

1750 Creekside Oaks Drive, Suite 200, Sacramento, CA 95833 (800) 541-4591 Fax (916) 244-1199 https://www.planjpa.org/

## SPECIAL BOARD OF DIRECTORS MEETING AGENDA

Thursday, March 28, 2024 10:00 a.m.

**DoubleTree Hotel San Francisco Airport** 835 Airport Blvd Burlingame, CA 94010

In compliance with the Americans with Disabilities Act, if you need a disability-related modification or accommodation to participate in this meeting, please contact Katie Sullivan at (916) 244-1164 or (916) 244-1199 (fax). Requests must be made as early as possible and at least one full business day before the start of the meeting.

Documents and materials relating to an open session agenda item that are provided to the Pooled Liability Assurance Network (PLAN) JPA Board of Directors less than 72 hours prior to a regular meeting will be available for public inspection at 1750 Creekside Oaks Dr., Suite 200, Sacramento, CA 95833.

#### CALL TO ORDER 1. Page

#### 2. **INTRODUCTIONS**

#### 3. **APPROVAL OF AGENDA AS POSTED (OR AMENDED)**

- 4. PUBLIC COMMENTS - The Public may submit any questions in advance of the meeting by contacting Katie Sullivan at: katie.sullivan@sedgwick.com. This time is reserved for members of the public to address the Board relative to matters of the Board of Directors not on the agenda. No action may be taken on non-agenda items unless authorized by law. Comments will be limited to five minutes per person and twenty minutes in total.
- 5. **CONSENT CALENDAR** If a Board Member would like to discuss any item listed, it may be pulled from the Consent Calendar.
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\*A. PLAN JPA Strategic Plan

Recommendation: Staff recommends the Board of Directors approve the Consent Calendar.

#### Page 6. GENERAL MANAGER's REPORT

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\*A. Report from PLAN JPA's General Manager Recommendation: Staff recommends the Board of Directors provide direction in the case of expanded inverse condemnation coverage language to be proposed at the CARMA Board of Directors meeting.

## 7. APPOINTMENTS

A. Consideration of Appointment to Executive Committee and PLAN JPA Treasurer

Recommendation: Staff recommends the Board of Directors appoint a Director to fill the vacancy on the Executive Committee and as PLAN JPA Treasurer, effective March 28, 2024.

#### 8. CONTRACTS

\*A. Consideration of Ad Hoc Committee for Third-Party Administration Request for Proposal Process

Recommendation: Staff recommends the Board of Directors appoint an Ad Hoc Committee for the Third-Party Administration Request for Proposal Process.

## 9. CLOSED SESSION

- A. Pursuant to Government Code Section 54956.95(a), the Committee will hold a closed session to discuss the following claims:
  - Karoshi v. City of Campbell
  - Huynh v. City of Half Moon Bay
  - Diermier v. City of Milpitas
  - Bhatnagar v. City of Milpitas
  - 4A2301LFLMS-0001 Town of Hillsborough
- B. Pursuant to Government Code Section 54957.1, the Committee will report in open session any reportable action taken in closed session.

#### **10. STATE OF THE MARKET**

\*A. State of the Market Presentation *Recommendation: None.* 

## 11. ACTUARIAL UPDATE FOR THE GENERAL LIABILITY AND PROPERTY PROGRAMS

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\*A. Actuarial Update for the General Liability and Property Programs *Recommendation: None.* 

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<sup>\*</sup> Reference materials attached with staff report.

## Page 12. FINANCIAL MATTERS

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# \*A. Review of the PLAN JPA 2024/25 Preliminary Operating Budget *Recommendation: None.*

## **13. CLOSING COMMENTS**

This time is reserved for comments by Board members and/or staff and to identify matters for future Board business.

- A. Board of Directors
- B. Staff

## 14. ADJOURNMENT

## **NOTICES:**

- ➤The next Executive Committee meeting will be held on April 25, 2024, at 9:30am, via Zoom Videoconference.
- ➤The next Board of Directors meeting will be held on June 20, 2024, at 9:30am, via Zoom Videoconference.

<sup>\*</sup> Reference materials attached with staff report.

March 28, 2024

Agenda Item 5.A.

## CONSENT CALENDAR

#### SUBJECT: Consent Calendar

### **BACKGROUND AND HISTORY:**

The Consent Calendar consists of items that require approval or acceptance but are selfexplanatory and require no discussion. If a Board Member would like to discuss any item listed, it may be pulled from the Consent Calendar.

#### **<u>RECOMMENDATION</u>**:

Staff recommend the Board of Directors approve the Consent Calendar.

### **<u>REFERENCE MATERIALS ATTACHED</u>**:

A. PLAN JPA Strategic Plan

# Strategic Plan – Ideas in Motion



D. Eric Dahlen, General Manager Pooled Liability Assurance Network

PLAN JPA,

During the last strategic planning session held in November 2023, the board engaged in a robust planning opportunity that allowed for open commentary, small team collaboration, and facilitated discussion regarding the pool's status, outlook, and financial strength. The board spoke with a unified voice and addressed issues such as potential complacency, looming changes that have not been identified, and the concepts of proactive adjustments to current practices.

As a result of hearing from PLAN's key strategic partners (insurance broker, actuarial, financial auditor, third party administrator, and loss control provider) the Board presented active commentary and contributed ideas to develop this multi-year plan that will serve as a guideline of activities to implement and reach the pool's goals. Moving forward, staff will present meeting agendas for committees and the full board that reflect the applicable strategic initiatives to be met for each presented item.

Each year, typically in the late fall, PLAN will hold its annual meeting wherein a complete review of the current strategic plan will be presented, including initiative updates, status of the pool as it relates to the industry and marketplace, and suggestions for plan alterations to meet challenges and/or opportunities that have presented themselves along the way.

It is with great pleasure that this plan has been put together and now presented to the Board of the Pooled Liability Assurance Network.

Sincerely,

Del Del

D. Eric Dahlen, ARM General Manager, PLAN

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## Initiative 1. GOVERNANCE

## 1.1 Training Programs – Claims Handling

**Description:** Create programs and how-to-videos that support and educate the membership through initial learning and sustained reference. This can be especially beneficial through periods of high turnover, in addition to revisiting why the pool's members no longer pursue commercial insurance coverages as a method of financing their risks.

