396 | 774,695 | 789,550 | 1,564,245 | 1,564,245 |
| 2017-2018 | 3,526,144 | 0 | 0 | 3,526,144 | 480,594 | 1,934,343 | 1,591,801 | 1,453,749 | 3,045,550 | 3,045,550 |
| 2018-2019 | 3,252,247 | 0 | 0 | 3,252,247 | 98,668 | 1,248,401 | 2,003,846 | 1,149,732 | 3,153,579 | 3,153,579 |
| 2019-2020 | 2,388,544 | 0 | 0 | 2,388,544 | 0 | 764,650 | 1,623,894 | 764,650 | 2,388,544 | 2,388,544 |
| 2020-2021 | 281,168 | 0 | 0 | 281,168 | 0 | 0 | 281,168 | 0 | 281,168 | 281,168 |
| Total | \$25,527,950 | \$0 | \$0 | \$25,527,950 | \$7,027,954 | \$17,009,483 | \$8,518,466 | \$9,981,530 | \$18,499,996 | \$18,499,996 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Appendix H, Page 1, Column (B) - Appendix H, Page 2, Column (B).
(C) Appendix H, Page 1, Column (C) - Appendix H, Page 2, Column (C).
(D) Appendix H, Page 1, Column (D) - Appendix H, Page 2, Column (D).
(E) $(\mathrm{B})+(\mathrm{C})-(\mathrm{D})$.
(F) Sum of case reserves in excess of SIR.
(G) Sum of case reserves in excess of \$100,000.
(H) (E) - (G).
(I) (G) - (F).
(J) (E) - (F).
(K) Minimum of (J) and the aggregate stop loss. See Not Included.

Claim Counts as of 9/30/20

| Accident Year <br> (A) | Reported Claims (B) | Additions to Reported Claims (C) | Subtractions from Reported Claims (D) | Adjusted Reported Claims (E) | Closed Claims (F) | Additions to Closed Claims (G) | Subtractions from Closed Claims (H) | Adjusted Closed Claims (I) | Open <br> Claims <br> (J) | Adjusted Open Claims (K) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2007-2008 | 556 | 0 | 29 | 527 | 548 | 0 | 29 | 519 | 8 | 8 |
| 2008-2009 | 515 | 0 | 23 | 492 | 502 | 0 | 23 | 479 | 13 | 13 |
| 2009-2010 | 620 | 0 | 21 | 599 | 603 | 0 | 21 | 582 | 17 | 17 |
| 2010-2011 | 567 | 0 | 30 | 537 | 551 | 0 | 30 | 521 | 16 | 16 |
| 2011-2012 | 513 | 0 | 37 | 476 | 506 | 0 | 37 | 469 | 7 | 7 |
| 2012-2013 | 503 | 0 | 25 | 478 | 485 | 0 | 25 | 460 | 18 | 18 |
| 2013-2014 | 504 | 0 | 28 | 476 | 474 | 0 | 28 | 446 | 30 | 30 |
| 2014-2015 | 470 | 0 | 21 | 449 | 444 | 0 | 21 | 423 | 26 | 26 |
| 2015-2016 | 448 | 0 | 24 | 424 | 418 | 0 | 24 | 394 | 30 | 30 |
| 2016-2017 | 511 | 0 | 40 | 471 | 464 | 0 | 40 | 424 | 47 | 47 |
| 2017-2018 | 462 | 0 | 32 | 430 | 386 | 0 | 32 | 354 | 76 | 76 |
| 2018-2019 | 443 | 0 | 55 | 388 | 357 | 0 | 55 | 302 | 86 | 86 |
| 2019-2020 | 391 | 0 | 55 | 336 | 307 | 0 | 55 | 252 | 84 | 84 |
| 2020-2021 | 90 | 0 | 8 | 82 | 35 | 0 | 8 | 27 | 55 | 55 |
| Total | 6,593 | 0 | 428 | 6,165 | 6,080 | 0 | 428 | 5,652 | 513 | 513 |

Notes:
(A) Years are $7 / 1$ to $6 / 30$.
(B) Provided by the CIRA.
(C)
(D) GIVE DESCRIPTION OF ADJUSTMENT.
(E) $(\mathrm{B})+(\mathrm{C})-(\mathrm{D})$.
(F) Provided by the CIRA.
(G)
(H) GIVE DESCRIPTION OF ADJUSTMENT.
(I) $(\mathrm{F})+(\mathrm{G})-(\mathrm{H})$.
(J) (B) $-(F)$.
(K) (E) - (I).

| Accident | Total <br> Payroll <br> (\$00) | Inflation <br> Trend <br> Factor | Trended <br> Payroll |
| :---: | :---: | :---: | :---: |
| (A) | (B) | $(\$ 00)$ |  |
| (C) |  |  |  |

Notes:
(A) Provided by the CIRA.
(B) Based on WCIRB.
(C) $\quad(\mathrm{A}) \times(\mathrm{B})$.

# Bickmore Actuarial 

# Actuarial Review of the Self-Insured <br> Employment Practices Liability Program 

Premium Allocation Options
Forecast for Program Year 2021-22

Presented to
California Intergovernmental Risk Authority

January 28, 2021 - DRAFT

Thursday, January 28, 2021
Mr. Kin Ong
General Manager
Public Agency Risk Sharing Authority of California
1525 Response Road, Suite 1
Sacramento, CA 95815
Ms. Amy Northam
General Manager
Redwood Empire Municipal Insurance Fund
414 West Napa Street
Sonoma, California 95476

## RE: CIRA EPL Premium Allocation Options

Dear Kin and Amy:
As requested, we have completed our estimates of Employment Practices Liability (EPL) claim costs, experience modification calculations, and various premium allocation options for the newly formed California Intergovernmental Risk Authority (CIRA).
In this analysis, we have considered the following six options for allocating EPL costs between members:

- Option 1: 100\% Pooling Option (Current Method)
- Option 2 and 3: Experience Modification Options
o Option 2: 5 years experience, \$50K loss cap, and 33\%/5\% max/min credibility o Option 3: 5 years experience, $\$ 100 \mathrm{~K}$ loss cap, and 33\%/5\% max/min credibility
- Option 4: Claim Frequency Adjustment Option - Number of claims in the 5-year experience period are normalized using the payrolls. Based upon the $100 \%$ Pooling Option with the following premium adjustments:
5 Year Payroll less than \$13,300,000:
o 0 claims per $\$ 100 \mathrm{~K}$ of payrolls: -5.5\% discount
o 1 claim: $+4.5 \%$ surcharge
o 2 or more claims: $+9.4 \%$ surcharge
5 Year Payroll greater than \$13,300,000:
o 0 claims per \$100K of payrolls: -5.5\% discount
o 0.10 to 0.75 claims per $\$ 100 \mathrm{~K}$ of payrolls: $+4.5 \%$ surcharge
o Over 0.75 claims per $\$ 100 \mathrm{~K}$ of payrolls: $+9.4 \%$ surcharge

0
All options make the following assumptions:

- Estimated 2021-22 EPL member deductibles provided by CIRA
- Estimated 2021-22 member payrolls provided by CIRA
o Sierra Madre payrolls estimated using 2019-20 actual payrolls increased by 3\% per year.
- Rates from the analysis of EPL losses at $9 / 30 / 20$ and recent actuarial studies and analysis
- Discount rate assumed to be $1.5 \%$
- Confidence levels of $80 \%$ and $85 \%$
- Pool retention of $\$ 250,000$

The estimates contained in this report take these considerations into account with regard to the appropriate premium for each member.

## Background

California Intergovernmental Risk Authority (CIRA) is a municipal risk pool currently being formed as the combination of two existing risk pools, the Public Agency Risk Sharing Authority of California (PARSAC) and the Redwood Empire Municipal Insurance Fund (REMIF). Both underlying pools are members of excess risk pools to provide coverage above their self-insured retention (SIR).

PARSAC currently has a SIR of $\$ 25,000$ for employment practices liability (EPL). REMIF currently has a SIR of $\$ 750,000$ employment practices liability (EPL). The combined entity CIRA is considering both $\$ 250,000$ and $\$ 350,000$ as potential SIR options for the 2021-22 policy year.

## Approach

Base rates are taken from the analysis of most recent EPL losses at 9/30/20 and limit factors taken from the most recent CIRA pool retention report dated August 21, 2020. As such, this should be considered an addendum, and the conditions and limitations contained in those reports apply to this report as well.

Industry information was also utilized to assess rates for various limits not contained in the prior reports.

Premiums assume a $\$ 250,000$ pool limit; however, impacts relative to the base $100 \%$ Pooling Option would be very similar.

## DRAFT

## Recommendation

Our recommendation for the CIRA EPL premium allocation method is the Claim Frequency Adjustment Option. This option minimizes large swings in premium from year to year and provides incentive for loss control.

We appreciate the opportunity to be of service to PARSAC and REMIF in preparing this report for CIRA. Please feel free to call Mike Harrington at (916) 244-1162, Becky Richard at (916) 244-1183, or David Kim at (916) 244-1166 with any questions you may have concerning this report.

Sincerely,
Bickmore Actuarial

## DRAFT

Mike Harrington, FCAS, MAAA
President and Principal, Bickmore Actuarial

## DRAFT

Becky Richard, ACAS, MAAA
Senior Actuarial Manager, Bickmore Actuarial

## DRAFT

David Kim, MA
Senior Actuarial Analyst, Bickmore Actuarial

California Intergovernmental Risk Authority (CIRA) - Employee Practices Liability


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Citrus Heights Cloverdale $\stackrel{\square}{\stackrel{0}{0}}$ 둔
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& \text { Parameters } \\
& \text { SIR } \\
& \text { X-Mod } \\
& \text { Experience Period } \\
& \text { Loss Limit } \\
& \text { Maximum Credibility } \\
& \text { Frequency Adjustment }
\end{aligned}
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California Intergovernmental Risk Authority (CIRA) - Employee Practices Liability
2021-22 Estimated Premium Options @ 80\% Confidence Level

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\begin{aligned}
& \text { Rancho Cucamonga } \\
& \text { Rancho Cucamonga FD } \\
& \text { Rancho Santa Margarita }
\end{aligned}
$$ Rohnert Park San Juan Bautista

Sebastopol Sierra Madre
 St. Helena Trinidad Truckee Ukiah
 Wildomar Windsor Yountville

Yucaipa | $\bar{\square}$ |
| :---: |
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Exhibit 2

California Intergovernmental Risk Authority (CIRA) - Employee Practices Liability


Member
Amador City
Arcata
Avalon
Belvedere
Blue Lake California City Calimesa

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Exhibit 2
 2021-22 Estimated Premium Options @ 80\% Confidence Level


Frequency Adjustment
$\frac{\text { Member }}{\text { Rancho Cucamonga }}$ Rancho Cucamonga FD Rancho Santa Margarita
Rohnert Park San Juan Bautista

Sierra Madre South Lake Tahoe St. Helena Trinidad Twentynine Palms Ukiah Wheatland Wildomar Willits Yountville Yucaipa
Yucca Valley $\bar{T} 0$
$\stackrel{0}{0}$




$$
\begin{aligned}
& \text { Parameters } \\
& \text { SIR } \\
& \text { X-Mod } \\
& \text { Experience Period } \\
& \text { Loss Limit } \\
& \text { Maximum Credibility } \\
& \text { Frequency Adjustment }
\end{aligned}
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 Rancho Cucamonga FD Rancho Santa Margarita
Rohnert Park San Juan Bautista Sebastopol Sonoma St. Helena Tehama Trinidad
Truckee Twentynine Ukiah Wheatland Wildomar Willits Yountville Yucaipa
Yucca Valley

California Intergovernmental Risk Authority (CIRA) - Employee Practices Liability
2021-22 Estimated Premium Options @ 85\% Confidence Level
 Blue Lake
California City
 Calistoga
Citrus Heights Cloverdale


 Fortuna
Grass Valley
 Highland Nevada City nia $\stackrel{\text { © }}{\stackrel{0}{\omega}}$

California Intergovernmental Risk Authority (CIRA) - Employee Practices Liability
2021-22 Estimated Premium Options @ 85\% Confidence Level


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 Rancho Cucamonga
Rancho Cucamonga FD
Rancho Santa Margarita Rohnert Park San Juan Bautista
Sebastopol

 Tehama Truckee Ukiah Wheatland
 Willits
Windsor Yountville Yucaipa
Yucca Valley Total

Exhibit 2
California Intergovernmental Risk Authority (CIRA) - Employee Practices Liability

Exhibit 2
California Intergovernmental Risk Authority (CIRA) - Employee Practices Liability
2021-22 Estimated Premium Options @ 85\% Confidence Level 2021-22 Estimated Premium Options @ 85\% Confidence Leve
Percentage Change from Option $1-100 \%$ Pooling Option Change from Option 1-100\% Pooling Option
$\underline{\text { Option } 1} \quad \underline{\text { Option 2 }} \quad \underline{\text { Option 3 }}$
 웅
 Parameters
SIR
X-Mod
Experience Period
Loss Limit
Maximum Credibility
Frequency Adjustment
 Rancho Cucamonga FD Rancho Santa Margarita Rohnert Park
San Juan Bautis Sebastopol
Sierra Madre Sierra Madre
Sonoma
 St. Helena Trinidad wentynine Palms Ukiah Wheatland Wildomar Willits Yountville Yucaipa
Yucca Valley $\stackrel{\Gamma}{\square}$
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2021-22 X-Mods

Rancho Cucamonga
Rancho Cucamonga FD
Rancho Santa Margarita
Rohnert Park
San Juan Bautista
Sebastopol
Sierra Madre
Sonoma
South Lake Tahoe
St. Helena
Tehama
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# CALIFORNIA INTERGOVERNMENTAL RISK AUTHORITY 

MASTER PROGRAM DOCUMENT FOR<br>THE<br>POOLED GENERAL LIABILITY PROGRAM

DRAFT March 1, 2021

# CALIFORNIA INTERGOVERNMENTAL RISK AUTHORITY (CIRA) <br> MASTER PROGRAM DOCUMENT (MPD) <br> FOR THE <br> POOLED GENERAL LIABILITY PROGRAM (PGLP) 

## ARTICLE I: DEFINITIONS

The following definitions apply to this MPD:

1. General Manager shall mean the person responsible for the daily administration, management, and operation of the Authority's programs as defined in the Bylaws.
2. Authority shall mean the California Intergovernmental Risk Authority (CIRA).
3. Board shall mean the Board of Directors for the California Intergovernmental Risk Authority (CIRA) Joint Powers Authority.
4. Deposit Contribution shall mean that amount to be paid by each Participant for each program year as determined by the Board in accordance with Article III, Section B of this MPD.
5. Joint Powers Agreement shall mean the agreement made by and among the public entities listed in Appendix A (Member Entities) of the Joint Powers Agreement, hereafter referred to as Agreement.
6. Limit of Coverage shall mean the amount of coverage stated in the Declarations or certificate of coverage, or sublimits as stated therein for each Participant or covered party per occurrence, subject to any lower sublimit stated in the MOC.
7. Loss Experience shall mean only such amounts as incurred (paid and reserves) as are actually paid by the Participant or the Authority, including payments to investigators and defense attorneys, as outlined in the Program Memorandum of Coverage (MOC).
8. Member Entity shall mean a signatory to the Agreement establishing the California Intergovernmental Risk Authority (CIRA) Joint Powers Authority.
9. Memorandum of Coverage shall mean a document issued by the Authority specifying the coverages and limits provided to the Members participating in the Program.
10. Participant shall mean a Member Entity who has elected to participate in the Program
11. Program shall mean the self-funded General Liability Program of the Authority.
12. Program Year shall mean that period of time commencing at 12:01 a.m. on July 1 and ending at 12:00 am on the following July 1.
13. Retained Limits shall mean the amount stated on the applicable Declarations or certificate of coverage, which will be paid by the Participant or covered party before the Authority is obligated to make any payment from the pooled funds.
14. Self-Insured Retention (SIR) shall mean the Authority's limit of coverage above Participant's Retained Limits and up to the attachment point for excess coverage.
15. Third Party Administrator (TPA) shall mean the Program claims administrator for the Authority

ARTICLE II: GENERAL
A. AUTHORITY

1. The Program Master Program Document (MPD) is one of the Authority's governing documents. However, any conflict between the Program MPD, the Authority's Joint Powers Agreement, the Bylaws, or the Memorandum of Coverage (MOC) shall be determined in favor of the Agreement, the Bylaws, or the MOC, in that order.
2. The Program MPD is intended to be the primary source of information, contain the rules and regulations, and serve as the operational guide for the conduct of the Program.
3. The Program has been organized under authority granted by, and shall be conducted in accordance with, the laws of the State of California; regulations prescribed by the Department of Industrial Relations (DIR) and the State of California Audit Unit; and the accreditation standards set forth by the California Association of Joint Powers Authorities (CAJPA).
4. The Program has selected participation in ERMA (Employment Risk Management Authority) for employment practices claims. This MPD is applicable to all liability claims, except for employment practices claims covered by ERMA. Any and all employment practices claims under the authority of ERMA shall be handled under the exclusive control of ERMA. This includes, but is not limited to, claims handling, attorney selection, and settlement. All contributions to ERMA will be included in the member contributions, and both the Authority and the Member shall follow ERMA's governance.