**Objective:** Develop thorough and detailed information sharing content regarding the claims management process from the time a claim is received by the member to the point of closure. The entire process will include the member's initial response, early settlement strategies, litigation, and closure.

	<b>Recommended Actions:</b>	Responsibility:	Deadlines:	Status:
1.	Investigation of all current	Admin		
	content	Lit. Mgmt.		
2.	Creation of program outline,			
	needed resources, loss run	Lit. Mgmt.		
	access, etc.			
3.	Develop process outline for	Lit. Mgmt.		
	claims handling	TPA		
4.	Determine best persons to			
	deliver training through	Admin		
	PLAN's Town Hall series			

Governance Impact:	Yes 🗆	No 🖂	Unknown 🗆
Fiscal Impact:	Yes 🗆	No 🖂	Unknown 🗆

## 1.2 Training Programs – Lessons Learned and Best Practices

**Description:** A well-stocked and designed library of information regarding the industry's best practices pertaining to loss control, access to past training webinars, and trending/emerging trends can serve the membership in a proactive manner.

**Objective:** Develop a process by which members, staff, and valued partners contribute to the success of the JPA through the writing of "white papers" with lessons learned and best practices.

	<b>Recommended Actions:</b>	Responsibility:	Deadlines:	Status:
	Determine through survey method the most sought-after lessons learned regarding JPA internal practices Conduct outreach to claims adjusters, defense attorneys, brokers, and excess insurance underwriters for content and resources	Admin Risk Control Lit. Mgmt. Admin		
3.	Develop format, distribution, and library access for members	Admin		
4.	Develop feedback method for members	Admin		

Governance Impact: Yes □ No ⊠

Unknown 🗆

Fiscal Impact:

Yes 🗆

No 🖂

Unknown 🗆

## 1.3 Training Programs – Member Orientation

**Description:** Enhance the programs and delivery methods to educate member representatives, vendor support personnel, and members' elected officials including other members or the general public of their communities more efficiently.

**Objective:** Develop Town hall style webinar series that addresses JPA operations, structure, and offerings.

	Recommended Actions:	Responsibility:	Deadlines:	Status:
1.	Encourage all Board members and other appropriate agency personnel to attend training that identifies their roles and responsibilities pertaining to the JPA	Staff Board		
2.	Refine new Board member orientations to be more efficient as well as encouraging the attendance of 1-2 Executive Committee meetings	Staff Board		
3.	Meet with Board representative, city/town manager and/or council to outline goals of the programs and what is necessary to mitigate member losses	Staff		

Governance Impact:	Yes 🗆	No 🖂	Unknown $\Box$
Fiscal Impact:	Yes 🗆	No 🖂	Unknown 🗆

## Initiative 2. JPA FINANCIAL STABILITY AND SUSTAINABILITY

## 2.1 Coverages – Primary / Excess Pooling, and Excess Policies

**Description:** Detailed explanation of the types and amounts of coverages afforded to each member through their association with PLAN; including individual member's Self-Insured Retentions, and the various excess components of the coverage tower.

**Objective:** Develop an ongoing member education program on the topic of JPA coverages and offerings.

<b>Recommended Actions:</b>	Responsibility:	Deadlines:	Status:
<ol> <li>Develop outline of coverage tower as it relates to each member</li> </ol>	Admin Broker		
2. In-depth review of PLAN's memorandum of coverage	Admin Cov. Counsel Lit. Mgmt.		
3. Review of excess MOCs and coverage documents of excess policies	Admin Cov. Counsel Lit. Mgmt.		

Governance Impact:	Yes 🗆	No 🖂	Unknown 🗆
Fiscal Impact:	Yes 🖂	No 🗆	Unknown 🗆

## 2.2 Coverages – SIR Setting and Reserving Policy

**Description:** The JPA's current financial liquidity and stability are key focus points regarding the strength and sustainability of the pool. As such, individual retentions and claims related reserves reflect the "skin in the game" throughout the claims settling process. In addition, the self-insured retentions are designed to be appropriate for the size entity as well as reflective of the frequency and severity of the losses experienced.

**Objective:** To develop a sound evaluative, equitable, and sustainable process by which the SIRs for the member reflects the true represented risk.

Recommended Actions:	Responsibility:	Deadlines:	Status:
<ol> <li>Develop and implement risk assessment strategy for calculating SIR for current and potential members – may include implementation of member level loss ratio rating system</li> <li>Complete a pool wide analysis of SIR determination based on % of payroll vs. %</li> </ol>	Admin Actuary Finance Admin Actuary Finance		
of total population       3. Reserving Policy	Admin Finance Claims?		

Governance Impact:	Yes 🗆	No $\Box$	Unknown 🖂
Fiscal Impact:	Yes 🗵	No $\Box$	Unknown 🗆

## 2.3 Coverages – Funding Methodologies

**Description:** The funding of the pool demonstrates the overall fiscal well-being of the JPA as well as the annual costs that are equitably shared amongst its members. As with any other endeavor, the pool requires financial resources to conduct business. A portion of those resources should be dedicated to developing unreserved surplus funds to be used for supplemental and other non-recurring costs to the pool.

**Objective:** Increase the strength of the pool through the development of funding methodologies and strategies to meet the overall objectives of the JPA as well as enhance the attractiveness of the pool to potential new members.

	Recommended Actions:	Responsibility:	Deadlines:	Status:
1.	Review the top 5 JPA's, geographically near PLAN,	Finance		
	regarding top to bottom			
	funding methodologies, etc.			
2.	Compare current PLAN practice with that of	Finance/Admin		
	professional organizations			
	such as AGRiP and CAJPA			
3.	Identify historical reasons for	Finance/Admin		
	contribution increases (i.e.	1 11111100/11011111		
	experience, higher coverage,			
	higher premiums, etc.)			
4.	Development of a plan to	Finance		
	increase confidence level	1 manee		
	funding to the actuarial and			
	accreditation recommended			
	levels			
5.	New member evaluation/risk			
	assessment			

Governance Impact:	Yes 🗆	No $\Box$	Unknown 🖂
Fiscal Impact:	Yes 🖂	No $\Box$	Unknown 🗆

## **Initiative 3. MEMBER SERVICES**

#### 3.1 Member Outreach

**Description:** An ongoing opportunity to communicate with each of the members through positively developing the business relationships throughout the JPA.

**Objective:** To develop an ongoing member education program on the topic of JPA coverages and offerings.

	<b>Recommended Actions:</b>	Responsibility:	Deadlines:	Status:
1.	Initiate pro-active communications with each member based on staff evaluations of statuses	Admin		
2.	Create individualized risk education, assessment, and mitigation plans	Admin Loss Control		
3.	Development of a Risk Management Coalition	Admin Loss Control		
4.	Explore and develop relationship with colleges/universities with risk management and insurance education programs	Admin Loss Control		

Governance Impact:	Yes 🗆	No 🖂
Fiscal Impact:	Yes 🗆	No 🖂

Unknown 🗆

Fiscal Impact:

Unknown 🗆

## 3.2 Member Outreach – Training and Educational Programs

**Description:** Training and educational programs serve as one of the most useful services a JPA can offer its membership.

**Objective:** Develop resources from either internal or external sources that directly support member safety, risk management and other appropriate topics such as American with Disabilities Act, Law enforcement facility liability, Land us and zoning loss control, Park and recreation safety and liability, public health services liability, Open meeting laws, and Waste management liability.

Governance Impact:	Yes 🗆	No 🖂	Unknown 🗆
Fiscal Impact:	Yes 🗆	No 🗆	Unknown 🛛

## 3.2 Member Outreach – Comprehensive Operational Review

**Description:** Staff and/or service providers should serve as the pool's primary facilitators of the JPA's comprehensive risk management and transfer opportunities.

**Objective:** Conduct comprehensive operational reviews of each member to identify loss exposures followed by the creation of risk management recommendations based on thorough evaluation and analysis of identified exposures.

]	Recommended Actions:	Responsibility:	Deadlines:	Status:
1.	Identify non-pool Coverage	Admin		
1.	Needs	Loss Control		
	neeus	Broker		
2.	Evaluate Special Risks	Loss Control		
3.	Evaluate Retained Risks	Loss Control		
4.	Identify Risks to Avoid	Loss Control		
5.	Identify Member Specific	Admin		
	Contractual Risk Transfer	Loss Control		
	Practice/process	Consultant		
6.	Develop plan to re-allocate all			
	loss control days afforded to	Admin		
	members during Q4 of	Loss Control		
	program year			
7.	Develop plan for loss control			
	days to be split 70%	Admin		
	dedicated to liability loss	Loss Control		
	experience			

Governance Impact:	Yes 🗆	No 🖂	Unknown 🗆
Fiscal Impact:	Yes 🗆	No 🗆	Unknown 🖂

## Initiative 4. ORGANIZATIONAL DEVELOPMENT AND SUSTAINABILITY

## 4.1 Strategic Growth

**Description:** Strategic growth is intentional designed to overcome current and future challenges. Recommend actions below can be key pieces to building a pool for the foreseeable future or beyond.

**Objective:** Long-term success by continually learning, adapting, and innovating, PLAN JPA can remain relevant and competitive over time and achieve goals set forth in the recommended actions.

Recommended Actions:	Responsibility:	Deadlines:	Status:
1. Explore the geographical diversification of the pool's outreach for new members	Admin		
2. Identify investment alternatives			
3. Dividend (one of pooling's benefits) Policy/distribution			
4. Conference Scholarships			
5. Annual review of discount rate			
6. 5- year financial plan			
7. Coverages – Workcomp via SHARP, Employee Benefits			

Governance Impact:	Yes 🗆	No 🗆	Unknown 🛛
Fiscal Impact:	Yes 🖂	No 🗆	Unknown 🗆

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#### PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING Maugh 29, 2024

March 28, 2024

Agenda Item 6.A.

## **GENERAL MANAGER'S REPORT**

### SUBJECT: Report from PLAN JPA's General Manager

## **BACKGROUND AND HISTORY:**

Eric Dahlen, PLAN JPA General Manager, will be in attendance to discuss the following:

## **Financial**

2024/25 Annual Operating Budget for PLAN JPA. The JPA's finance team has worked diligently to eliminate potential surprises. The initial state of the market presentation from PLAN's broker, Seth Cole, was back in November 2023. Since then, there have been some developments along the same indicators mentioned during strategic planning and the following Board Meeting. Mr. Cole will address the Board with an update to the state of the market.

Confidence Level (CL) Funding as it relates to the budget, net position of the pool, and accreditation. While the pool is "funded" at approximately 90-95% it is only budgeted at 60%. The Board will hear from PLAN's finance manager and actuarial the importance of considering a higher funding level and the points of consideration.

Challenges are a reality amongst the pool's vendor partners. Staff is currently discussing options with the Financial Auditor regarding a recently received request to amend the current contract regarding a fee increase. While the contract is scheduled to terminate June 30, 2024, their work occurs after the end of the current program year. Staff will continue to update the Executive Committee and the Board as appropriate.

#### Coverage

On April 10, 2024, CARMA is scheduled to hold a Board of Directors meeting where several big-ticket items will be discussed. Among them will be the preliminary notices that were submitted by two other pools, Bay Cities Joint Powers Insurance Authority and Monterey Bay Area Self Insurance Authority. In addition, CARMA is exploring coverage options to increase benefits to its members regarding inverse condemnation claims.

## **<u>RECOMMENDATION</u>**:

Staff recommends the Board of Directors provide direction in the case of the expanded inverse condemnation coverage language to be proposed at the CARMA Board of Directors meeting.

## **REFERENCE MATERIALS ATTACHED:**

• Inverse Condemnation Memo from CARMA



FARMER CURTIS

Craig E. Farmer cfarmer@farmercurtislaw.com (916) 679-6565 x 208 (916) 679-1240 Direct

March 12, 2024

Via email to Rob.Kramer@Sedgwick.com

Rob Kramer CARMA 1750 Creekside Oaks Drive Suite 200 Sacramento, CA 95833

RE: CARMA coverage for inverse condemnation exposures of its members

For several years the CARMA Memorandum of Coverage has provided a sub-limit for claims of inverse condemnation resulting in Property Damage against its Members. Under Section VI-Exclusions, Exclusion 9 has provided that CARMA's MOC affords coverage for claims and suits alleging Property Damage due to inverse condemnation if resulting from (1) weather acting upon or with the Covered Party's property or equipment; (2) accidental failure of the Covered Party's property or equipment; or (3) negligent design, maintenance of, or inadequate design of a public work or public improvement. That coverage has been sub-limited to the amount of \$2,000,000 per Occurrence excess of a \$1,000,000 Covered Party Retained Limit and subject to a \$4,000,000 aggregate limit per Member.