## B. PURPOSE

The Authority, as a part of its overall objectives, has designed the Program to provide for the needs of the Program Participants in the area of general liability.

## C. PARTICIPATION

All Member Entities may become Participants in the Program and are encouraged to do so. However, the terms and conditions which may be imposed on Member Entities which desire to join the Program may be different, depending upon payroll, number of employees, the size of the Member Entity, its loss record, and other pertinent information.

## D. GOVERNANCE

Each Participant's appointed Director and alternate Director shall be the representative for the Program. The Participant will be entitled to one vote on all issues or decisions that involve the Program.

Either the appointed Director or appointed alternate Director must attend at least one Board of Directors meeting for each Program Year, either in person or virtually. Violation of this requirement may result in a $\$ 1,000$ surcharge. Payments for the surcharge shall be included and paid in the next billing cycle.

## E. GOALS AND OBJECTIVES

1. The Authority offers Member Entities this Program designed to provide coverage for the liabilities outlined in the Memorandum of Coverage.
2. The Program shall provide general liability coverage for the Participants utilizing an optimum mix of risk retention and risk transfer. The Program may provide various levels of retentions for the Participants, provide a risk sharing pool for losses above individual retention levels up to the Authority's Self-Insured Retention (SIR), and obtain excess coverage for the amount of the loss which exceeds the Authority's SIR. Additionally, the Program shall provide for the sharing of operating costs and payment of the excess coverage by charging all Participants their share of such costs.
3. Although the Program is provided to the Participants under those terms and conditions which prevail at the time of the Participant's joining the Program, the Board shall have the right to alter, from time to time, the terms and conditions of the excess coverage and the pooled underlying coverage in response to the needs and abilities of the Program and the Participants, as well as in response to availability of coverage from outside sources.
4. The Authority offers participation in a risk sharing pool, covering losses of Participants in accordance with the MOC adopted by the Member Entities. The assets of the pooled Program shall be maintained at all times as the assets of the

Participants collectively. The assets may be disbursed only pursuant to the provisions of this MPD, and no Participant shall have an individual right to exercise control over said assets.
5. The Program will provide coverage under the terms and conditions set forth in the MOC. In addition to the coverage provided by the MOC, the Authority may purchase excess insurance or reinsurance. The amount of coverage to be pooled and/or purchased is at the discretion of the Board.

## ARTICLE III: PROGRAM ELEMENTS

## A. FUNDING

1. Funding each year shall be at a minimum of the $80 \%$ confidence level at the discretion of the Board of Directors.
2. The Target Equity goal is set at five times the Program's SIR.
3. A Rate Stabilization Fund in an amount not to exceed $\$ 2,000,000$ may be established to off-set pool and excess rate increases as determined by the Board of Directors. The Fund may be replenished at the Board of Director's discretion when the fund falls below $50 \%$ capacity.
4. Funding in excess of the $90 \%$ confidence level, excluding the target equity goal, may be available for distribution at the discretion of the Board of Directors.
5. If the overall confidence level falls below $70 \%$ according to actuarial projections, the Board of Directors may declare an assessment to be shared by all Program Participants.
6. Upon completing seven years, a program year shall be available for Retrospective Premium Adjustment (RPA)
7. Distributions under the RPA formula will be made in the following percentages:
$50 \%$ of equity in year 6
$60 \%$ of equity in year 7
$70 \%$ of equity in year 8
$90 \%$ of equity in year 9
8. Program years may be considered for closure 10 years after the year-end, and it has been at least on year since closure of the last claim in the proposed year(s). Once declared closed, $100 \%$ of remaining equity may be distributed to members through the RPA formula.
9. If a claim is reported or reopened after a year, and the year has been closed and equity returned, surplus in positive years may be used to offset the deficit in negative years.

Any surplus in a positive year must exceed a funding level equal to a $90 \%$ confidence level to be used to offset a deficit. If there is no offset available, members may be assessed at the discretion of the board.
10. The following four benchmarks will be reviewed before an RPA is issued:

- Net Contribution to Equity

Calculation: (Contribution - Excess Insurance) / Equity
Measures the impact of pricing inaccuracies on equity (a low ratio is desirable). A low ratio indicates that more equity is available to cover under-charged years. The target is less than $200 \%$

- Claim Reserves and IBNR to Equity

Calculation: (Claim Reserves $+I B N R+$ ULAE) / Equity
Measures the impact of reserves inaccuracies on equity (a low ratio is desirable). A low ratio indicates more equity available to cover years with large losses. The target is less than $300 \%$

- Prior Year Loss Development

Calculation: (Year 1 Loss Reserves / Year 2 Loss Reserves) / (Yr 2 / Yr3) - 1
Measures the change in loss reserves from one year to the prior year. A lower ratio indicates not much change in reserves between years. Target of less than $20 \%$ is desirable.

- Change in Equity

Calculation: (Year 2 Equity / Year 1 Equity) - 1

Measures the change in equity. Any increase is desirable. The target is less than $10 \%$.

## B. DEPOSIT CONTRIBUTIONS

1. Annually, each Participant shall pay a deposit contribution to the Authority for each program year. Such deposit contribution shall consist of the amount needed to cover excess insurance or reinsurance premiums (if any), administrative expenses and actuarially-determined losses, plus a margin for added confidence as determined by the Board.
2. The following criteria is used to calculate the deposit contribution for each Participant:

## Participant's payroll

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Participant's loss experience
Participant's self-insured retention
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3. The deposit contribution is calculated by taking the Participant's estimated payroll and multiplying it by the actuarially determined rate per $\$ 100$ of payroll and adjusted for loss experience and self-insured retention. Administrative and claims expenses are also included in the calculations. Excess or reinsurance is allocated on the Participant's payroll. The estimated payroll is annualized for the remainder of the year with an inflation factor of three percent, unless the Participant provides the Authority with a different estimated payroll projection for its Entity.
4. Each year the Authority shall bill Participants for the general liability deposit contribution for the next program year to be paid on an annual. The invoices shall be billed to Participants at least 30 days prior to the inception of a new program year, when practicable, and due within 45 days of the billing date.

A $2 \%$ fee of the balance due shall be assessed on late premium payments, every 30 days; this assessment will apply 60 days after the billing date.

Former Participants in the Program shall be required to pay all applicable billings for the program years in which they participated in accordance with the Bylaws, and shall continue to pay for administrative costs as outlined in the Bylaws.

## C. SELF INSURED RETENTION

1. Participants may select an SIR of $\$ 5,000, \$ 10,000, \$ 25,000, \$ 50,000, \$ 100,000$, $\$ 150,000, \$ 250,000, \$ 350,000$, and $\$ 500,000$ and must notify the Program of their SIR selection by April 1 of the preceding Program Year.
2. A Participant's SIR evaluation shall be completed every three years in conjunction with the annual actuarial study. As a result, Participants may be subject to an SIR adjustment based on the following:
a. Number of losses above its SIR, or a disproportionate number of losses within its SIR level compared to the pool average; and or
b. Payroll that is disproportionate in size to the payroll of the other Participants within the SIR level.
3. A statistical model developed by the Program's actuary shall be the standard by which the Board determines which Participants are candidates for SIR adjustments. Participants identified as candidates for adjustment will be notified of such determinations. Should the Participant deem the adjustment is not warranted, they may request exception to the adjustment by submitting a request for exception to the Board of Directors at the next regular meeting in order to provide new or updated information for consideration prior to ratification of the SIR adjustment. Final
decisions will be in the sole discretion of the Board of Directors.
4. Approved SIR adjustments shall, at minimum, increase the Participant's SIR to the next available SIR level and will become effective for the next program year. The Participant shall remain at the adjusted SIR level for a minimum of three program years, unless otherwise approved by the Board of Directors, at which time the SIR may be re-evaluated based on the statistical model.

For those members with a SIR below $\$ 100,000$, the Program shall pay all claims expenses within the Participant's SIR, which shall be reconciled and invoiced to the Participant quarterly. The Participant shall have 30 days from the date of invoice to submit its SIR payment.

For those members with a SIR above $\$ 100,000$, the Program may pay all claims expenses within the Participant's SIR, which shall be reconciled and invoiced to the Participant quarterly. The Member has the option of paying for claims expenses directly. The Participant shall have 30 days from the date of invoice to submit its SIR payment.

A $2 \%$ fee of the balance due shall be assessed on late premium payments, every 30 days; this assessment will apply 60 days after the billing date.

## C. EXPERIENCE MODIFICATION

1. Each Participant shall be evaluated each year for an experience modification adjustment that shall be applied to the deposit contribution.
2. The calculation of the adjustment shall include the actual loss experience of the individual Participant as it relates to the average loss experience of the group as a whole. The experience modification formula shall:
a. Not consider loss years that are more than five years old.
b. Limit losses to $\$ 250,000$ per claim.
c. Apply a credibility factor based on the Participant's weight, between $10 \%$ 75\%
d. Cap the experience modification factor at a minimum of 0.50 and maximum of 2.00
e. Not increase or decrease more than $25 \%$ from the prior year for any Participant.

## D. EXCESS COVERAGE

1. The Board shall ensure that, each program year, Participants are provided with excess general liability coverage for the Participants. It is the intent and purpose of the Authority to continue to provide such coverage to the Participants, provided that such coverage can be obtained, and the coverage is not unreasonably priced. This coverage may be obtained from an insurance company, by participating in another
pool established under the Government Code as a joint powers authority, or offered through another Program pooling procedure. If the coverage is purchased from an insurance company, such insurance company shall have an A.M. Best Rating Classification of A- or better and an A.M. Best Financial Rating of VII or better or their equivalents.
2. Premiums for such coverages shall be paid by the Program from the proceeds received as deposit contributions from the Participants.
3. The Board may, from time to time, alter excess coverage based on insurance market conditions, available alternatives, costs, and other factors. The Board shall place excess coverage with the two competing objectives of security and minimizing costs to the Program as a whole.

## ARTICLE IV: ADMINISTRATION

A. BOARD

1. The Board shall have the responsibility and authority to carry out and perform all functions, and make all decisions, affecting the Program, consistent with the powers of the Authority and not in conflict with the Agreement, the Bylaws, or the MOC.

## B. GENERAL MANAGER

The General Manager shall be responsible for:

1. General oversight of the Program, which includes:
a. Monitoring the status of the Program and its operations, the development of losses, the program's administrative and operational costs, service companies' performance, and brokers' performance;
b. Developing, for Board approval, performance standards for Third Party Administrator (TPA).
c. Work with the Third Party Administrators, including but not limited to the following:
i. Periodically review third party Third Party Administrators' claims files. The review should include all open claims, whether litigated or not, all claims reported twelve months prior, and those claims for which a Participant has requested a specific review;
ii. Provide guidance to the Third Party Administrator on the management of problem or complex claims;
iii. Advise, where needed, on the selection of legal representation in anticipation of litigation;
iv. Monitor and evaluate the effectiveness of the defense firms and the management of the litigation;
v. Evaluate, where needed, recommendations for settlement of claims;
vi. Mediate differences, if any, between the Third Party Ad ministrator and a Participant; and
vii. Review the performance of the Third Party Administrators, personnel assigned to the Authority's account with special emphasis in the handling of "open claims."
d. Recommend to the Board the setting of reserves for those cases that are likely to penetrate to pooled funds;
e. Upon the reporting of each claim that has an expectation of exceeding the minimum incurred loss threshold set by the Board, review said claim for the Authority and report said claims to the Board at the next scheduled meeting;
f. Review the progress of all reported claims for the Authority and, if directed by the Board, propose reserve changes, and/or take control and assume settlement authority for the claim;

## ARTICLE V: CLAIMS ADMINISTRATION

## A. CLAIMS PROCEDURES MANUAL

1. A General Liability Claims Procedures Manual (Manual) including reporting procedures, forms, and other vital information is included in Appendix A and will be updated from time to time as needed.
2. All Participants shall be held accountable for understanding and abiding by the procedures stated in the Manual, as well as any changes thereto.

## B. CLAIM SETTLEMENT AUTHORITY

1. Authority for the settlement of General Liability claims shall be in the following increments:

| Authorizing Entity | Authority |
| :--- | :--- |
| Third Party Administrator | $\$ 0$ |
| Deputy General Manager | $\$ 1-\$ 50,000$ |
| General Manager | $\$ 1-\$ 100,000$ |
| Executive Committee | $\$ 100,000-500,000$ |
| Board of Directors | $\$ 500,000+$ |

2. The Third Party Administrator will ensure the Participant is kept informed regarding these claims and will take into consideration the Participant's desires in any settlement process. Authorization on all settlement or stipulations shall be obtained.
3. Should the settlement value enter into the excess layer of funding, authority from the excess coverage provider would be required.
4. The Third Party Administrator shall consult with and obtain authorization prior to settlement of any claim. All requests for settlement authority shall include a written claim summary, factual background, litigation summary, and any comments and recommendations.
C. DISPUTES BETWEEN PARTICIPANTS AND GENERAL MANAGER, OR Board

Any matter in dispute between a Participant and the Program shall be heard by the Executive Committee whose decision may be appealed to the Board within thirty (30) days of the Committee's decision. The decision of the Executive Committee or, if appealed, the decision of the Board shall be final.

## ARTICLE VI: DEFENSE PANEL

## A. CRITERIA FOR DEFENSE PANEL

1. The defense panel shall include all attorneys listed in the attached Appendix B, which may be amended at the discretion of the General Manager. Appendix B does not include employment practices attorneys, which are selected by ERMA and criteria for the ERMA defense panel comes from ERMA. This MPD incorporates by reference the ERMA defense panel.
2. Attorneys must meet and agree to the following provisions before consideration of inclusion on the panel:
a. The firm must have demonstrated success representing public entities and specific expertise in the public entity defense, specifically to municipalities.
b. Firms must have no less than 5 years litigation practice which includes substantial and significant experience in public entity defense to be eligible for case assignment.
c. The firm shall provide a resume setting forth the experience of the individual attorneys that would be assigned to cases and their areas of expertise.
d. The firm must agree to the maximum hourly rates outlined in the fee schedule outlined below, in section B, unless specialized legal representation is necessary, which requires prior approval. The maximum hourly rate will be reviewed on a bi-annual basis.
e. The firm must agree to abide by the policies and procedures established by CIRA for handling of litigation.
f. The firm must evidence general liability, automobile liability, workers' compensation, and professional liability insurance. The policy limits must not be less than $\$ 1,000,000$ per occurrence. CIRA, its officials, officers, employees, and agents must be named additional insured for general liability and auto liability and follow all insurance requirements of the Authority.
3. The General Manager and Officers may appoint a particular attorney or law firm other than panel counsel when specialized, unforeseen defense is required. The law firm or attorney shall comply with conditions a-f above.
4. CIRA will assign defense counsel in collaboration with the Participant.