It is our understanding the Board of CARMA desires to expand the available coverage for inverse condemnation claims and suits to the amount of the full Ultimate Net Loss coverage limit assuming CARMA's broker is able to obtain such coverage under the reinsurance/excess policies that apply beyond the Member Retained Limit (MRL) and CARMA's \$9,000,000 In the 2023-2024 Memorandum Period, those layers were reinsurance up to the \$24,500,000 amount and excess insurance for the last \$10,000,000. However, each of those coverages includes a policy aggregate. Accordingly, market conditions may or may not limit the Authority's ability to eliminate aggregates in the reinsurance and excess layers.

In any event, in the effort to expand CARMA's coverage for inverse condemnation, Exclusion 9 could be modified to read:

"9. Claims arising out of

(a) Land use regulations or planning policies, annexation, eminent domain by whatever name called, no matter how or under what theory such claims are alleged. Mr. Rob Kramer Re: CARMA coverage for inverse condemnation exposures of its members March 12, 2024 Page 2

Notwithstanding this exclusion, coverage under this Memorandum is provided, in excess of the \$1,000,000 Covered Party's Retained Limit first paid and any commercial insurance coverage available to the Covered Party not purchased by the Authority and intended to apply in excess of CARMA'S self-insurance for any claims or suits alleging Property Damage due to inverse condemnation as a result of any of the following: weather acting upon or with the Covered Party's property or equipment; accidental failure of the Covered Party's property or equipment; negligent design, maintenance of, or inadequate design of a public work or public improvement.

I did not think that the final paragraph of the current Exclusion 9 would be needed. That provision was added because of the coverage dispute that occurred with Sausalito over the landslide event which included inverse condemnation claims against the City as well as some emotional distress claims relating to the Property Damage losses and in a couple of cases physical Bodily Injuries. By those allegations the City asserted full limits of CARMA's coverage should be available rather than the sub-limited amounts in exception to Exclusion 9. Assuming the coverage of inverse condemnation can be expanded, it would not seem the Sausalito issues are likely to arise as an impediment to coverage taking place in future Memorandum years. So I would delete the last paragraph of the current Exclusion 9(a).

Because CARMA's definition of Ultimate Net Loss includes both Damages and Defense Costs, and because the term Damages has been defined to include monetary compensation recovered by a third party for loss or detriment it has suffered through the acts of a Covered Party and "attorney's fees not based on contract awarded against the Covered Party" and "costs, for which the Covered Party is liable if the costs arise from an Occurrence to which coverage applies", I believe Damages recovered in the inverse condemnation case for the plaintiff's attorney's fees and extra costs allowed under CCP1036 would come within the Damages definition under the CARMA MOC.

If the coverage for inverse condemnation under CARMA's MOC is changed, it would be broader than what is afforded under the 2023-2024 PRISM and California Joint Powers Risk Management Authority Memoranda for several reasons. I have reviewed the General Liability 1 program MOC form 47/1/22. That form used by PRISM provides under Exclusions the following:

"G. To liability, directly or indirectly, arising out of or in any connection with the principles of eminent domain, condemnation proceedings or inverse condemnation, by whatever name called, whether grounded in federal or state law regardless of whether such claims are made directly against the covered party or by virtue of any agreement entered into by or on behalf of the covered party. Mr. Rob Kramer Re: CARMA coverage for inverse condemnation exposures of its members March 12, 2024 Page 3

> This exclusion does not apply to any aspect of inverse condemnation liability directly arising out of physical injury to, or destruction of, tangible property neither expected nor intended from the standpoint of the covered party; provided; however, this exception does not apply to any non-physical consequential damages or to expert or attorney's fees claimed by or awarded to a claimant or a plaintiff in a suit." (Emphasis added).

Additionally, the PRISM memorandum includes Exclusion I to property damage arising out of subsidence. Accordingly, PRISM's coverage appears narrower than what CARMA would afford because PRISM excludes the additional costs typically awarded under an inverse condemnation claim. These include attorney's fees and additional expert costs under CCP Section 1036. Property damage arising out of subsidence which may sometimes be asserted as a taking for inverse condemnation also might be excluded by PRISM. CARMA by a change to the exception of Exclusion 9 of its MOC would cover the additional costs recoverable and CARMA does not exclude subsidence.

The CJPRMA sub-limits the coverage it affords for subsidence to \$7,500,000 per occurrence. There is no subsidence limitation in CARMA's coverage. Additionally, the CJPRMA document under its land use exclusion excludes "claims arising out of or in connection with ... the principles of eminent domain, condemnation proceedings or inverse condemnation by whatever name called, and whether or not liability accrues directly against any covered party by virtue of any agreement entered into by or on behalf of any covered party. ..." By that means, it appears CJPRMA excludes claims arising out of inverse condemnation.

If CARMA's reinsurers are unwilling to accept coverage for inverse condemnation beyond the pooled self-insurance, CARMA could still revise the exception to Exclusion 9 to provide a sub-limit of up to the \$9,000,000 in group self-insurance. However, that issue may or may not arise depending upon the reinsurers and excess insurers' positions being addressed by Seth Cole.

We have also given some consideration to adding a second paragraph to the Occurrence definition which reads in CARMA's 2023 MOC:

"Occurrence means with respect to Property Damage an accident including continuous or repeated exposure to substantially the same general harmful conditions, which results in Property Damage neither expected nor intended from the standpoint of the Covered Party. Loss of use of tangible property that is not physically injured shall be deemed to occur at the time of the Occurrence that caused it." Mr. Rob Kramer Re: CARMA coverage for inverse condemnation exposures of its members March 12, 2024 Page 4

To this, one might add a further provision that:

"The inverse condemnation exception affording coverage under Exclusion 9 of this Memorandum of Coverage is a temporary or permanent taking of third-party r real or personal property as the result of a public work or public improvement system failure and, in the case of a weather-related event, happening within 72 hours of such event acting upon or together with the public work or public improvement such as, but not limited to, a drainage system, roadway or other public work or public improvement. The number of inverse condemnation Occurrences where the exception to Exclusion 9 applies to two or more claims of takings within a single 72-hour period and shall depend upon whether the takings were the result of the same or separate public work or improvement system failures."

This additional Occurrence language would be intended to result, for examples, in coverage for poor maintenance causing blockage of a drainage system resulting in flooding, a mudslide or earth movement resulting from poor or inadequate design of a roadway, resulting from or contributed to by poor or inadequate design of a roadway where either happened due to heavy rains of a 72 hour timeframe. Also, if there were a drain blockage with flooding in one area of a covered city and a mudslide due to a roadway systems failure in a different area of that city or flooding due to the blockage of a separate drainage system in the same city, these could be viewed as multiple Occurrences in respect to inverse condemnation liability exposure of that single city.

Very truly yours,

FARMER CURTIS, LLP

Farmer

Partner

CEF:lkf

March 28, 2024

Agenda Item 7.A.

### **APPOINTMENTS**

### SUBJECT: Consideration of Appointment to Executive Committee and PLAN JPA Treasurer

### BACKGROUND AND HISTORY:

On January 4, 2024, staff was notified that Pak Lin, PLAN JPA Treasurer, would be stepping down from her position with the Town of Colma, and therefore, PLAN JPA, on January 26, 2024, leaving a vacancy on the Executive Committee and the position of Treasurer.

According to Article IX of the PLAN JPA Bylaws, the responsibilities and duties of the Treasurer, an Officer of the Board, and a member of the Executive Committee, are:

- Keep and maintain, or cause to be kept and maintained, adequate and correct books and records of accounts of the properties and business transactions of the PLAN JPA, including accounts of its assets, liabilities, receipts, disbursements, gains, losses, capital, retained earnings, and other matters customarily included in financial statements. The books of account shall be open to inspection by any Director at all reasonable times.
- Deposit all money and other valuables in the name and to the credit of PLAN JPA with such depositories as may be designated by the Board of Directors; shall disburse the funds of PLAN JPA as may be ordered by the Board of Directors; shall render to the President and Directors, whenever they request it, an account of all of his/her transactions as Treasurer and Assistant Treasurer and of the financial condition of PLAN JPA; and shall have other powers and perform such other duties as may be prescribed by the Board of Directors or the Bylaws.

The process to elect/appoint a new member of the Executive Committee and Treasurer include the nomination of an interested candidate and the appointment of said candidate by a vote of the Board of Directors.

#### **<u>RECOMMENDATION</u>**:

Staff recommends the Board of Directors appoint a Director to fill the vacancy on the Executive Committee and as PLAN JPA Treasurer, effective March 28, 2024.

## **<u>REFERENCE MATERIALS ATTACHED</u>**:

None

March 28, 2024

#### Agenda Item 8.A

## **CONTRACTS**

### SUBJECT: Consideration of Ad Hoc Committee for Third-Party Administration Request for Proposal Process

## **BACKGROUND AND HISTORY:**

In November 2023, the Board held a discussion regarding the performance of its service providers. At the conclusion of its discussion, the Board provided authority to the Executive Committee to oversee the entire process including contract execution and directed to staff to work with Marc Zafferano, Board Counsel, to contact the consultant regarding the Request for Proposal (RFP) and move ahead with receiving a proposal and presenting the Executive Committee with the draft contract.

During its January 25, 2024, meeting, the Executive Committee approved the proposal with Clovis Consultants and Associates. The contract was executed on February 9, 2024. In a Special Executive Committee meeting held on March 6, 2024, the Committee discussed several concerns regarding the use of a consultant for this process and ultimately terminated the contract with the consultant. The Committee informed to staff they wished to establish an Ad-Hoc Committee of members of the PLAN Board of Directors.

The Ad-Hoc Committee will consist of no more than five (5) members including the President of the Board, Rebecca Mendenhall and four (4) others. Mr. Zafferano will also be instrumental in leading the Committee regarding order of process for all next steps moving forward through selection and start of a potential new contract for the Third-Party Administrator services.

A draft RFP has been included with this item and will serve as the base for the Ad-Hoc Committee to refine to include all duties and responsibilities, as well as performance expectations and any other metrics to be included. Once the RFP is released, the Ad-Hoc Committee will evaluate the proposals received, invite respondents to be interviewed, and ultimately select a provider to meet the needs of the pool.

Due to a potential conflict of interest, PLAN JPA staff will recuse themselves from this process.

## **<u>RECOMMENDATION</u>**:

Staff recommends the Board of Directors appoint an Ad Hoc Committee for the Third-Party Administration Request for Proposal Process.

## **<u>REFERENCE MATERIALS ATTACHED</u>**:

• Draft Request for Proposal for Third-Party Administration Services for PLAN JPA

[Type here]

## **REQUEST FOR PROPOSAL**

## LIABILITY AND PROPERTY THIRD PARTY CLAIMS ADJUSTING SERVICES

FOR

## POOLED LIABILITY ASSURANCE NETWORK JOINT POWERS AUTHORITY (PLAN JPA)

### **RETURN PROPOSALS TO:**

Rebecca Mendenhall, President, PLAN JPA RMendenhall@cityofsancarlos.org

DEADLINE FOR FILING: \_\_\_\_\_, 2024

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## REQUEST FOR PROPOSAL LIABILITY AND PROPERTY THIRD PARTY CLAIMS ADJUSTING SERVICES FOR PLAN JPA

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Appendix C – PLAN JPA Liability Program Summary of Claims Valued at 12/31/2023

Appendix D - Model Service Level Agreement TPA Contract/Performance Standards

## PLAN JPA

## REQUEST FOR PROPOSAL

## LIABILITY AND PROPERTY THIRD PARTY CLAIMS ADJUSTING SERVICES

## I. <u>BACKGROUND AND HISTORY – to be provided by Sedgwick</u>

The Board of Directors of the Pooled Liability Assurance Network (PLAN) is requesting proposals from qualified third-party claims adjusting firms (TPAs) to provide liability and property claims adjusting services for its self-funded Pooled Liability and Pooled Property Programs.