Participants may assign cases to firms listed on the Panel. Nothing in this MPD shall be construed to limit the right of the Participant to retain its own defense counsel to represent the Participant in any litigation. Except where prior approval has been given, the Participant is responsible for amounts in excess of the maximum hourly rates, which shall not reduce the Participant's self-insured retention obligation.

## B. MAXIMUM FEE SCHEDULE

| Legal Staff | Maximum Rate |
| :--- | :--- |
| Partners | $\$ 225$ |
| Associates | $\$ 185$ |
| Paralegals | $\$ 95$ |

The maximum fee schedule may be amended at the discretion of the General Manager. This MPD incorporates by reference the ERMA defense panel and the ERMA maximum fees for ERMA's defense panel.

## ARTICLE VII: PARTICIPATION

## A. ELIGIBILITY AND APPLICATION

1. ELIGIBILITY
a. New applicants must commit to at least five full program years of participation in this Program.
b. Any Member Entity may apply to participate in the Program by providing an adopted resolution of its governing body and such other information/materials as may be required. The applicant's resolution shall commit the applicant to five full years of participation in the Program, if accepted, and consent to be governed for general liability matters in accordance with the MPD, the MOC and other documents and policies adopted by the Board. The resolution may also state the retained limit desired by the applicant.
c. The application for participation shall be submitted at least thirty (30) days prior to the date of the last Board meeting of the program year to ensure that the State Certificate of Consent to Self-Insure is received prior to the inception date, and that the Board has adequate time to review and evaluate the acceptability of the applicant. It is recommended that an applicantenter the Program only at the commencement of a new program year. If an applicant chooses to enter the Program at any other time, the deposit contribution for the remainder of the program year will be pro-rated. The new Participant will begin coverage on the date that is mutually acceptable to the Participant and the Board; however, the new Participant will be required to share losses with the other members of the Program for the entire program year.

## 2. APPROVAL OF APPLICATION

The Board shall, after reviewing the resolution and other underwriting criteria, determine the acceptability of the exposures presented by the applicant and shall advise the applicant in writing of its decision to accept or reject the request within 10 days after the decision has been made.

## B. PARTICIPANTS' DUTIES

1. The Participants shall provide payroll, using data as included on the State DE-9 form, and all other requested information in conformance with the policies adopted by the Board.
2. The Participants shall disclose activities not usual and customary in their operation.
3. The Participants shall at all times cooperate with the Authority's General Manager and Third Party Administrator in regards to claims handling and underwriting activities of the Authority.

## ARTICLE VII: TERMINATION AND DISSOLUTION OF THE PROGRAM

The Program may be terminated and dissolved at any time by a vote of two-thirds of the Participants. However, the Program may continue to exist for the purpose of disposing of all claims, distributing assets, and all other functions necessary to conclude the affairs of the Program, at the Board's discretion.

Upon termination of the Program, all assets of the Program shall be distributed only among the current Participants. The Board shall determine such distribution within six months after the last pending claim or loss covered by the Program has been finally resolved and there is a reasonable expectation that no new claims will be filed.

ARTICLE VIII: AMENDMENTS
This MPD may be amended by a two-thirds (2/3rds) vote of the Participants at the meeting, provided prior written notice, as provided within the Bylaws, has been given to the Board.

## Appendix A

General Liability Claims Manual

## Appendix B

## General Liability Defense Panel Approved Firm List

Allen, Glaessner Hazelwood \& Werth
Angelo Kilday \& Kilduff
Bertrand, Fox, Elliott, Osman \& Wenzel
Best Best \& Krieger
Bordin Semmer
Law Offices of Borton Petrini
Bremer Whyte Brown \& O'Meara
Brobeck West Borges Rosa \& Douville
Caulfield Law Firm
Collins Collins Muir \& Stewart
Daley \& Heft
Diepenbrock \& Cotter
Edrington Schirmer \& Murphy
Ewing and Associates
Ferguson Praet \& Sherman
Fortin Law Group
Geary, Shea, O’Donnell,Grattan \& Mitchell
Gibbons \& Conley
Graves \& King
Haight, Brown \& Bonesteel
James A. Wyatt

Jones \& Dyer P.C.
Jones \& Mayer
Kennedy Archer \& Giffen
Longyear O'Dea \& Lavra
Low Ball \& Lynch
Manning \& Kass Ellrod Ramirez Trester
Marderosian, Cercone \& Cohen
McNamara Ney Beatty Slattery Borges \& Ambacher, LLP

Mitchel Brisso Delaney \& Vrieze
Murchison \& Cumming
Nisso, Pincin \& Hill
Noland Hamerly Etienne \& Hoss
Perry, Johnson, Anderson, Miller \& Moskowitz
Porter Scott, P.C.
Porter Simon
Pyka Lenhard Schnaider Zell
Richards, Watson \& Gershon
Law Offices of Scott C. Haith
Shapiro, Galvin, Shapiro \& Moran \& Moran

## CIRA

## 2021/22 Draft Operating Budget - Version 2

| 2020/21 PARSAC and REMIF Budget adjusted for <br> costs associated with PARSAC and REMIF <br> legacy claims, REMIF Health Program, and <br> retiree benefits. |  |  |  |
| :---: | :---: | :---: | :---: |
| Total Budget <br> PARSAC$\quad$ REMIF |  |  | 2020/21 |
| $2020 / 21$ |  |  |  |


| CIRA Budget |  |
| :---: | :---: |
| Proposed <br> Budget | Budget <br> Difference |
| $\mathbf{2 0 2 1 / 2 2}$ | \% Change |

## INCOME

Member Contributions
Liability Contributions
Workers' Compensation Contributions
Property Contributions
Bond Income
Auto Physical Damage
Total Member Contributions
Misc Fees
TOTAL INCOME

| $\$ 9,429,296$ | $\$$ | $5,592,039$ |
| ---: | ---: | ---: |
| $6,170,861$ | $7,362,265$ | $15,021,335$ |
| $2,766,736$ | $3,307,316$ | $6,074,126$ |
| 78,000 | - | 78,000 |
| - | 372,364 | 372,364 |
| $18,444,893$ | $16,633,984$ | $35,078,877$ |
| - | 104,400 | 104,400 |
| $18,444,893$ | $16,738,384$ | $35,183,277$ |


| $\$ 14,472,013$ | $-4 \%$ |
| ---: | :---: | :---: |
| $13,186,989$ | $-3 \%$ |
| $5,975,022$ | $-2 \%$ |
| 78,000 | $0 \%$ |
| 372,364 | $0 \%$ |
| $34,084,388$ | $-3 \%$ |
| - | $-100 \%$ |
| $34,084,388$ | $-3 \%$ |

## EXPENSE

Excess Insurance
Liability Insurance Premium
ERMA
Pollution
Auto Physical Damage
Workers Comp Premium - LAWCX
Property Insurance - PEPIP
Bond Insurance
Total Excess Insurance

Claims Expense
Liability Claims Expense
Liability Claims Expense
Liab Adm Fees

Sewer Consultant
Total Liability Claims Expense
Workers Compensation Claims Expense
WC Claims Expense
WC Adm Fees
Total Workers Compensation Claims Exp
Total Claims Expense

WC Self Insurance Fees
WC self insurance fees alloacted to legacy claims

| $3,149,467$ | $1,170,000$ | $4,319,467$ |
| ---: | ---: | ---: |
| $1,346,595$ | - | $1,346,595$ |
| 12,000 | - | 12,000 |
| - | 248,000 | 248,000 |
| $1,311,345$ | 402,500 | $1,713,845$ |
| $2,713,070$ | $2,823,997$ | $5,537,067$ |
| 78,000 | - | 78,000 |
| $8,610,477$ | $4,644,497$ | $13,254,974$ |


| 3,657,736 | 2,998,451 | 6,656,187 | 6,656,187 | 0\% |
| :---: | :---: | :---: | :---: | :---: |
| 427,000 | 127,000 | 554,000 | 410,000 | -26\% |
| 15,000 | - | 15,000 | 15,000 | 0\% |
| 4,099,736 | 3,125,451 | 7,225,187 | 7,081,187 | -2\% |
| 3,605,157 | 5,134,690 | 8,739,847 | 8,739,847 | 0\% |
| 448,880 | 570,000 | 1,018,880 | 1,004,935 | -1\% |
| 4,054,037 | 5,704,690 | 9,758,727 | 9,744,782 | 0\% |
| 8,153,773 | 8,830,141 | 16,983,914 | 16,825,969 | -1\% |
| 150,000 | 253,867 | 403,867 |  |  |
| $(150,000)$ | $(253,867)$ | $(403,867)$ | - | -100\% |
| - | - | - | - | 0\% |

Payroll and Benefits

| Employee Salary | 532,389 | 372,243 | 904,632 | 782,762 | $-13 \%$ |
| :--- | ---: | ---: | ---: | ---: | :---: |
| Accrued Vacation Expense | 8,000 | - | 8,000 | 5,375 | $-33 \%$ |
| COLA Increase | - | - | - | - | $0 \%$ |
| Performance Pay | 3,500 | - | 3,500 | - | $-100 \%$ |

## CIRA

2021/22 Draft Operating Budget - Version 2

|  | 2020/21 PARSAC and REMIF Budget adjusted for costs associated with PARSAC and REMIF legacy claims, REMIF Health Program, and retiree benefits. |  |  | CIRA Budget |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | PARSAC | REMIF | Total Budget 2020/21 | Proposed Budget | Budget Difference |
|  | 2020/21 |  |  | 2021/22 | \% Change |
| Payroll Taxes PARSAC | 8,505 | 23,000 | 31,505 | 14,068 | -55\% |
| Medical | 130,000 | 92,703 | 222,703 | 142,918 | -36\% |
| Ancillary Benefits | 16,500 | 5,035 | 21,535 | 10,502 | -51\% |
| PERS Retirement Cost | 53,509 | 59,000 | 112,509 | 82,757 | -26\% |
| Unfunded Liability | 26,072 | 230,000 | 256,072 | - |  |
| Salary \& Benefits Allocated to REMIF Health |  |  |  |  |  |
| Program '20/21 | - | $(187,427)$ | $(187,427)$ | - |  |
| Unfunded Liability Allocated to REMIF Health |  |  |  |  |  |
| Total Payroll and Benefits | 752,403 | 364,554 | 1,116,957 | 1,038,382 | -7\% |
| Consultants |  |  |  |  |  |
| Actuarial Liability Fee | 18,700 | 10,609 | 29,309 | 14,500 | -51\% |
| Actuarial WC Fee | 20,125 | 10,609 | 30,734 | 14,500 | -53\% |
| Actuarial - OPEB | 7,000 | 10,000 | 17,000 | 7,500 | -56\% |
| Claims Audit | - | 25,000 | 25,000 | - | -100\% |
| Computer Consultant | 12,000 | 5,305 | 17,305 | 4,600 | -73\% |
| Web Development | 2,500 | 5,000 | 7,500 | 6,000 | -20\% |
| Legal- General | 50,000 | 35,000 | 85,000 | 45,000 | -47\% |
| Financial Audit/Accounting | 26,500 | 28,000 | 54,500 | 20,000 | -63\% |
| Finance Manager | - | 99,225 | 99,225 | - | -100\% |
| Consultants Liab Other | 7,500 | - | 7,500 | - | -100\% |
| Consultants WC Other | 7,500 | - | 7,500 | - | -100\% |
| Consultants Allocated to REMIF Health Program '20/21 | - | $(58,665)$ | $(58,665)$ | - |  |
| Total Consultants | 151,825 | 170,083 | 321,908 | 112,100 | -65\% |
| Safety \& Loss Control |  |  |  |  |  |
| New Member Audit | 2,500 | - | 2,500 | - | -100\% |
| On-line Training | 12,000 | - | 12,000 | 20,000 | 67\% |
| OccuMed | - | 9,000 | 9,000 | - | -100\% |
| DOT (Pass-Through) | - | 11,430 | 11,430 | - | -100\% |
| Safety/MSDS (Pass-Through) | - | 63,860 | 63,860 | - | -100\% |
| Group Legal (Pass-Through) | - | 10,040 | 10,040 | - | -100\% |
| DKF Solutions | - | 68,600 | 68,600 | - | -100\% |
| Acceptable Risk | - | 24,000 | 24,000 | - | -100\% |
| Marines | - | 10,000 | 10,000 | - | -100\% |
| Lexipol | 80,000 | 53,500 | 133,500 | 215,000 | 61\% |
| EPL Consortium | - | 47,616 | 47,616 | 125,000 | 163\% |
| E-Certs | - | - | - | 1,500 | New |
| WaiverSign | 1,000 | - | 1,000 | 2,000 | 100\% |
| Safety/BLR/Powtoons (Tableau PY Only) | 3,922 | - | 3,922 | 2,000 | -49\% |
| Simple But Needed | 7,500 | - | 7,500 | 10,000 | 33\% |
| Misc Loss Control | 7,578 | 5,733 | 13,311 | 5,000 | -62\% |
| Annual Academy | 15,000 | - | 15,000 | 15,000 | 0\% |
| RM 101 | 5,000 | - | 5,000 | - | -100\% |

## CIRA

## 2021/22 Draft Operating Budget - Version 2



## CIRA

2021/22 Draft Operating Budget - Version 2

|  | 2020/21 PARSAC and REMIF Budget adjusted for <br> costs associated with PARSAC and REMIF <br> legacy claims, REMIF Health Program, and <br> retiree benefits. |  |
| :--- | :---: | :---: | :---: | :---: | :---: |

# AGREEMENT BETWEEN THE CALIFORNIA INTERGOVERNMENT RISK AUTHORITY and <br> Douglas R. Alliston of Murphy, Campbell, Alliston \& Quinn_for Coverage Counsel Services 

This contract is dated for identification this $1^{\text {st }}$ day of July 2021 and is made by and between the California Intergovernmental Risk Authority (CIRA) and Douglas R. Alliston of Murphy, Campbell, Alliston \& Quinn (ATTORNEY) whose address is 8801 Folsom Boulevard, Suite 230, Sacramento, CA, 95826.

## RECITALS

A. CIRA desires to retain the services of ATTORNEY to provide Coverage Counsel services.
B. ATTORNEY is a qualified professional capable of providing the certain professional services that CIRA seeks.

NOW, THEREFORE, in consideration of the recitals and mutual promises contained herein, CIRA does hereby engage ATTORNEY, and ATTORNEY agrees, to perform the services set forth herein in accordance with the following terms and conditions:

1. Description of Services. ATTORNEY shall provide Coverage Counsel services and shall perform legal services as may be required by CIRA as set forth in this agreement. As part of the Services to be performed hereunder, ATTORNEY shall be responsible for reviewing and providing analysis of CIRA's Memoranda of Coverage, provide coverage analysis relating to claims and lawsuits against CIRA members, and other legal documents as requested by CIRA. Further, ATTORNEY shall render legal advice and opinions on all matters affecting CIRA's coverage documents, as directed by the Board of Directors, Executive Committee or the General Manager.

Douglas R. Alliston shall be the individual designated as General Counsel and shall be responsible for the performance of services under this Agreement. No change in this assignment shall be made without the consent of CIRA.
2. Schedule and Term. These services shall be provided on annual basis and continue from July 1, 2021 until terminated by either party.
3. Compensation. The hourly rate for these services shall be $\$ 225.00$.
4. Payment Schedule. CIRA shall make payment within thirty (30) days of receiving and approving a billing statement in proportion to the satisfactory completion of ATTORNEY's services.
5. Termination. CIRA may terminate this Agreement at any time, for any and no
reason, by providing thirty (30) days advance written notice to ATTORNEY.
6. Independent Contractor. It is agreed that ATTORNEY is an independent contractor, and all persons working for or under the direction of ATTORNEY are ATTORNEY's agents, servants and employees, and said persons shall not be deemed agents, servants or employees of CIRA.
7. Applicable Laws and Attorneys' Fees. This Agreement shall be construed and enforced pursuant to the laws of the State of California. Should any legal action be brought by a party for breach of this Agreement or to enforce any provision herein, the prevailing party of such action shall be entitled to reasonable attorneys' fees, court costs, and such other costs as may be fixed by the court. Reasonable attorney fees shall be based upon comparable fees of private attorneys practicing in Sacramento County.