The PLAN JPA has its roots dating back to 1986 as ABAG PLAN Corporation, originally developed as a nonprofit public benefit corporation organized exclusively for the promotion of the social welfare of the citizens of the San Francisco Bay area. In 2018, the Board of Directors decided to dissolve the corporation in favor of the creation of a Joint Powers Authority, PLAN JPA.

Pooled Liability Assurance Network, a Joint Powers Authority (PLAN) was established to provide and administer property and liability insurance and self-insurance services for member cities. PLAN membership includes 28 municipalities located in the bay area of Northern California. PLAN uses self-insurance, traditional insurance carriers and pooled self-insurance to provide financial coverage for the membership. In addition, PLAN has developed effective risk management programs to reduce the amount and frequency of losses, to share the losses on a self-insured basis, and to jointly purchase and provide administrative and other services such as claims adjusting, data processing, risk management, loss prevention, accounting services, actuarial services, and legal services in connection with the program.

Within PLAN's 28 members, there is a projected payroll of \$532,374,900 and a reported Total Insured Value of \$3,790,625,716.

Sedgwick Claims Management, Inc. has provided Liability claims adjusting services to the PLAN since 2014 with the original party to the agreement being ABAG Plan Corporation and later assigned to PLAN JPA. The contract is currently active under its third amendment and is set to expire on June 30, 2026.

The PLAN has approximately 150 new claims each year. The PLAN has approximately 220 open claims at any one time. The number of newly opened claims approximates the number of claims being closed in any one program year. There is no expectation for the average number of open claims to increase or decrease significantly. A summary of the claims activity as of December 31, 2024, has been provided in Appendix C.

PLAN provides General Liability, Auto Liability, and Errors & Omissions coverage for its members in excess of the Members' retained limit, or Self-Insured Retention (SIR), up to \$1,000,000 per occurrence. Each Member maintains responsibility for the portion of every loss

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that falls within their SIR, ranging from \$25,000 to \$250,000. PLAN is also a member of the California Affiliated Risk Management Authorities (CARMA), a risk sharing joint powers authority. When losses exceed the \$1,000,000 per occurrence limit, CARMA provides coverage up to \$10,000,000. PLAN maintains additional coverage utilizing five (5) excess policies providing access to \$35,000,000 per occurrence coverage.

All new PLAN member losses (including claim incident reporting) are to be reported immediately to the Third-Party Administrator. Cases meeting the following criteria must be reported to the PLAN Litigation Manager, with an indication of the reason for excess reporting, consistent with the requirements of the applicable excess carrier as soon as reasonably practicable:

A serious case (including multiple claims or suits arising out of one *Occurrence*), in which the exposure may exceed fifty (50%) percent of the PLAN Member's retained limit based the claim adjuster's professional assessment (adding indemnity and legal reserve together):

- a) A demand or demands totaling fifty (50%) percent of the PLAN Member's remaining retained limit or more;
- b) Title 42 USC 1983 matters alleging a violation of civil rights;
- c) Non-Employment Sexual Abuse conduct;
- d) Any claim or case in which a complaint has been filed and served on the PLAN Member;
- e) Death;
- f) Paralysis, paraplegia, quadriplegia;
- g) Loss of use of any sensory organ;
- h) Amputation;
- i) Spinal cord or brain injury;
- j) Third degree burns involving ten percent or more of the body;
- k) Nerve injury and/or neurological deficit;
- 1) Loss of use of any body function,
- m) Substantial disability or disfigurement; or
- n) Loss of work time of six months or more.

The members of the PLAN, the TPA, and the Litigation Manager actively monitor all claims. This requires the Third-Party Administrator to maintain open communications and a good rapport with all parties. The PLAN has formally approved Claim Handling Guidelines (See Appendix A) that the TPA firm and the Litigation Manager are tasked with enforcing.

Regarding the Pooled Property Program, PLAN has a risk sharing All-Risk Property pool that

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covers the member entities' buildings, building contents, and vehicles parked on the entities' premises. In most cases, the coverage provides replacement cost without reduction for depreciation. This program provides coverage from the Members' deductible of \$5,000 to the Alliant Property Insurance Program (APIP) deductible of \$500,000. Through APIP, the coverage limit is equal to the scheduled total insured values of the members' property for most exposures; however, there are sub-limits for some exposures. The APIP portion of the program also provides coverage for the sudden and accidental breakdown of Boiler & Machinery equipment. This is a pass-through coverage provided through APIP.

## II. OBJECTIVES AND SCOPE OF WORK TO BE PERFORMED

The objective of this RFP is to select a Liability and Property Third Party Claims Adjusting Company (TPA). The incumbent may be bidding. A written contract will be executed by both the PLAN JPA and the selected firm. Such contract will be for a **three-year period** with two (2) one-year extension options. There shall be provisions within the contract providing for termination with and without cause. The contract will also include detailed performance standards and should be based on a **fixed fee annual price with pre-determined annual increases**. See Appendix D for a sample model contract.

The PLAN JPA is very interested in maintaining a high level of communication between the TPA and the members, the Litigation Manager and defense counsel. The proposal should be priced in such a way to ensure this can be accomplished.

The responsibilities of the claims adjusting service is divided into three categories: claims administration, support of the Litigation Manager, and reporting of claims activities. PLAN JPA has adopted the following best practices to promote effective claims administration, litigation management, and reporting of claims activities.

## A. Claims Administration

The claims adjusting firm shall provide PLAN JPA with sufficient qualified personnel, including at least one senior claims adjuster, to meet the responsibilities efficiently and effectively as defined below and any other duties incidental, or in addition, to those responsibilities. The claims adjusting firm shall conform to the procedures outlined in the PLAN JPA Claim Handling Guidelines and Best Practices Litigation Management Guidelines (Appendix A). The senior claims adjuster shall have a minimum of three years experience in adjusting liability claims for public entities. The claims adjusting firm shall also provide a supervisor/account manager who shall oversee the servicing of the PLAN JPA's claims and act as a liaison to the PLAN JPA Litigation Manager, who is proposed to be retained. The supervisor/account manager shall have at least six years experience in adjusting liability claims, five of which involved adjusting liability claims for public entities. No adjuster or supervisor/account manager shall service

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the PLAN JPA's account without prior written approval by the PLAN JPA.