## 8. Insurance.

## a. Commercial General Liability Insurance:

ATTORNEY shall obtain Commercial General Liability insurance no less broad than ISO form CG 0001 with minimum limits of $\$ 1,000,000$ per Occurrence; $\$ 2,000,000$ General Aggregate; $\$ 2,000,000$. The General Aggregate shall apply separately to each project. The required limits may be provided by a combination of General Liability Insurance and Commercial Excess or Umbrella Liability. Automobile Liability insurance in the amount of One Million Dollars $(\$ 1,000,000)$ combined single limit per accident to include coverage for owned, hired and non-owned autos If ATTORNEY maintains higher limits than the specified minimum limits required, CIRA and shall be entitled to coverage for the higher limits maintained by PROVIDER.

## b. Workers' Compensation Insurance:

ATTORNEY shall obtain statutory Workers' Compensation insurance and Employer's Liability insurance in the amount of One Million Dollars $(\$ 1,000,000)$ per accident, One Million Dollars $(\$ 1,000,000)$ per employee; One Million Dollars $(\$ 1,000,000)$ per policy.

## c. Professional Liability Insurance:

ATTORNEY shall obtain Professional Liability insurance in the amount of One Million Dollars $(\$ 2,000,000)$ per claim. Coverage applicable to the work performed under this agreement shall be continued for two (2) years after completion of the work. Such continuation coverage may be provided by one of the following: (1) renewal of the existing policy; (2) an extended reporting period endorsement; or (3) replacement insurance with a retroactive date no later than the commencement of the work under this Agreement.

## d. Acceptability of Insurers:

Insurance is to be placed with insurers with a current Best Rating of A:VII unless otherwise acceptable to CIRA.

## e. Verification of Coverage:

Insurance, deductibles or self-insurance retentions shall be subject to CIRA's approval. Original Certificates of Coverage with endorsements shall be received and approved by CIRA before work commences, and insurance must be in effect for the duration of the contract. The absence of insurance or a reduction of stated limits shall cause all work on the project to cease. Any delays shall not increase costs to CIRA or increase the duration of the project.

## f. Other Insurance Provisions:

1) CIRA, its officers, officials, and employees are to be covered as additional insured on the Commercial General Liability Insurance policy arising out of ongoing operations by or on behalf of the ATTORNEY.
2) For any claims related to this project, ATTORNEY's insurance coverage shall be primary and any insurance or self-insurance maintained by CIRA, its officers, officials, employees, and volunteers shall not contribute to it.
3) ATTORNEY shall provide immediate written notice if: (1) any of the required insurance policies is terminated; (2) the coverage limit of any of the required polices are reduced; (3) or the deductible or self- insured retention is increased.
4) In the event ATTORNEY employs subcontractors as part of the work covered by this Agreement, it shall be the responsibility of the ATTORNEY to ensure that all subcontractors comply with the same insurance requirements that are stated in this Agreement.
5) The worker's compensation insurer shall issue an endorsement waiving its right to subrogate against CIRA, its officers, officials, employees, and volunteers.
10. Reliance Upon Professional Skill. It is mutually agreed by the parties that CIRA is relying upon the professional skill of ATTORNEY, and ATTORNEY represents to CIRA that its work shall conform to generally recognized professional standards in the industry. Acceptance of ATTORNEY's work by CIRA does not operate as a release of ATTORNEY's said representation.
11. Amendment. This Agreement may be amended by written instrument signed by
both parties.
12. Inconsistent Terms. If the attachments or exhibits to this Agreement, if any, are inconsistent with this Agreement, this Agreement shall control.
13. Entire Agreement. This Agreement contains the entire understanding between the parties with respect to the subject matter herein. There are no representations, agreements or understandings (whether oral or written) between or among the parties relating to the subject matter of this Agreement which are not fully expressed herein. If the attachments or exhibits to this Agreement, if any, are inconsistent with this Agreement, this Agreement shall control.
14. Notices. Any notice required to be given to ATTORNEY shall be deemed to be duly and properly given if mailed to ATTORNEY, postage prepaid, addressed to:

Douglas R. Alliston
Murphy, Campbell, Alliston \& Quinn
8801 Folsom Boulevard, Suite 230
Sacramento, CA 95826
(916) 400-2300
or, personally delivered to ATTORNEY at such address or at such other addresses as ATTORNEY may designate in writing to PARSAC.

Any notice required to be given to PARSAC shall be deemed to be duly and properly given if mailed to PARSAC, postage prepaid, addressed to:

Kin Ong<br>General Manager<br>CIRA<br>1525 Response Road, Suite One<br>Sacramento, California 95815-4805

(916) 927-7727
or, personally delivered to CIRA at such address or at such other addresses as CIRA may designate in writing to ATTORNEY.

IN WITNESS WHEREOF, this Agreement is executed by CIRA and by ATTORNEY.

APPROVED AS TO FORM AND CONTENT:
CIRA:

Kin Ong, General Manager

Murphy, Campbell, Alliston \& Quinn

Douglas R. Alliston, Partner
Taxpayer I.D. Number: 20-5905659

## LEGAL SERVICES AGREEMENT

## AGREEMENT FOR GENERAL COUNSEL LEGAL SERVICES BETWEEN <br> CALIFORNIA INTERGOVERNMENTAL RISK AUTHORITY <br> AND <br> BEST BEST \& KRIEGER LLP

## 1. Parties and Date

This Agreement is made and entered into as of the 1st day of July, 2021, by and between the California Intergovernmental Risk Authority ("CIRA") and Best Best \& Krieger LLP, a limited liability partnership engaged in the practice of law ("BB\&K").

## 2. Recitals

2.1 CIRA wishes to engage the services of BB\&K as its General Counsel to perform all necessary legal services for CIRA on the terms set forth below.

## 3. TERMS.

3.1 Term. The term of this Agreement shall commence on July 1, 2021 and shall continue in full force and effect until terminated in accordance with Section 3.12.
3.2 Scope of Services. BB\&K shall serve as General Counsel and shall perform legal services ("Services") as may be required from time to time by CIRA as set forth by this Agreement, unless otherwise agreed to by CIRA and BB\&K. As part of the Services to be performed hereunder, $\mathrm{BB} \& \mathrm{~K}$ shall be responsible for the following:
3.2.1 Preparation for, and attendance at, regular meetings of CIRA;
3.2.2 Provision of legal counsel at such other meetings as directed by CIRA;
3.2.3 Preparation or review of CIRA ordinances, if any, and resolutions, together with such staff reports, orders, agreements, forms, notices, declarations, certificates, deeds, leases and other documents as requested by CIRA;
3.2.4 Rendering to the officers and employees of CIRA legal advice and opinions on all legal matters affecting CIRA, including new legislation and court decisions, as directed by CIRA;
3.2.5 Researching and interpreting laws, court decisions and other legal authorities in order to prepare legal opinions and to advise CIRA on legal matters pertaining to CIRA operations, as directed by CIRA;
3.2.6 Performing legal work pertaining to property acquisition, property disposal, public improvements, public rights-of-way and easements, as directed by CIRA;
3.2.7 Responding to inquiries and review for legal sufficiency ordinances, resolutions, contracts, and administrative and personnel matters, as directed by CIRA;
3.2.8 Representing and assisting on litigation matters, as directed by CIRA. Such services shall include, but shall not be limited to, the preparation for and making of appearances, including preparing pleadings and petitions, making oral presentations, and preparing answers, briefs or other documents on behalf of CIRA, and any officer or employee of CIRA, in all federal and state courts of this State, and alternative dispute resolution officer, and before any governmental board or commission, including reviewing, defending or assisting any insurer of CIRA or its agents or attorneys with respect to any lawsuit filed against CIRA or any officer or employee thereof, for money or damages.
3.3 BB\&K Trainings. Best Best \& Krieger LLP offers a variety of trainings to public agency and private business leadership and staff on topics required by law, as well as preventative and educational legal topics. The trainings are interactive and can be given onsite, via live webinar or virtual on-demand. Some of our most popular trainings include AB 1234 Ethics, Workplace Civility and Sexual Harassment Avoidance Training, The Brown Act "Open Meetings Law," Crystalizing Your Agency's CIRA Policies \& Procedures and SB 1343 Sexual Harassment Avoidance Training for Non-Supervisors.
3.4 Designated General Counsel. Ann Siprelle shall be designated as General Counsel, and shall be responsible for the performance of all Services under this Agreement, including the supervision of Services performed by other members of BB\&K. Other attorneys may assist Mr. Siprelle as warranted.
3.5 Time of Performance. The Services of BB\&K shall be performed expeditiously in the time frames and as directed by CIRA.
3.6 Assistance. CIRA agrees to provide all information and documents necessary for the attorneys at $\mathrm{BB} \& \mathrm{~K}$ to perform their obligations under this Agreement.
3.7 Independent Contractor. BB\&K shall perform all legal services required under this Agreement as an independent contractor of CIRA and shall remain, at all times as to CIRA, a wholly independent contractor with only such obligations as are required under this Agreement. Neither CIRA, nor any of its employees, shall have any control over the manner, mode or means by which BB\&K, its agents or employees, render the legal services required under this Agreement, except as otherwise set forth. CIRA shall have no voice in the selection, discharge, supervision or control of BB\&K's employees, representatives or agents, or in fixing their number, compensation, or hours of service.
3.8 Fees and Costs. BB\&K shall render and bill for legal services in the following categories and at rates set forth in Exhibit "A" and in accordance with the BB\&K Billing Policies set forth in Exhibit "D", both of which are attached hereto and incorporated herein by reference. In addition, CIRA shall reimburse $\mathrm{BB} \& \mathrm{~K}$ for reasonable and necessary expenses incurred by it in the performance of the Services under this Agreement. Authorized reimbursable expenses shall include, but are not limited to, printing and copying expenses, mileage expenses at the rate allowed by the Internal Revenue Service, toll road expenses, long distance telephone and facsimile tolls,
computerized research time (e.g. Lexis or Westlaw), research services performed by BB\&K's library staff, extraordinary mail or delivery costs (e.g. courier, overnight and express delivery), court fees and similar costs relating to the Services that are generally chargeable to a CIRA. However, no separate charge shall be made by BB\&K for secretarial or word processing services.
3.9 Billing. BB\&K shall submit monthly to CIRA a detailed statement of account for Services. CIRA shall review BB\&K's monthly statements and pay BB\&K for Services rendered and costs incurred, as provided for in this Agreement, on a monthly basis.
3.10 Annual Reviews. CIRA and BB\&K agree that a review of performance and the compensation amounts referenced in this Agreement may occur at least annually.
3.11 Insurance. BB\&K carries errors and omissions insurance with Lloyd's of London. After a standard deductible, this insurance provides coverage beyond what is required by the State of California. A declaration page containing information about BB\&K's errors and omissions insurance policy is available upon CIRA's request.
3.12 Attorney-Client Privilege. Confidential communication between CIRA and BB\&K shall be covered by the attorney-client privilege. As used in this article, "confidential communication" means information transmitted between CIRA and BB\&K in the course of the relationship covered by this Agreement and in confidence by a means that, so far as CIRA is aware, discloses the information to no third persons other than those who are present to further the interests of CIRA in the consultation or those to whom disclosure is reasonably necessary for the transmission of the information or the accomplishment of the purpose for which BB\&K is consulted, and includes any legal opinion formed and advice given by BB\&K in the course of this relationship.
3.13 Termination of Agreement and Legal Services. This Agreement and the Services rendered under it may be terminated at any time upon thirty (30) days' prior written notice from either party, with or without cause. In the event of such termination, BB\&K shall be paid for all Services authorized by CIRA and performed up through and including the effective date of termination. BB\&K shall also be reimbursed for all costs associated with transitioning any files or other data or documents to a new law firm or returning them to CIRA.
3.14 Entire Agreement. This Agreement contains the entire Agreement of the parties with respect to the subject matter hereof, and supersedes all prior negotiations, understandings or agreements.
3.15 Governing Law. This Agreement shall be governed by the laws of the State of California. Venue shall be in Sacramento County.
3.16 Amendment; Modification. No supplement, modification or amendment of this Agreement shall be binding unless executed in writing and signed by both parties.
3.17 Waiver. No waiver of any default shall constitute a waiver of any other default or breach, whether of the same or other covenant or condition. No waiver, benefit, privilege, or service voluntarily given or performed by a party shall give the other party any contractual rights by custom, estoppel, or otherwise.
3.18 Invalidity; Severability. If any portion of this Agreement is declared invalid, illegal, or otherwise unenforceable by a court of competent jurisdiction, the remaining provisions shall continue in full force and effect.
3.19 Counterparts. This Agreement may be signed in counterparts, each of which shall constitute an original.
3.20 Delivery of Notices. All notices permitted or required under this Agreement notices shall be deemed made when personally delivered or when mailed, forty-eight (48) hours after deposit in the U.S. Mail, first class postage prepaid and addressed to the party at its applicable address. Actual notice shall be deemed adequate notice on the date actual notice occurred, regardless of the method of service. All notices permitted or required under this Agreement shall be given to the respective parties at the following address, or at such other address as the respective parties may provide in writing for this purpose:

Client: California Intergovernmental Risk Authority 1525 Response Road,<br>Suite One<br>Sacramento, CA, 95815-4805<br>Attention: Kin Ong<br>BB\&K: Best Best \& Krieger LLP<br>300 South Grand Ave., $25^{\text {th }}$ Floor<br>Los Angeles, CA 90071<br>Attention: Scott Campbell

### 3.21 Indemnification.

(A) BB\&K agrees to indemnify and defend CIRA, its officers, employees and agents against, and will hold and save each of them harmless from, any and all actions, suits, claims, damages to persons or property, losses, costs, penalties, obligations, errors, omissions or liabilities (herein "claims or liabilities") that may be asserted or claimed by any person, firm or entity arising from the negligent acts or omissions of BB\&K hereunder, or arising from BB\&K's negligent or alleged negligent performance of any term, provision, covenant or condition of this Agreement, except to the extent such claims or liabilities arise from the negligence or willful misconduct of CIRA, its officers, agents or employees.
(B) CIRA acknowledges BB\&K is being appointed as General Counsel pursuant to the authority of Government Code Section 36505, and has the authority of that office. Accordingly, the CIRA is responsible pursuant to Government Code Section 825 for providing a defense for the General Counsel for actions within the scope of its engagement hereunder. Therefore, CIRA agrees to undertake its statutory duty and indemnify $\mathrm{BB} \& \mathrm{~K}$, its officers, employees and agents against and will hold and save each of them harmless from, any and all claims or liabilities that may be asserted or claims by any person, firm or entity arising out of or in connection with the work, operations or activities of $\mathrm{BB} \& \mathrm{~K}$ within the course and scope of its performance hereunder, but
nothing herein shall require CIRA to indemnify or defend BB\&K for liability arising from its own negligence or alleged negligence.

IN WITNESS WHEREOF, CIRA and BB\&K have executed this Agreement for General Counsel Legal Services as of the date first written above.
(signatures contained on following page)

SIGNATURE PAGE TO
AGREEMENT FOR GENERAL COUNSEL LEGAL SERVICES BETWEEN
CALIFORNIA INTERGOVERNMENTAL RISK AUTHORITY AND
BEST BEST \& KRIEGER LLP

CALIFORNIA INTERGOVERNMENTAL RISK AUTHORITY:

By:
Kin Ong
General Manager
Date: $\qquad$ , 2021

## BEST BEST \& KRIEGER LLP:

By:
Scott Campbell
Partner
Date: $\qquad$ , 2021

## EXHIBIT A

TO

# AGREEMENT FOR GENERAL COUNSEL LEGAL SERVICES BETWEEN <br> CALIFORNIA INTERGOVERNMENTAL RISK AUTHORITY AND <br> BEST BEST \& KRIEGER LLP 

## BILLING ARRANGEMENTS

1. Basic Legal Services - Description. Basic legal services shall include all services provided to Client that are not otherwise specifically identified below as either Special Legal Services, Third Party Reimbursable Legal Services, or Public Finance Legal Services ("Basic Legal Services").
2. Basic Legal Services - Rates. The Client shall pay for Basic Legal Services at the following rates:

| Attorneys | $\$ 250$ |
| :--- | :--- |
| Paralegals | $\$ 170$ |
| Law Clerks | $\$ 170$ |
| Litigation Analysts | $\$ 170$ |

3. Specialized Legal Services - Rates.. The Client shall pay for Special Counsel Legal Services related to CALPERS matters, if any at the following rates:

Partner $\$ 450$
Associate $\$ 275$
Pension Consultant $\$ 250$
Paralegal $\$ 190$
Other titles may be used in our legal services. Please refer to section 6 of this Exhibit for those other personnel titles and rates.