The responsibilities of the claims adjusting firm shall include, but are not limited to, the following:

- 1. Establish and maintain a file for each claim reported, to include a diary review system by both the examiner and supervisor; statistical data for each claim should be stored electronically and shall include all data required to comply with federal and state requirements **including Medicare secondary payer laws and regulations.** E-mail communications with the members and PLAN JPA are preferred.
- 2. Provide comprehensive investigative services;
- 3. Periodically, determine potential liability and establish, review, and update reserves for each reported accident and advise the member and PLAN JPA of any changes as they occur;
- 4. Notify the PLAN JPA Litigation Manager of any claim as required by the Memorandum of Coverage (MOC) and coordinate with the members and PLAN JPA Litigation Manager in the defense, settlement, and payment of claims;
- 5. Provide the members with a recommendation to accept or reject a claim within the statutory period in the California Government Code;
- 6. Provide immediate notification to the members, and if appropriate the PLAN JPA Litigation Manager of offers to settle;
- 7. Obtain releases and other necessary forms from all appropriate parties upon settlement of a claim;
- 8. Upon the members' requests, assist with its preparation for appearances in small claims court;
- 9. Prepare and issue checks (from the approved PLAN JPA trust account), drafts, or other documents in the payment of all claims activities, including litigation costs, miscellaneous investigative costs, and claim clean up costs, with copies sent to the members;
- 10. Obtain approval for issuance of checks for claims, claim expenses, litigation expenses, and settlements, drafts, or other documents in the payment of claims, where needed;

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- 11. Maintain complete records of payments from an approved trust account, established by the Administrator on behalf of the PLAN JPA for the purpose of paying all claims related costs.
- 12. Determine any potential to tender a claim to third parties and the feasibility of subrogation, and take appropriate steps to subrogate, where such action is appropriate;
- 13. Promptly close each claim as soon as possible;
- 14. Make available time, files, and necessary staff for meetings with the members and PLAN JPA and attendance at applicable meetings (City Council, PLAN JPA Executive Committee, or PLAN JPA Board of Directors) for settlement authority, claim resolution strategy, and periodic claim audits; and
- 15. Provide a single designated adjuster rather than multiple adjusters, if possible, per member.

## B. Support of the Litigation Manager

The claims adjusting firm shall assist in the implementation and conform to the procedures outlined in the Litigation Management Guidelines formally approved by Resolution of the PLAN JPA (see Appendix B). The duties of the claims adjusting firm shall be to assist the PLAN JPA Litigation Manager and include, but are not limited to:

- 1. Monitoring defense counsel and assisting in the implementation of the PLAN JPA Litigation Management Guidelines;
- 2. With input from the members and the Litigation Manager, assigning the defense of litigated cases to the defense firm selected (PLAN JPA maintains a defense panel of approved firms);
- 3. Assisting defense counsel, at the direction of the members and the PLAN JPA Litigation Manager, in obtaining facts or circumstances of a claim, including assistance in answering interrogatories;
- 4. Supplying and collecting the case analysis and performance evaluation forms from the defense firms;
- 5. Reviewing legal bills for accuracy, for compliance with the Litigation Management Guidelines, and use of cost effective processes; and

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6. Maintaining, in coordination with the members and the Litigation Manager, an evaluation file on each defense firm with respect to each defense assignment.

## C. Reporting of Claims Activity

Provide a monthly statistical report for each line of coverage which shows all claims having activity, including claimant name, nature/type/cause of injury/loss, date of loss, status, loss/expense paid and reserved amounts, with monthly and year-to-date totals. Report should include a brief narrative of the actions to date and future recommended actions. A guide to any and all abbreviations used in any of the reports shall be provided to the members and the PLAN JPA. Reports shall include all claims meeting the members' and the PLAN JPA's reporting criteria.

In addition to the monthly statistical report, the adjusting firm will provide a monthly payment register showing all payments issued, payee, voucher number, voucher date, and claimant name, if applicable.

Upon the request of the member or the PLAN JPA, the adjusting firm shall also provide special reports on claims, in detail or summary, sorted or queried by any, or any combination, of the fields at no additional cost. All reports shall be provided in a Microsoft Excel format or PDF as requested by the member.

The adjusting firm shall also cooperate and assist with information services "mapping" to coordinate the dissemination of information into any data management system implemented by PLAN JPA.

## III. <u>PROPOSAL REQUIREMENTS</u>

Each proposer shall submit a complete proposal with all information requested. The content of the proposal will be as follows:

A. Cover Letter

The cover letter will include the company name, address, and telephone number of the authorized person to be used as the contact.

The letter will indicate whether the proposer is an individual, partnership, or corporation. It must be signed by the individual, partner, or an officer or agent authorized to bind the firm. A corporation submitting a proposal may be required to furnish a certificate as to its corporate existence and satisfactory evidence as to the officers authorized to execute the contract on behalf of the corporation.

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- B. Table of Contents
  - C. Company Qualifications

This section should include:

- 1. An explanation of the knowledge and experience of the firm and its personnel in serving self-insured public entities in California. (limited to one page);
- 2. A description of at least two similar or related contracts under which the proposer is currently providing services;
- 3. An explanation of the experience and qualifications of staff.
  - List the staff assigned, title, and responsibilities as it would relate to this engagement;
  - Include resumes of each staff assigned; and
  - Identify appropriate certifications; and
- 4. A list of at least three public entity client references, preferably located in Northern California.
- D. Work Plan

This section should contain the proposer's work plan for providing the services required. The following work plan must, at a minimum, address the following:

- 1. The general approach to providing claims administration services the proposer will employ;
- 2. Confirmation the proposer will comply with the attached PLAN JPA Claim Handling Guidelines and Best Practices (See Appendix A) and the PLAN JPA Litigation Management Guidelines (Appendix B)
  - 3. Alternatively, the proposer must clearly specify how services will vary from these standards;
  - 4. An explanation of the process of reporting and ability to generate a variety of Risk Management Information Systems RMIS reports. Discussion should include the ability of the members and the PLAN JPA to access claims information through Windows-based or web-based programs;