Other titles may be used in our legal services. Please refer to section 6 of this Exhibit for those other personnel titles and rates.

The above rates and retainer amounts will be adjusted annually using the cost of living index. At the start of CIRA's fiscal year, July 01, 2021 and every year thereafter during the term of this Agreement, rates and amounts shall be increased for the change in the cost of living for the most recently published twelve (12) month period, as shown by the U.S. Department of Labor in
its All Urban Consumers Index set forth bi-monthly; provided, however, that such adjustment shall never be lower than zero percent ( $0 \%$ ) nor more than three percent ( $3 \%$ ). In addition to the automatic rate increases, either BB\&K or CIRA may initiate consideration of a rate increase at any time.

## EXHIBIT B

TO

## AGREEMENT FOR GENERAL COUNSEL LEGAL SERVICES BETWEEN <br> CALIFORNIA INTERGOVERNMENTAL RISK AUTHORITY AND <br> BEST BEST \& KRIEGER LLP

## BB\&K BILLING POLICIES

Our century of experience has shown that the attorney-client relationship works best when there is mutual understanding about fees, expenses, billing and payment terms. Therefore, this statement is intended to explain our billing policies and procedures. Clients are encouraged to discuss with us any questions they have about these policies and procedures. Clients may direct specific questions about a bill to the attorney with whom the client works or to our Accounts Receivable Department (accounts.receivable@bbklaw.com). Any specific billing arrangements different from those set forth below will be confirmed in a separate written agreement between the client and the firm.

## Invoice and Payment Options

Best Best \& Krieger strives to meet our clients' needs in terms of providing a wide variety of invoice types, delivery and payment options. Please indicate those needs including the preferred method of invoice delivery (Invoice via Email; or USPS). In addition, accounts.receivable@bbklaw.com can provide a W-9 upon request and discuss various accepted payment methods.

## Fees for Professional Services

Unless a flat fee is set forth in our engagement letter with a client, our fees for the legal work we will undertake will be based in substantial part on time spent by personnel in our office on that client's behalf. In special circumstances which will be discussed with the client and agreed upon in writing, fees will be based upon the novelty or difficulty of the matter, or the time or other special limitations imposed by the client.

Hourly rates are set to reflect the skill and experience of the attorney or other legal personnel rendering services on CIRA's behalf. All legal services are billed in one-tenth of an hour ( 0.10 /hour) or six-minute increments. Generally, our attorneys are currently billed at rates from $\$ 220$ to $\$ 795$ per hour, and our administrative assistants, research assistants, municipal analysts, litigation analysts, paralegals, paraprofessionals and law clerks are billed at rates from $\$ 150$ to $\$ 290$ per hour for new work. These rates reflect the ranges in both our public and our private rates. These hourly rates are reviewed annually to accommodate rising firm costs and to reflect changes in attorney status as lawyers attain new levels of legal experience. Any increases resulting from such reviews will be instituted automatically and will apply to each affected client, after advance notice.

Non-Attorney Personnel: BBK may employ the services of non-attorney personnel under the supervision of a BBK attorney in order to perform services called for in the legal services agreement. The most common non-attorney personnel utilized are paralegals. Other types of nonattorney personnel include, but are not limited to, case clerks, litigation analysts, and specialty consultants. The client agrees that BBK may use such non-attorney personnel to perform its services when it is reasonably necessary in the judgment of the responsible BBK attorney. Hourly fees for non-attorney personnel will be charged at the rate then in effect for such personnel. A copy of BBK's current rates and titles for non-attorney personnel will be provided upon request.

Fees For Other Services, Costs and Expenses
We attempt to serve all our clients with the most effective support systems available. Therefore, in addition to fees for professional legal services, we also charge separately for some other services and expenses to the extent of their use by individual clients. These charges include but are not limited to, mileage at the current IRS approved rate per mile, extraordinary telephone and document delivery charges, copying charges, computerized research, court filing fees and other court-related expenditures including court reporter and transcription fees. No separate charge is made for secretarial or word processing services; those costs are included within the above hourly rates.

ESI: BBK provides Electronically Stored Information ("ESI") services for matters requiring ESI support - typically litigation or threatened litigation matters as well as extensive Public Records Act files and other Practice support services. BBK shall receive payment for ESI support, if needed, at BBK's then current rates. A copy of BBK's current rates for such services will be provided upon request. BBK shall not incur costs for ESI support on a particular matter without first confirming by email or written correspondence with the client that the client agrees such services are necessary for the matter at hand.

We may need to advance costs and incur expenses on your behalf on an ongoing basis. These items are separate and apart from attorneys' fees and, as they are out-of-pocket charges, we need to have sufficient funds on hand from you to pay them when due. We will advise the client from time to time when we expect items of significant cost to be incurred, and it is required that the client send us advances to cover those costs before they are due.

## Advance Deposit Toward Fees And Costs

Because new client matters involve both a substantial undertaking by our firm and the establishment of client credit with our accounting office, we require an advance payment from clients. The amount of this advance deposit is determined on a case-by-case basis discussed first with the client, and is specified in our engagement letter.

Upon receipt, the advance deposit will be deposited into the firm's client trust account. Our monthly billings will reflect such applications of the advance deposit to costs and not to attorney's fees (unless otherwise noted in our accompanying engagement letter). At the end of engagement, we will apply any remaining balance first to costs and then to fees. We also reserve the right to require increases or renewals of these advanced deposits.

By signing the initial engagement letter, each client is agreeing that trust account balances may be withdrawn and applied to costs as they are incurred and to our billings, when we issue our invoice to the client. If we succeed in resolving your matter before the amounts deposited are used, any balance will be promptly refunded.

## Monthly Invoices and Payment

Best Best \& Krieger LLP provides our clients with monthly invoices for legal services performed and expenses incurred. Invoices are due and payable upon receipt.

Each monthly invoice reflects both professional and other fees for services rendered through the end of the prior month, as well as expenses incurred on CIRA's behalf that have been processed by the end of the prior month. Processing of some expenses is delayed until the next month and billed thereafter.

Our fees are not contingent upon any aspect of the matter and are due upon receipt. All billings are due and payable within ten days of presentation unless the full amount is covered by the balance of an advance held in our trust account. If a bill is not paid within 30 days, a late charge of one percent per month on the unpaid invoice may be added to the balance owed, commencing with the next statement and continuing until paid.

It is our policy to treat every question about a bill promptly and fairly. It is also our policy that if a client does not pay an invoice within 60 days of mailing, we assume the client is, for whatever reason, refusing to pay. We reserve the right to terminate our engagement and withdraw as attorney of record whenever our invoices are not paid. If an invoice is 60 days late, however, we may advise the client by letter that the client must pay the invoice within 14 days or the firm will take appropriate steps to withdraw as attorney of record. If the delay is caused by a problem in the invoice, we must rely upon the client to raise that with us during the 14 -day period. This same policy applies to fee arrangements which require the client to replenish fee deposits or make deposits for anticipated costs.

From time to time clients have questions about the format of the bill or description of work performed. If you have any such questions, please ask them when you receive the bill so we may address them on a current basis.

## Changes in Fee Arrangements and Budgets

It may be necessary under certain circumstances for a client to increase the size of required advances for fees after the commencement of our engagement and depending upon the scope of the work. For example, prior to a protracted trial or hearing, the firm may require a further advance payment to the firm's trust account sufficient to cover expected fees. Any such changes in fee arrangements will be discussed with the client and mutually agreed in writing.

Because of the uncertainties involved, any estimates of anticipated fees that we provide at the request of a client for budgeting purposes, or otherwise, can only be an approximation of potential fees.

This Contract of Engagement ("the Contract") is entered into as of February 24, 2021 between Boretti, Inc. ("Boretti"), a California corporation and the California Intergovernmental Risk Authority (CIRA) ("Client") (collectively referred to at times as the "Parties").

Boretti is pleased to have the opportunity to provide the Services (as defined below) to Client. Boretti's objective is to provide the highest quality and most efficient safety, health and risk management services possible. Experience has shown that our relationship will be stronger if we start with a mutual understanding about fees and their payment.

Work assignments. A Boretti Professional will be assigned to your account along with support from Debra Dominguez, Administrative Assistant and Stephanie Morgen, Accounts and Financial Analyst. We will continue to be responsible to you for the entire assignment. The goal is to produce the highest quality of work at the most reasonable cost. Additional personnel, as needed by the work to be completed, may be assigned to your account, subject to Client's approval.

Boretti's Responsibilities; Performance of the Services. Boretti shall provide services and advice relating to safety, health, environmental and risk management as set forth on Exhibit " $A$ " hereto (the "Services"), which is hereby incorporated into and made part of the Contract. In the event of a conflict between the terms of the Contract and Exhibit " A ", the terms of the Contract shall prevail. Client acknowledges and agrees that the Contract, including Exhibit "A", sets forth the sole duties, tasks and obligations of Boretti and that Client shall be solely responsible for performing all other duties, tasks and obligations that are not specifically identified in the Contract as Boretti's responsibility including, without limitation, the duties, tasks and obligations set forth below.

Client's Responsibilities. As a condition to Boretti's performance of the Services, Client shall: (a) provide sufficient qualified personnel who are capable of performing Client's duties, tasks and obligations under the Contract; (b) provide Boretti with access to Client's facility during Client's normal business hours and otherwise as reasonably requested by Boretti in order to facilitate Boretti's ability to timely perform the Services; and (c) perform such other duties and tasks as set forth on Exhibit "A". Client acknowledges and agrees that its failure to perform or to timely perform any of its duties or obligations under this Contract may affect the timing and cost of Services to be provided by Boretti.

Fees and Expenses. Client shall pay to Boretti the fees set forth in the "Investment for Service" section of Exhibit "A" for the Services rendered by Boretti. Client shall reimburse Boretti for all reasonable out-of-pocket expenses incurred by Boretti in connection with the Contract. At Client's request, Boretti will provide such documentation as may be reasonably required to verify such expenses.

In those engagements where it appears a large amount of travel time will be incurred by Boretti or a high degree of special services will be necessary, an advance payment is typically requested. In this case, Client agrees to pay $\$ 0.00$ as an advance payment.
"Boretti"

## __ "Client"

Payment of Invoice. Boretti shall use reasonable efforts to bill Client on a monthly basis or at the completion of the Services, whichever is earlier. Client shall pay all amounts incurred hereunder within thirty (30) calendar days after the date of Boretti's invoice. If Client fails to remit payment within such thirty (30) calendar day period, Client shall pay interest on the amount due under such invoice at the rate of ten-percent (12\%) per annum. Any work rendered by Boretti shall be invoiced to, and paid by, Client even if this Contract is cancelled for any reason provided the work rendered is actually provided to Client.

Progress Payments: For service projects, i.e.: safety programs, development of safety trainings; client agrees to make progress payments to Boretti for services rendered according to the following schedule:

| SERVICE ACTIVITY | PERCENTAGE BILLED |
| :--- | :---: |
| Initial contact after signed contract | $10 \%$ |
| Draft of program and / or developed training | $50 \%$ |
| Completion of project | $40 \%$ |

Payments should be made by check or draft, Online credit card payment at borettiinc.com or electronic funds transfer, to "Boretti, Inc."

"Boretti"
Ownership of Proprietary Materials. Boretti shall share ownership of all right, title and interest in developed materials with the Client, and all copies thereof, and in and to all of the related trade secrets, copyrights, patents and all other proprietary rights. Neither party shall obtain any right or license in and to the other party's proprietary materials.

Ownership of Work Product. Upon payment of all amounts due hereunder, title to all written work product delivered by Boretti under this Contract (the "Work Product") shall invest in Client and Client shall have the perpetual right to use and make derivative work from such work. Notwithstanding the foregoing, Boretti shall retain sole and exclusive ownership of ideas, concepts, theories, improvements, designs, original works of authorship, formulas, processes, algorithms, inventions, know-how, techniques, compositions of matter and any other information owned by Boretti prior to the date of this Contract or generated by Boretti under this Contract, including all intermediate and partial versions thereof, and all proprietary rights therein (collectively, the "Boretti Knowledge"). Use of the work product shall be shared with the Client, with the Client
using the work product for its intent with Client and for sharing samples of work with potential Client members. Independent Sale of the work product may not be made without written consent of Boretti, Inc.

Exclusions: Bilingual - verbal or written trainings, training material or written programs are excluded unless otherwise indicated in Exhibit " A ".

Independent Contractor. Nothing herein shall be deemed or construed to create a joint venture, partnership, agency, or employee/employer relationship between the Parties for any purpose, including but not limited to, withholding for purposes of social security or income tax, or entitlement to vacation, insurance, retirement, or other employee benefits. The relationship of the Parties is that of independent contractor and client and is governed solely by the Contract. Neither Boretti nor Client is authorized to act as an agent for, otherwise on behalf of the other, and no action by either Boretti or Client shall bind the other.

Services Warranty. Boretti warrants that it shall perform the Services in a professional and workmanlike manner. In the event Boretti fails to perform any Services as provided in this Section, Boretti's sole and exclusive obligation shall be to promptly take such action as may be reasonably necessary to correct such failure.

Exclusion of Warranties. Boretti makes no other express or implied representations or warranties with respect to the Services to be performed by Boretti or any products that may result therefrom. Boretti disclaims all other express and implied warranties including, without limitation, the implied warranties of merchantability and fitness for a particular purpose. Without limitation to the foregoing, Client acknowledges that Boretti has been hired for consultancy and advisory services only. ENFORCEMENT OF ALL SAFETY AND HEALTH REGULATIONS SHALL BE THE SOLE RESPONSIBILITY OF CLIENT AND SHALL NOT BE THE RESPONSIBILITY OF BORETTI.

Term and Termination for Default. Unless terminated earlier in accordance with the termination provisions set forth in the Agreement, this agreement will end on the completion of the Services, as defined herein, by Boretti, Inc., which in no event shall be later than June 30, 2022, and acceptance of the Services, as defined herein, by the client. The client shall have the option to renew this agreement for two (2) additional one (1) year periods upon written notice by the client to Boretti, Inc. in advance of the agreement anniversary date.

Conditions. Boretti, shall provide the following Services to the client ("Services") for the rates defined within.

1. The Services shall meet the following acceptance criteria, and shall pass the following tests: Boretti, must submit a written request (which may occur by electronic mail) to the client Project Manager (defined as the municipality / agency
service contact) for acceptance of Services and Deliverables. The client Project Manager will either accept or reject the Services and Deliverables within five (5) business days following receipt of the Services or Deliverables and the written request. If the client rejects the Services or Deliverables, the client Project Manager's rejection will include a written statement of reasons for the rejection. For any rejected Services or Deliverables, the parties will agree upon a deadline for Boretti, to correct the deficiencies. Boretti, will correct the deficiencies and will submit another request for acceptance before the agreed upon deadline. This process will be repeated until all deficiencies in the Services or Deliverables are completed to the client's satisfaction and the client Project Manager has provided Boretti, with written acceptance
2. Boretti Resources: Boretti, shall provide the following to complete the Services:
a. Boretti's Pre-existing Property: As needed to complete the desired service.
b. Boretti's Resources: As needed to complete the desired service. This may include 3rd party equipment and analysis (i.e., air pumps, sampling media, lab analysis), as specified and paid for in the Master Services Agreement.
3. The client's Resources: All property and assets, whether tangible or intangible, provided by the client to Boretti, shall remain the client's property.

Arbitration: In the event of any controversy or claim arising out of or relating to this Contract, or a breach thereof, the Parties shall settle the dispute by binding arbitration, administered by the American Arbitration Association under the Commercial Arbitration Rules then in effect. The number of arbitrators shall be one and that arbitrator's ruling shall be binding. The place of arbitration shall be Visalia, California and California shall be applied by the arbitrator. The Parties shall use reasonable efforts to expedite the arbitration proceeding and will request that the arbitrator render an opinion within thirty (30) days after the conclusion of the evidence and argument. Judgment on the award rendered by the arbitrator may be entered in any court having jurisdiction thereof.

Amendment. This contract, including the terms and provisions of Exhibit "A" and Exhibit " $B$ ", shall only be amended by the written consent of the Parties.

Disclosure of Confidential and/or Proprietary Information. Any confidential information disclosed to Boretti by Client in connection with the Services, shall be subject to the terms of the Confidentiality and Non-Disclosure Agreement between the Parties signed by the Parties on February 24, 2021 that is hereby attached to this Contract as Exhibit " B " and incorporated into and made part of this Contract.

Indemnification: Each party hereto (hereafter, "indemnifying Party") shall indemnify, defend and hold harmless the other party, its officers, agents, employees and volunteers against any loss, cost, damage, expense, claim, suit, demand, or liability of any kind or character, including but not limited to reasonable attorney fees, arising from or relating to any negligent or wrongful act or omission of the Indemnifying Party, its officers, agents
or employees, which occurs in the performance of, or otherwise in connection with, this agreement, but only in proportion to and to the extent such loss, cost, damage, expense, claim, suit, demand, or liability of any kind or character, including reasonable attorney fees, is caused by or results from the negligent or wrongful act or omission of the Indemnifying Party, its officers, agents, or employees.

Governing Law: This Contract shall be construed in accordance with the laws of the State of California.

Right to Cure. In case of a breach of this Contract by either party, the non-breaching party shall give the breaching party notice of the breach and a reasonable period to cure under the circumstances.

Attorney's Fees: If any action (including an initiation of an arbitration proceeding) is brought by any party to this Contract to enforce or interpret its terms or provisions, the prevailing party will be entitled to reasonable attorney fees and costs incurred in connection with such action prior to and at trial or arbitration and on any appeal therefrom.

Integration. This Contract constitutes the entire agreement among the Parties hereto pertaining to the subject matter hereof and supersedes all prior agreements and understandings pertaining thereto.

No Assignment or Delegation. This Contract is personal to each of the Parties. No Party may assign or delegate any rights or obligations hereunder without first obtaining the written consent of the other party hereto.

Severability. If any provision of this Contract shall be declared by any court or competent jurisdiction or arbitrator to be illegal, void, or unenforceable, the other provisions shall not be affected but shall remain in full force and effect.

Insurance. Boretti shall obtain and maintain, all insurance, except professional liability, shall name the Client, its directors, officers, agents, volunteers and employees (if any) as additional insureds and shall provide primary coverage with respect to the Client.

Boretti shall obtain and maintain, at its sole cost and expense, throughout the Term, the following minimum insurance coverage:
A. Workers' Compensation and Employers Liability Insurance: Workers' Compensation Insurance, as required by law with statutory limits. Employers' Liability Insurance of $\$ 1,000,000$ for Bodily Injury by Accident, $\$ 1,000,000$ for Bodily Injury by Disease policy limit, and $\$ 1,000,000$ for Bodily Injury by Disease each employee. Such policy shall have a waiver of subrogation in favor of Client.
B. Commercial General Liability Insurance (CGL): CGL insurance shall be written on the most recent Insurance Services Office (ISO) occurrence form CG 0001 (or a substitute form providing substantially equivalent coverage acceptable to State Fund). Required CGL limits inclusive of those provided by following form excess insurance (or equivalent) are as follows: an each occurrence limit of \$1,000,000 a personal and advertising injury limit of INCLUDED a products-completed operations aggregate limit of INCLUDED, and a general aggregate limit of $\$ 2,000,000$.
C. Business Auto Policy (BAP): The BAP shall be written on the most recent ISO occurrence form CA 0001 covering "any auto" (Symbol 1) (or a substitute form providing substantially equivalent coverage acceptable to Client). Required BAP limits inclusive of those provided by following form excess insurance (or equivalent) are as follows: a combined single limit for bodily injury and property damage of $\$ 1,000,000$ each accident and uninsured motorist and underinsured motorist liability with the minimum limits, if any, required by Law
D. Professional Liability (PL): PL insurance covering loss or damage due to an act, error, omission or professional negligence by Boretti in the course of providing Services under this agreement, with a maximum limit per claim of $\$ 1,000,000$. Such insurance shall be in a form acceptable to Client with a retroactive date no later than the commencement of services and shall continuously maintain such PL coverage for at least one year after the termination of Services.
(signatures contained on next page)

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Please sign and return Contract of Engagement and Confidentiality Agreement / Non-Disclosure Agreement (Exhibit "B") so that we may commence safety services.

BORETTI, INC.

By:


Title: $\qquad$
Date: $\qquad$

CIRA

By: $\qquad$
Print Name: $\qquad$
Title: $\qquad$

Date: $\qquad$

## EXHIBIT A

## INIRODUCTION:

Boretti, Inc. is pleased to submit this proposal to Califomia Intergovemmental Risk Authority (CIRA) to deliver an effective safety service as a Rent-a-Risk Manager designed to deliver safety services that assess safety process and provide supportive services to resolve safety issues and ensure compliance with appropriate safety regulations as discovered.

## SERVICE:

## $>$ Safety Consultation

Provide the following service as part of leading and supporting safety efforts, acting as a resource to the organization and supporting its members as defined: $\mathbf{2 5}$ members for a total of 1000 hours per year.
ㅁ Methodology -
a) Annual Loss Analysis \& Risk Assessment: Performed for each member as part of the first day of service. Includes use of client defined risk assessment document / executive summary indicating key findings and recommendations.
b) Recommendation Implementation: Performed for each member as part of the follow-up to address the findings from the risk assessment and assist the member in implementing the suggested recommendations.
c) Resource \& Support: Subsequent visits would serve to address and resolve recommendations including assistance with any remaining risk assessment findings. Other services provided in consultation with the member include, but not limited:
a. Employee safety training
b. Ergonomic assessments
c. Safety inspections
d. Safety and risk control program development
e. Implementation of online training
f. Implementation of online safety inspection platform (i.e., through SBN)
g. Contract reviews

NOTE: services can include those items outlined in the Master Services Agreement, subject to hour limitations for service to the member with additional fees applicable as identified (i.e., industrial hygiene equipment, lab analysis, etc.).
d) Dedicated Professional: Boretti, Inc. will provide a dedicated professional for the identified 25 members so a relationship can be built to enhance service experience. Boretti, Inc.'s professional will need to learn how to use the online training and safety inspection platform.

## Tmerrame:

Boretti, Inc. will complete all services outlined in this proposal. Scheduling delivery of the service will be discussed with the client upon proposal acceptance. It is understood that service delivery may be as follows:

| Smaller Members | 2-days of service per year |
| :--- | :--- |
| Larger Members | 4-days of service per year |
| Largest Members | 8-days of service per year | Boretti, Inc. will remain flexible and fluid to adjust timeframes for the need of the member.

## EXHIBIT A

INVESTMENT:
Investment for the service outlined in this proposal is as follows: $\$ 125.00$ per hour for 1,000 hours. Boretti, Inc. will also ensure that travel costs do not exceed the budgeted amount of \$15,000.00 per annum.

## Testing Equipment \& Lab Analysis:

If industrial hygiene equipment and/or lab analysis is needed to complete work, equipment rental, media and lab analysis will be charged to the client at cost.

## Travel:

For locations outside of California, the cost of travel (air fare, hotel, rental car and fuel for rental) will be billed to the client at actual cost: Boretti, Inc. does not bill for or pass on the cost of per diem to clients.

## Payment:

Billing will be invoiced monthly.

## Exclusions:

Bilingual - verbal or written trainings, training material or written programs. We can accommodate this need for an additional nominal fee.

NOTE: Fees are effective for 30 days of the date on the cover page of this proposal. Services to commence upon receipt of executed contract.

## CONTACT INFORMATION:

## James Boretti, CSP

CEO/President
Boretti, Inc.
1817 South Woodland Street
Visalia, CA 93277
Phone: 559.679.8659
Fax: 866.423.6089
E-mail: james@borettiinc.com

Debra Dominguez
Administrative Assistant
Boretti, Inc.
1817 South Woodland Street
Visalia, CA 93277
Phone: 559.372.7545
Fax: 866.423.6089
E-mail: debra@borettiinc.com

## EXHIBIT B

## Confidentiality / Non-Disclosure Agreement

This Confidentiality / Non-Disclosure Agreement ("Agreement") is made as of the date of full execution, by and between California Intergovernmental Risk Authority (CIRA)
1525 Response Road, Suite 1, Sacramento, CA 95815 and Boretti, Inc., a Corporation duly organized under the laws of the State of California, and having its principal place of business at $\mathbf{2 4 1 4} \mathbf{N}$. Leila Street, Visalia, CA 93291.

## Recitals:

Each party contemplates disclosing certain of its confidential or proprietary information to the other for the purpose of investigating areas of potential mutual business interests and, if consummated, the implementation and enforcement thereof ("Purpose"). Each party desires to set forth the terms that apply to such confidential information.

Provisions: NOW, THEREFORE, the parties agree as follows:

1. Definition of Confidential Information: Each party ("Disclosing Party") may, either orally, in written form, or otherwise disclose to the other party ("Recipient") or the Recipient may otherwise obtain the Disclosing Party's confidential or proprietary information that is not available from public sources ("Confidential Information") for the Purpose. If any of the following apply to any information, such information shall not be considered as Confidential Information: (i) it is or becomes available to the public through no wrongful act of the Recipient, (ii) it is already in the possession of the Recipient and not subject to any agreement of confidence between the parties, (iii) it is received from a third party without any restriction known to the Recipient for the benefit of the Disclosing Party; or (iv) it is independently developed by the Recipient.
2. Use and Care of Confidential Information: Confidential Information disclosed or obtained hereunder shall only be used by the Recipient for the Purpose, and it shall not be disclosed by the Recipient except to those employees, affiliates, advisors, and consultants of the Recipient who have a need to know and an obligation to treat Confidential Information in accordance with the provisions of this Agreement. The Recipient may disclose the Disclosing Party's Confidential Information pursuant to a requirement of a duly empowered government agency or a court of competent jurisdiction after due notice and an adequate opportunity to intervene is given to the Disclosing Party unless such notice is legally prohibited.
3. Return of Confidential Information: Upon receipt of a written request from the Disclosing Party, the Recipient shall, at the Disclosing Party's direction, either return to the Disclosing Party or destroy all of the Disclosing Party's Confidential Information and so certify in writing.
4. Term: The obligations under Section 2 shall survive throughout the parties' discussions for the Purpose and for a period of five (5) years thereafter; provided, however, that for Confidential Information that constitutes a trade secret, those obligations shall continue until that information no longer constitutes a trade secret under law.
5. No Warranty. The Parties acknowledge that the Confidential Information disclosed is
provided "AS IS" and the Disclosing Party makes no representations or warranties of any kind, express or implied, including without limitation any implied warranty of merchantability or fitness for a particular purpose.
6. Additional Terms: Nothing hereunder shall grant or confer to the Recipient any rights by license or otherwise in any of the Disclosing Party's Confidential Information. Nothing hereunder shall obligate either party to enter into any further agreement or negotiation with the other or to refrain from entering into any agreement or negotiation with any third party. Neither party may assign or otherwise transfer this Agreement, or any of its rights and obligations hereunder, to any third party. This Agreement shall become effective as of the date of full execution, is governed by and subject to the internal laws and the exclusive jurisdiction of the courts of California, constitutes the entire agreement between the parties with respect to its subject matter, supersedes prior or contemporaneous oral or written agreements with respect thereto, and may not be modified except by a written instrument signed by both parties.

AGREED AND ACCEPTED as of the date of full execution.

## BORETTI, INC.

By:


Title: $\qquad$
Date: $\qquad$ February 24, 2021

## CIRA

By: $\qquad$
Print Name: $\qquad$
Title: $\qquad$
Date: $\qquad$

## Managed Services Agreement

This agreement is formalized and negotiated between:

## California Intergovernmental Risk Authority (CIRA)

and

## Office Information Systems (OIS)

This Agreement relates to the scope of the services to be provided by OIS to CIRA, which includes monitoring and Managed Infrastructure Services, and states the terms and conditions related to delivery of those services.

By signing this agreement the responsible parties agree with the service provisioning as specified in this document.

This Agreement is drawn up by and between:

Name : ............................. Name : ..............................

Title $\qquad$ Title

Company : ............................... Company $\qquad$

Signature:
Signature:

Date of Agreement: $\qquad$

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## 1. General

This Agreement defines the IT services and support provided by Office Information Systems to its customer.

In order for Office Information Systems to deliver services and products to CIRA in a timely and effective manner, and to ensure that the service meets or exceeds CIRA's expectations, Office Information Systems and CIRA will jointly create and enter into a monthly Service Agreement. This will enable CIRA and Office Information Systems to:

- Have a clear frame of reference on the agreed service level.
- Have an objective insight into the performance of operations.
- Be assured of a high level of service quality.
- Establish a dialogue through structured Agreement status reports, review meetings and evaluations.
- Define an agreed set of responsibilities and procedures.


## DEFINITIONS

## Customer

- The individual customer receiving services by Office Information Systems is referred to as "customer" throughout this document.


## Office Information Systems

- The individuals comprising Office Information Systems delivering IT services and support are referred to as Office Information Systems throughout this document.


## Service Description

## Managed Infrastructure Services

Managed Infrastructure Services covers several components of CIRA's basic IT infrastructure including server operation, automated system monitoring, firewall operation, ethernet switching, system patch management via ConnectWise, and server data backup as needed.

Managed Infrastructure Services are designed to guarantee uptime, support, and maintenance of existing functional infrastructure. It does not include new initial deployments of Software and Hardware (although new hardware can be added to the managed service contract once deployed). It does not include replacement of hardware components, although the time to research and acquire components is handled at no additional charge. It does not explicitly include support for machines outside of the managed service contract (i.e trying to get a personal/home Machine to function in the business environment), but does cover modifications to firewalls and servers to enable general access by industry supported devices.

## Overall Scope of Work

- Managed Infrastructure Services will include the following components.
- All Microsoft, Sophos, Veeam, vmWare and Adobe patch management for local servers and local workstations as needed.
- 24 hour system logging for all servers and workstations via Labtech/ConnectWise as internet communications permits.
- All server configuration, restoration, software upgrades, Microsoft Software repair, and server troubleshooting.
- Business hour availability on a routine basis.
- Some after-hours availability (1 service call per quarter/4 per year) as well as additional after-hours availability at a fixed rate per hour. Any maintenance that is listed in this scope of work, and drifts into an after-hours time period will not be cause for additional billing. Any regular maintenance that is best done after hours will also not be cause for additional billing.
- Periodic visits as needed.
- Malware Prevention, Repair, and Recovery -- The managed service contract will cover all malware repair and system recovery. In order to minimize the threat of infection, it is expected that CIRA will maintain its anti-virus and anti-malware subscriptions from both Sophos and Sonicwall; as well as any other vendor subscription agreed upon.
- HelpDesk Services

OIS is will be available as CIRA's first tier of IT support for all users covered by this agreement.

- User/Desktop Support Maintenance - This is the provision of services to assist with the troubleshooting and maintenance (patching, updating, restoring performance, cleaning malware, imaging \& re-imaging of disks to streamline building or rebuilding of computers) of hardware, software and operating system problems with computers and similar products. Common and industry standard productivity applications (e.g. Microsoft Office) are within scope, however, specialized, customized or custom built software applications are out of scope.
- Printers - Resolve printer issues if end-user cannot print from computer or mobile device. Supplies for printers/copiers, inventory and Vendor scheduling will be managed by client.
- Mobile Device Management - Configure and support mobile devices to synch with contacts, calendar and email. Resolve application issues and connectivity with Wi-Fi devices.


### 1.1. Duration of agreement

This agreement is in effect on a month-to-month basis commencing on $\qquad$ .
Either party may terminate this agreement at any time by written notice to the other party, which termination shall take effect at the end of the month that is no less than 30 days from the date of the notice.

## CUSTOMER:

## Company

Address :

Representative:
Title :

Phone :

MANAGED SERVICE PROVIDER:

Company : OIS
Address : 7730 Pardee Lane
Oakland, CA 94621

Representative: Richard Ozer
Title : President
Telephone : 510-568-7900

## 2. Legal and Financial Provisions

### 2.1. Legal Aspects

Office Information Systems shall perform the services described in this agreement in a professional manner and in accordance with the best practices of information technology professionals, to the full satisfaction of CIRA. OIS agrees to indemnify, defend, and hold CIRA, its affiliated companies, and all of their respective members and employees harmless from any and all liabilities, costs, claims and causes of action, including but not limited to litigation costs and attorney fees, that any of the indemnified parties may incur in connection with OIS' services under this agreement and/or as a result of either party's misconduct or negligence.

### 2.2. Disaster Recovery

A disaster is an unplanned situation by which the expected downtime of one or more services will exceed defined thresholds and for which the services are disrupted is such a manner that regular recovery procedures are unsuitable.

CIRA and OIS evaluates the situation, and determines whether to trigger the "disaster recovery procedures". CIRA will be the final decision maker to execute any or all recovery options based on the nature of the situation and the recovery options available.

Office Information Systems will inform all involved parties and keep them up-to-date of the progress of restoration of the service level. CIRA is responsible for identifying third party providers that need notification. During the disaster, Office Information Systems cannot guarantee the service levels later defined in this document.

### 2.3. Indemnification

Consultant shall defend, indemnify and hold the California Intergovernmental Risk Authority (CIRA), its officials, officers, employees, volunteers and agents free and harmless from any and all claims, demands, causes of action, costs, expenses, liability, loss, damage or injury, in law or equity, to property or persons, including wrongful death, in any manner which actually or allegedly arise out of or are incident to any alleged acts, omissions, negligence or willful misconduct of Consultant, its officials, officers, employees, agents, subconsultants and subcontractors arising out of or in connection with the performance of the Services, the Project or this Agreement, including without limitation the payment of all consequential damages and attorneys fees and other related costs and expenses, except where caused by the active negligence, sole negligence or willful misconduct of the California Intergovernmental Risk Authority (CIRA), its officials, officers, employees, volunteers and agents.

### 2.4. Costs

This section addresses the costing, accounting, invoicing and payment related to the services mentioned in this agreement.

### 2.4.1. Invoicing

The cost of this agreement will be invoiced to the customer on a monthly basis.

### 2.4.2. Payment

Payments take place according to the standard monthly invoicing practices of Office Information Systems. Time and materials are billed within two weeks of occurrence, and managed services are billed approximately one week in advance of the service month. Terms are Net 30 on all these invoices.

### 2.4.3. Pricing

A. Monthly managed Infrastructure services (Section I) are priced as follows (inventory is adjusted monthly). See attached spreadsheet in Appendix A for details. The numbers here are for illustration only.

| Servers |  | QTY | Total |  |
| :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |
| Remif HP Mini | $\$$ | 75.00 | 1 | $\$$ |
| PARSAC Server | $\$$ | 75.00 | 1 | $\$$ |
| PARSAC Sophos Server | $\$$ | 7.00 | 1 | $\$ 7$ |
|  |  | 7.00 |  |  |
| Workstations |  |  |  |  |
|  | $\$$ | 25.00 | 3 | $\$$ |
| Remif Support and Mgmt | $\$$ | 25.00 | 4 | $\$ 100.00$ |
| PARSAC Support and Mgmt | $\$$ | 5.00 | 4 | $\$$ |
| PARSAC Sophos AV | $\$$ |  |  |  |
|  |  |  |  |  |
| Routing/Switching/Firewall |  |  |  |  |
|  | $\$$ | 10.00 | 1 | $\$$ |
| Remif | $\$$ | 10.00 | 1 | $\$$ |
| PARSAC |  |  |  |  |
|  |  |  | $\$ 372.00$ |  |
| Total Monthly |  |  |  |  |

Hourly services falling outside of the MSA will be billed at OIS's regular rate of $\$ 125 / \mathrm{hr}$.

### 2.4.4. Assignment and Transfer

Neither party may assign this agreement, or transfer, delegate or assign any portion of the work required of it under this agreement, to a third party without the prior written consent of the other party.

### 2.4.5. Confidentiality and non-disclosure

OIS shall hold in strict confidence all information and materials developed or acquired in the course of its services to CIRA, including business, operational, mechanical, technical, and financial data and reports; customer and supplier names; trade secrets; contracts; and all other confidential information of any type. The provisions of this section shall remain binding on OIS and shall survive the completion or termination of this agreement.

## 3. Service Definition and Service Levels

### 3.1. Description

### 3.1.1. Functionality

Office Information Systems offers IT services and support for daily operations as well as for all required network expansion planning and hardware/software application management for our customers. Office Information Systems will ensure the availability and performance levels as defined in this agreement.

Office Information Systems shall provide and/or assist in:

- Continual network uptime during business hours.
- Business hours support for applications and end-users (applications are defined in the overall scope of work
- Four after-hours support incidents per year (i.e one per quarter)
- Network administration and information in a timely and correct manner.

Office Information Systems Information Systems manages the Managed Service Agreement for core business applications including the underlying technical infrastructure and will provide support for that platform to help CIRA to achieve maximum availability and performance.

### 3.1.2. Activities

The following activities are related to the provisioning of Office Information Systems' services and support.

## IT-Components

This paragraph defines the boundaries (technologies) of the service responsibility of Office Information Systems organization, and thus the services described in this agreement.

Office Information Systems responsibility includes the following elements and interfaces:

## Included with Managed Infrastructure

- Network Support
- Sonicwall equipment (firewalls, wireless + mail security devices)
- Network Switches physical or virtual (VMWare)
- Wifi Support
- Ethernet infrastructure troubleshooting
- Hardware Support
- HP and Lenovo or Dell Server equipment
- Support on any workstation convered by this agreement
- Printer communication troubleshooting
- Windows Server OS
- System patches for Servers (workstations by request via Labtech/Connectwise)
- Labtech/Connectwise monitoring
- Respond to networking issues and failures including critical slowdowns, firewall rule changes, and switch configuration changes.
- License management - Any software purchased under OIS those license and renewal dates will be managed by OIS
- Manage and maintain CIRA's Sophos anti-virus subscriptions as well as respond to any malware concerns by end-users.
- Internal and external domain name management
- Provide third party vendor support as Tier 2 support or where the application dictates the responsibility
- New Workstation Deployment (hourly deployment charges waived if machine is purchased through OIS)
- Upgrades (moving from one version of Windows/Linux /Vmware and or firmware upgrades on network equipment ). In place upgrades, where possible, incur no charge and are covered by the MSA.


### 3.1.3. Exclusions

This MSA does not cover service for the following items. However, any of them can be considered special projects and handled outside of this agreement, or OIS can help find an appropriate contractor.

- Printer and copier hardware components and repair.
- Telephony
- Environmental components such as air-conditioning, and electricity.
- Contracting with internet service providers for new service.
- Physical wiring of offices, including wall-plate and termination.
- Research and deployment of video conferencing solutions.
- Training of non-IT personnel


### 3.2. Service Level Breakdown

This paragraph gives an overview of the different agreement-components of the delivered services and the associated target service levels.

### 3.2.1. Definitions

See following table with definitions:

| Item | Definition |
| :--- | :--- |
| Working Day | Monday to Friday (except holidays), 8AM till 5PM. |
| Non-Working Day | Saturday, Sunday and US Holidays (special exceptions made for <br> urgent system down issues and predetermined maintenance <br> windows with customer; see below.) |


| Interactive Service <br> Window | 8:00AM till 5:00PM (local time) on working days. |
| :--- | :--- |
| Service Logging Window | $24 \times 7$ (24 hours, 7 days a week), except during monitoring <br> software maintenance windows (determined as needed). This <br> refers to Labtech/Connectwise logging which is always occurring. |

### 3.2.2. Support

Call management is performed by the Office Information Systems Helpdesk (510-568-7900) or by contacting technicians / support personnel directly via phone or email.

Contact is also available via the Connectwise ticket system.
Calls to the Office Information Systems Helpdesk for assistance can be made by any authorized personnel of the customer.

After hours support is available at OIS' rate of $\$ 125 / \mathrm{hr}$. Occasional critical after-hours support (i.e. two incidents per quarter / 8 per year) will be included at no additional charge. Regular response to service outages extending into an after-hours period will not be cause for incurring additional charges. Simple questions or concerns that are communicated after hours will be addressed as quickly as possible without any penalty.

## Incident Determination and Solving

Incidents that are not immediately resolved by the help desk should be prioritized. Prioritization is based upon the impact upon the business processes and the maximum downtime per failure/incident (in case the whole system is unavailable during working hours).

## Classification of Priority Codes and Targeted Reaction \& Resolution Time

The following table shows the targets of reaction and fault resolution times for each priority level. Escalation is when the next tier of support is called. This may be another vendor, such as Microsoft or HP; or other OIS support personnel (basically taking it beyond a single technician trying to solve the problem):

| Impact <br> Priority Level |  | Reaction time <br> (in hours) * | Max Estimated <br> Resolution time* | Escalation <br> threshold (in hours) |
| :--- | :--- | :--- | :--- | :--- |
| Service not available (all <br> users and functions <br> unavailable). | 1 - Critical | Immediate (30 <br> minute response <br> by return call or <br> email during <br> business hours) | One day | 2 hours |
| Significant degradation of <br> service (large number of <br> users or business critical <br> functions affected) | 2 - Urgent/High | Immediate (60 <br> minute response <br> by return call or <br> email during <br> business hours) | one day | 3 hours |
| Limited degradation of <br> service (limited number of <br> users or functions affected, <br> business process can <br> continue). | 3 - Medium | within 2 hours | one day | 4 hours |
| Small service degradation <br> (business process can <br> continue, one user <br> affected). | 4 - Low |  | within 2 hours | 16 hours |

## Escalation of the incidents

Incidents will be escalated in two ways:

- Inform additional Office Information Systems managers about the progress.
- Transfer incident to second-line or third-line support (i.e. vendor/manufacturer).

If an incident cannot be resolved immediately the incident will be dispatched to the most available or suitable technician, who may escalate to third-line support such as the hardware manufacturer, etc. Any costs billed by a third party as part of an escalation process (i.e. Microsoft Support, Accounting Support, etc.) is the responsibility of CIRA. There is no additional charge for OIS time when managing or monitoring such an incident.

# MacLeod Watts 

February 18, 2021

Ms. Amy Northam, General Manager CIRA
Kin Ing, ARM, General Manager PARSAC
On Behalf of the California Intergovernmental Risk Authority

Re: Engagement Letter for CIRA OPEB Actuarial Valuation Services

Dear Ms. Northam and Mr. Ing:
This letter is intended to serve as our proposal for MacLeod Watts's to complete new actuarial valuations of other postemployment benefits (OPEB) plans of the California Intergovernmental Risk Authority (CIRA). The valuation results will be applied to support ongoing plan funding and accounting requirements for financial reporting under GASB 75.

It is our understanding that CIRA is being formed from the merger of two other agencies (REMIF and PARSAC) and will begin operations on July 1, 2021. There will be two separate retiree health benefit programs, each with a separate corresponding OPEB trust.

- Current REMIF OPEB program retirees (14 members) will remain in this program with no change planned to their lifetime benefits. Benefits for these retirees are expected to be paid from the REMIF OPEB Trust.
- Current PARSAC employees and retirees and 3 current REMIF employees will become participants in the CIRA OPEB program. Benefits under this program are expected to mirror those currently provided by PARSAC, with the exceptions that: (1) the medical coverage will be transitioned away from CalPERS (PEMHCA) to SDRMA effective January 1, 2022 and (2) the CIRA OPEB program may be closed to new employees hired after July 1, 2021.

We are already engaged to prepare the GASB 75 reports for REMIF and PARSAC for their individual fiscal years ending June 30, 2021. First work under this engagement letter would be for the new valuations described on the following page.

Please let us know if you have any questions about the projects, timelines or fees quoted. We appreciate the opportunity to continue providing actuarial and consulting services to CIRA.

Cordially,

Cathuine L. Macleod<br>Catherine MacLeod, FSA, FCA, EA, MAAA<br>Principal \& Consulting Actuary

Enclosure

## Proposed Projects and Fees

July 1, 2021 Actuarial Valuations, ADCs and GASB 75 Report for FYE June 30, 2022
New biennial valuations will be prepared for:

- Closed plan covering current REMIF retirees: Subject to approval by CIRA, we propose a June 30,2022 valuation date and a measurement date of June 30, 2022. No additional funding to this plan is expected to be needed and, as such, the focus of the valuation will be on providing the information needed for GASB 75 financial reporting of these liabilities as of June 30, 2022.
$\$ 4,000$
- CIRA plan covering active employees and prior PARSAC retirees: A separate valuation will be prepared for these employees and retirees, backed by the assets in the current CERBT OPEB account. This valuation will remeasure plan liabilities anddevelop Actuarially Determined Contributions for plan funding (if needed) for 3 fiscal years. We will also prepare the GASB 75 exhibits and disclosures relating to this program for FYE June 30, 2022.
$\$ 6,000$
Fees for the projects described above include conference calls, as needed, to review the valuation results and preparation of required CERBT actuarial forms.


## FYE June 30, 2023 GASB 75 Reports

We assume no material changes in plan population or benefits between the measurement date for each of the two OPEB programs. If there are changes, then a new valuation may be required. These reports will be issued after June 2023 when all needed information is available.

- Closed REMIF plan
\$1,400
- CIRA plan
\$1,600
Out-of-Scope Services: Examples of work beyond scope of the projects described above that will, if needed, result in additional fees:

1) in person meetings; 2) auditor assistance in excess of 1 hour per plan; 3) consulting or actuarial projections relating to possible plan redesign, experience studies or long-term forecasting.

There may also be transitional accounting-related issues relating to moving members from REMIF to CIRA's plan and in related consulting for these two programs. We would recommend allotting up to $\$ 2,000$ for possible out-of-scope consulting fees during this transition period.

Should out-of-scope services be needed, our 2021 hourly rates are:

| Consultant | 2021 Rate per Hour |
| :--- | :---: |
| Senior Actuarial Consultants | $\$ 370$ |
| Actuarial Consultants | $290-340$ |
| Actuarial Analysts | $155-260$ |
| Administrative Staff | $105-130$ |

If the above fees and proposed timelines are acceptable to CIRA, please sign and date below and return a copy to us by email.

Accepted: $\qquad$

Date: $\qquad$

Date: $\qquad$

| Member |  | Option 1 Total Funding (B) | Change <br> (C) | Prior <br> Total <br> Funding <br> (D) | Option 2a Total Funding (E) | Change <br> (F) | Prior <br> Total <br> Funding <br> (G) | Option 2b Total Funding (H) | Change <br> (I) |  | Option 3a Total Funding (K) | Change <br> (L) | Prior <br> Total <br> Funding <br> (M) | Option 3b Total Funding (N) | Change <br> (0) | Prior <br> Total <br> Funding <br> (M) | Uncapped Total Funding (N) | Change <br> (0) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Amador City | \$8,343 | \$8,214 | -2\% | \$8,343 | \$8,214 | -2\% | \$8,343 | \$8,214 | -2\% | \$8,343 | \$8,214 | -2\% | \$8,343 | \$8,214 | -2\% | \$8,343 | \$8,214 | -2\% |
| Arcata | 354,186 | 567,404 | 60\% | 354,186 | 493,547 | 39\% | 354,186 | 500,044 | 41\% | 354,186 | 424,070 | 20\% | 354,186 | 437,483 | 24\% | 354,186 | 621,284 | 75\% |
| Avalon | 271,051 | 316,117 | 17\% | 271,051 | 342,314 | 26\% | 271,051 | 365,071 | 35\% | 271,051 | 372,989 | 38\% | 271,051 | 395,067 | 46\% | 271,051 | 307,974 | 14\% |
| Belvedere | 122,627 | 129,520 | 6\% | 122,627 | 142,232 | 16\% | 122,627 | 146,187 | 19\% | 122,627 | 142,472 | 16\% | 122,627 | 145,923 | 19\% | 122,627 | 126,787 | 3\% |
| Blue Lake | 30,970 | 26,708 | -14\% | 30,970 | 29,096 | -6\% | 30,970 | 30,660 | -1\% | 30,970 | 30,410 | -2\% | 30,970 | 31,743 | 2\% | 30,970 | 26,086 | -16\% |
| California City | 387,917 | 268,531 | -31\% | 387,917 | 296,696 | -24\% | 387,917 | 296,272 | -24\% | 387,917 | 336,240 | -13\% | 387,917 | 331,467 | -15\% | 387,917 | 256,749 | -34\% |
| Calimesa | 125,414 | 106,492 | -15\% | 125,414 | 116,270 | -7\% | 125,414 | 121,633 | -3\% | 125,414 | 120,010 | -4\% | 125,414 | 124,558 | -1\% | 125,414 | 104,070 | -17\% |
| Calistoga | 295,943 | 248,874 | -16\% | 295,943 | 273,771 | -7\% | 295,943 | 281,804 | -5\% | 295,943 | 270,915 | -8\% | 295,943 | 273,760 | -7\% | 295,943 | 243,950 | -18\% |
| Citrus Heights | 702,643 | 681,267 | -3\% | 702,643 | 760,784 | 8\% | 702,643 | 735,667 | 5\% | 702,643 | 745,817 | 6\% | 702,643 | 728,913 | 4\% | 702,643 | 669,502 | -5\% |
| Clearlake | 196,338 | 200,690 | 2\% | 196,338 | 220,960 | 13\% | 196,338 | 225,746 | 15\% | 196,338 | 226,870 | 16\% | 196,338 | 227,778 | 16\% | 196,338 | 196,652 | \% |
| Cloverdale | 201,286 | 244,978 | 22\% | 201,286 | 213,128 | 6\% | 201,286 | 215,854 | 7\% | 201,286 | 191,667 | -5\% | 201,286 | 197,729 | -2\% | 201,286 | 239,018 | 19\% |
| Coalinga | 301,142 | 331,672 | 10\% | 301,142 | 362,759 | 20\% | 301,142 | 377,170 | 25\% | 301,142 | 391,318 | 30\% | 301,142 | 399,343 | 33\% | 301,142 | 324,259 | 8\% |
| Cotati | 150,586 | 238,943 | 59\% | 150,586 | 208,658 | 39\% | 150,586 | 209,471 | 39\% | 150,586 | 185,137 | 23\% | 150,586 | 190,993 | 27\% | 150,586 | 315,137 | 109\% |
| Eureka | 841,850 | 756,736 | -10\% | 841,850 | 644,280 | -23\% | 841,850 | 683,610 | -19\% | 841,850 | 720,919 | -14\% | 841,850 | 743,721 | -12\% | 841,850 | 736,309 | -13\% |
| Ferndale | 40,599 | 36,407 | -10\% | 40,599 | 39,696 | -2\% | 40,599 | 41,820 | 3\% | 40,599 | 40,568 | 0\% | 40,599 | 42,297 | 4\% | 40,599 | 35,578 | -12\% |
| Fort Bragg | 153,210 | 192,198 | 25\% | 153,210 | 163,582 | 7\% | 153,210 | 173,261 | 13\% | 153,210 | 185,846 | 21\% | 153,210 | 191,724 | 25\% | 153,210 | 213,662 | 39\% |
| Fortuna | 187,209 | 256,976 | 37\% | 187,209 | 218,715 | 17\% | 187,209 | 231,656 | 24\% | 187,209 | 227,961 | 22\% | 187,209 | 235,171 | 26\% | 187,209 | 275,432 | 47\% |
| Grass Valley | 545,229 | 433,070 | -21\% | 545,229 | 468,791 | -14\% | 545,229 | 500,422 | -8\% | 545,229 | 481,205 | -12\% | 545,229 | 518,980 | -5\% | 545,229 | 421,863 | -23\% |
| Healdsburg | 488,052 | 876,492 | 80\% | 488,052 | 749,654 | 54\% | 488,052 | 786,181 | 61\% | 488,052 | 603,233 | 24\% | 488,052 | 622,312 | 28\% | 488,052 | 1,025,009 | 110\% |
| Highland | 201,974 | 165,333 | -18\% | 201,974 | 180,143 | -11\% | 201,974 | 188,753 | -7\% | 201,974 | 183,929 | -9\% | 201,974 | 193,839 | -4\% | 201,974 | 148,518 | -26\% |
| Lakeport | 224,028 | 221,406 | -1\% | 224,028 | 193,892 | -13\% | 224,028 | 193,682 | -14\% | 224,028 | 280,779 | 25\% | 224,028 | 289,659 | 29\% | 224,028 | 220,347 | -2\% |
| Menifee | 913,092 | 688,166 | -25\% | 913,092 | 758,890 | -17\% | 913,092 | 754,400 | -17\% | 913,092 | 787,692 | -14\% | 913,092 | 804,410 | -12\% | 913,092 | 656,545 | -28\% |
| Nevada City | 141,751 | 128,622 | -9\% | 141,751 | 140,969 | -1\% | 141,751 | 145,771 | 3\% | 141,751 | 139,142 | -2\% | 141,751 | 144,046 | 2\% | 141,751 | 125,836 | -11\% |
| Placentia | 404,760 | 510,880 | 26\% | 404,760 | 572,615 | 41\% | 404,760 | 547,591 | 35\% | 404,760 | 545,712 | 35\% | 404,760 | 527,162 | 30\% | 404,760 | 502,648 | 24\% |
| Placerville | 385,239 | 375,207 | -3\% | 385,239 | 409,574 | 6\% | 385,239 | 424,687 | 10\% | 385,239 | 423,630 | 10\% | 385,239 | 444,525 | 15\% | 385,239 | 360,738 | -6\% |
| Plymouth | 35,954 | 34,984 | -3\% | 35,954 | 38,111 | 6\% | 35,954 | 40,159 | 12\% | 35,954 | 39,762 | 11\% | 35,954 | 41,506 | 15\% | 35,954 | 34,168 | -5\% |
| Point Arena | 26,894 | 21,216 | -21\% | 26,894 | 22,845 | -15\% | 26,894 | 24,789 | -8\% | 26,894 | 24,755 | -8\% | 26,894 | 26,819 | 0\% | 26,894 | 21,533 | -20\% |
| Rancho Cucamonga | 671,898 | 594,418 | -12\% | 671,898 | 691,217 | 3\% | 671,898 | 576,192 | -14\% | 671,898 | 676,242 | 1\% | 671,898 | 570,239 | -15\% | 671,898 | 590,500 | -12\% |
| Rancho Cucamonga FD | 406,874 | 338,236 | -17\% | 406,874 | 388,870 | -4\% | 406,874 | 344,372 | -15\% | 406,874 | 342,657 | -16\% | 406,874 | 295,762 | -27\% | 406,874 | 337,002 | -17\% |
| Rancho Santa Margarita | 138,138 | 120,442 | -13\% | 138,138 | 132,015 | -4\% | 138,138 | 136,713 | -1\% | 138,138 | 133,799 | -3\% | 138,138 | 137,237 | -1\% | 138,138 | 117,862 | -15\% |
| Rohnert Park | 868,861 | 1,427,626 | 64\% | 868,861 | 1,255,444 | 44\% | 868,861 | 1,245,770 | 43\% | 868,861 | 1,044,318 | 20\% | 868,861 | 1,077,348 | 24\% | 868,861 | 1,390,038 | 60\% |
| San Juan Bautista | 49,107 | 43,101 | -12\% | 49,107 | 46,995 | -4\% | 49,107 | 49,410 | 1\% | 49,107 | 46,989 | -4\% | 49,107 | 49,389 | 1\% | 49,107 | 42,109 | -14\% |
| Sebastopol | 348,027 | 404,444 | 16\% | 348,027 | 358,276 | 3\% | 348,027 | 349,123 | 0\% | 348,027 | 387,215 | 11\% | 348,027 | 399,462 | 15\% | 348,027 | 393,712 | 13\% |
| Sierra Madre | 0 | 388,274 | 0\% | 0 | 419,765 | 0\% | 0 | 449,029 | 0\% | 0 | 388,274 | 0\% | 0 | 388,274 | 0\% | 0 | 329,899 | 0\% |
| Sonoma | 252,671 | 179,781 | -29\% | 252,671 | 155,107 | -39\% | 252,671 | 159,810 | -37\% | 252,671 | 318,315 | 26\% | 252,671 | 328,383 | 30\% | 252,671 | 187,648 | -26\% |
| South Lake Tahoe | 468,708 | 530,714 | 13\% | 468,708 | 603,997 | 29\% | 468,708 | 551,108 | 18\% | 468,708 | 563,469 | 20\% | 468,708 | 508,876 | 9\% | 468,708 | 524,731 | 12\% |
| St. Helena | 242,935 | 340,384 | 40\% | 242,935 | 287,448 | 18\% | 242,935 | 309,602 | 27\% | 242,935 | 238,219 | -2\% | 242,935 | 245,754 | 1\% | 242,935 | 333,349 | 37\% |
| Tehama | 4,098 | 3,575 | -13\% | 4,098 | 3,889 | -5\% | 4,098 | 4,114 | 0\% | 4,098 | 4,689 | 14\% | 4,098 | 4,868 | 19\% | 4,098 | 3,529 | -14\% |
| Trinidad | 21,711 | 18,676 | -14\% | 21,711 | 20,357 | -6\% | 21,711 | 21,420 | -1\% | 21,711 | 21,445 | -1\% | 21,711 | 22,320 | 3\% | 21,711 | 18,244 | -16\% |
| Truckee | 424,740 | 436,598 | 3\% | 424,740 | 484,556 | 14\% | 424,740 | 482,978 | 14\% | 424,740 | 414,617 | -2\% | 424,740 | 403,300 | -5\% | 424,740 | 428,829 |  |
| Twentynine Palms | 237,697 | 173,342 | -27\% | 237,697 | 186,844 | -21\% | 237,697 | 202,402 | -15\% | 237,697 | 199,230 | -16\% | 237,697 | 215,100 | -10\% | 237,697 | 159,816 | -33\% |
| Ukiah | 506,753 | 842,876 | 66\% | 506,753 | 704,906 | 39\% | 506,753 | 775,390 | 53\% | 506,753 | 592,401 | 17\% | 506,753 | 611,138 | 21\% | 506,753 | 826,098 | $63 \%$ |
| Watsonville | 803,355 | 835,249 | 4\% | 803,355 | 963,377 | 20\% | 803,355 | 826,303 | 3\% | 803,355 | 1,014,757 | 26\% | 803,355 | 881,376 | 10\% | 803,355 | 827,676 | 3\% |
| Wheatland | 97,331 | 89,921 | -8\% | 97,331 | 98,072 | 1\% | 97,331 | 103,243 | 6\% | 97,331 | 99,532 | 2\% | 97,331 | 103,680 | 7\% | 97,331 | 87,882 | -10\% |
| Wildoma | 105,797 | 77,964 | -26\% | 105,797 | 84,837 | -20\% | 105,797 | 89,652 | -15\% | 105,797 | 85,745 | -19\% | 105,797 | 90,524 | -14\% | 105,797 | 76,116 | -28\% |
| Willits | 333,224 | 244,114 | -27\% | 333,224 | 216,068 | -35\% | 333,224 | 211,113 | -37\% | 333,224 | 306,541 | -8\% | 333,224 | 316,237 | -5\% | 333,224 | 237,600 | -29\% |
| Windsor | 487,261 | 512,452 | 5\% | 487,261 | 440,358 | -10\%. | 487,261 | 457,851 | -6\% | 487,261 | 596,440 | 22\% | 487,261 | 615,304 | 26\% | 487,261 | 551,852 | 13\% |
| Yountville | 191,836 | 178,110 | -7\% | 191,836 | 195,295 | 2\% | 191,836 | 202,057 | 5\% | 191,836 | 203,619 | 6\% | 191,836 | 207,035 | 8\% | 191,836 | 174,317 | -9\% |
| Yucaipa | 299,006 | 243,392 | -19\% | 299,006 | 266,175 | -11\% | 299,006 | 274,571 | -8\% | 299,006 | 265,513 | -11\% | 299,006 | 278,716 | -7\% | 299,006 | 237,700 | -21\% |
| Yucca Valley | 163,647 | 165,255 | 1\% | 163,647 | 181,988 | 11\% | 163,647 | 183,246 | 12\% | 163,647 | 180,755 | 10\% | 163,647 | 186,581 | \% | 163,647 | 161,667 | \% |
| All Current Members | \$14,861,962 | \$16,256,043 | 9\% | \$14,861,962 | \$16,256,043 | 9\% | \$14,861,962 | \$16,256,043 | 9\% | \$14,861,962 | \$16,256,043 | 9\% | \$14,861,962 | \$16,256,043 | 9\% | \$14,861,962 | \$16,256,043 | 9\% |
| REMIF | 5,640,139 | 7,306,808 | 30\% | 5,640,139 | 6,303,062 | 12\% | 5,640,139 | 6,502,417 | 15\% | 5,640,139 | 6,303,062 | 12\% | 5,640,139 | 6,502,417 | 15\% | 5,640,139 | 7,566,496 | 34\% |
|  |  | Minimum | -29\% |  | Minimum | -39\% |  | Minimum | -37\% |  | Minimum | -14\% |  | Minimum | -12\% |  | Minimum | -29\% |
|  |  | Maximum | 80\% |  | Maximum | 54\% |  | Maximum | 61\% |  | Maximum | 26\% |  | Maximum | 30\% |  | Maximum | 110\% |
| PARSAC | 9,221,823 | 8,949,235 | -3\% | 9,221,823 | 9,952,981 | 8\% | 9,221,823 | 9,753,626 | 6\% | 9,221,823 | 9,952,981 | 8\% | 9,221,823 | 9,753,626 | 6\% | 9,221,823 | 8,689,548 | -6\% |
|  |  | Minimum | -31\% |  | Minimum | -24\% |  | Minimum | -24\% |  | Minimum | -19\% |  | Minimum | -27\% |  | Minimum | -34\% |
|  |  | Maximum | 26\% |  | Maximum | 41\% |  | Maximum | 35\% |  | Maximum | 38\% |  | Maximum | 46\% |  | Maximum | 24\% |


[^0]:    * Enrollment setback 2 months

[^1]:    ${ }^{1}$ This 18.5 cent rate does not include either Cyber or Pollution coverages offered through separate PRISM programs, but included in this analysis.
    ${ }^{2}$ This 16.75 cent rate did include Cyber and Pollution, but the cost for the prior year was a nominal impact. The 18.5 cent PRISM rate does not include these two coverage, and their cost is increasing significantly next year.

[^2]:    ${ }^{3}$ For the purposes of this discussion, we consider the CJPRMA program as an APIP program. If CIRA were to make the decision to join CJPRMA for excess liability early enough, then CIRA could also consider that hybrid program (that has higher deductibles), and these higher deductibles would require that CIRA create a risk sharing layer to provide members with lower $(\$ 10,000)$ deductible attachments.

[^3]:    (D) is designed to have a maximum 0.750 and a minimum of 0.100
    (J) Modifier is capped at $+/-15 \% .(\mathrm{J})=(\mathrm{I}) /(\mathrm{H})-1$.

[^4]:    （D）is designed to have a maximum 0.750 and a minimum of 0.100
    （I）Modifier is capped at $+/-25 \% .(\mathrm{J})=(\mathrm{I}) /(\mathrm{H})-1$ ． Fire Class Only factor is 1.40 ．