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- 5. An explanation of the adjusters assigned:
  - Identify adjuster
  - Location of service
  - Current case load;
  - Maximum case load for this assignment per adjuster and supervisor
- 6. An indication for each staff assigned as to the relative time they will spend on PLAN JPA, i.e., will they be dedicated to the members and PLAN JPA or will they have additional client responsibilities;
- 7. An explanation and project timeline describing how the conversion of historical data from the current claims administration service provider, including retrieval of files, will occur; and
- 8. An indication of the proposers' ability to fulfill the role of the reporting agent for the PLAN JPA regarding Medicare secondary payer laws/regulations and SCHIP act reporting. Whether such support service is included in the proposed contract pricing should be indicated. If the proposer is not equipped to fulfill the role of reporting agent to the PLAN JPA, please propose how this role may be fulfilled, by what 3<sup>rd</sup> party service provider, and at what additional cost.
- 9. Include an example of a monthly statistical report for each line of coverage which shows all claims having activity, including claimant name, nature/type/cause of injury/loss, date of loss, status, loss/expense paid and reserved amounts, with monthly and year-to-date totals.
- E. Cost

Please quote an annual service fee, clearly stating what services and expenses are included in the fee. Identify what services, if any, will require additional charges, fees, or costs. Any costs not identified in the proposal shall not be reimbursed by the PLAN JPA.

## IV. INSURANCE REQUIREMENTS – confirm limits

The proposer must agree to indemnify, hold the PLAN JPA and its members harmless, and defend the PLAN JPA and its members from all claims and legal action for damages arising from their performance under the agreement.

Prior to and during the performance of the contract, the proposer shall maintain at its own expense the following minimum insurance coverage:

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- 1. Commercial General Liability insurance in an amount no less than \$1,000,000.
- 2. Business Automobile Liability insurance in an amount no less than \$1,000,000 per accident.
- 3. Workers' Compensation insurance meeting all statutory benefit requirements of the Labor Code of the State of California and Employers Liability insurance with a minimum of \$1,000,000 per claim.
- 4. Professional Errors & Omissions insurance with a minimum of \$2,000,000 limit per claim.
- 5. Crime bond covering the misappropriation of PLAN JPA and/or member funds.
- 6. Cyber-liability coverage in an amount no less than \$1,000,000.

## Deductibles and Self-Insured Retentions

Any deductibles or self-insured retentions must be declared to and approved by the PLAN JPA. If necessary, at the option of the PLAN JPA either: the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects the PLAN JPA, its officers, officials, employees, and volunteers; or the Consultant shall provide a financial guarantee satisfactory to the PLAN JPA guaranteeing payment of losses and related investigations, claim administration, and defense expenses.

## Other Insurance Provisions

The commercial general liability and automobile liability policies are to contain, or be endorsed to contain, the following provisions:

- 1. The PLAN JPA, its Members, and all of their officers, officials, employees and volunteers are to be covered as insureds as respects: liability arising out of work or operations performed by or on behalf of the Consultant; or automobiles owned, leased, hired or borrowed by the Consultant.
- 2. For any claims related to this project, the Consultant's insurance coverage shall be primary insurance as respects the PLAN JPA, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by the PLAN JPA, its officers, officials, employees, or volunteers shall be excess of the Consultant's insurance and shall not contribute with it.
- 3. Each insurance policy required by this clause shall be endorsed to state that coverage shall not be canceled by either party, except after thirty (30) days' prior written notice by certified mail, return receipt requested, has been given to the PLAN JPA.

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#### Acceptability of Insurers

Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII, unless otherwise acceptable to the PLAN JPA.

#### Verification of Coverage

Proposer shall furnish the PLAN JPA with original certificates and amendatory endorsements effecting coverage required by this clause. The endorsements should be on forms provided by the PLAN JPA or on other forms provided those endorsements conform to PLAN JPA requirements. All certificates and endorsements are to be received and approved by the PLAN JPA before work commences prior to execution of a service agreement. The PLAN JPA reserves the right to require complete, certified copies of all required insurance policies, including endorsements affecting the coverage required by these specifications at any time.

#### V. <u>SELECTION PROCESS</u>

Only those proposals which are complete and delivered to PLAN JPA staff by 5:00 p.m. on May 6, 2024, shall be considered. Address all proposals to:

Rebecca Mendenhall, President, PLAN JPA RMendenhall@cityofsancarlos.org

The PLAN JPA will review the proposals submitted. The firms whose proposals are selected as finalists for consideration may be asked to appear, at their own expense, before an evaluation panel to discuss their proposal.

All proposals, whether selected or rejected, shall become the property of the PLAN JPA. Costs of preparation of proposals will be borne solely by the proposer. Proposals may be submitted electronically.

The PLAN JPA reserves the right to: reject any and all proposals; to waive any informality, defect, or irregularity in a proposal; to conduct contract negotiations with any TPA (whether or not it has submitted a proposal); to alter the selection process in any way; to postpone the selection process for its own convenience at any time; to accept or reject any individual sub-consultant that a TPA proposes to use; and/or to decide whether or not to contract with any TPA. Nothing in this RFP shall be construed to obligate the PLAN JPA to negotiate or enter into a contract with any particular TPA. This RFP shall not be deemed to be an offer to contract or to enter into a binding contract or agreement of any kind.

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Listed below is an anticipated timetable:

04/05/2024	Dissemination of Request for Proposals
05/06/2024	Proposals Due
05/07-05/17/2024	Evaluation of Proposals
05/20/2024	Ad Hoc Committee to select interviewees
05/27/2024	Interview of Prospective Bidders and Selection of Firm
06/2024	Inform Bidders of Selection and Negotiate Contract
07/2024	Contract Formally Approved by Board
08/01/-10/01/2024	Data Transfer and Mapping
11/01/2024	Begin Engagement

Questions regarding this Request for Proposal or the PLAN JPA liability and property claims programs may be directed to:

Rebecca Mendenhall, , PLAN JPA, President RMendenhall@cityofsancarlos.org

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**APPENDIX A – PLAN JPA Claims Handling Guidelines** 

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#### APPENDIX B - PLAN JPA Memoranda of Coverage for the Liability and Property Programs and APIP Policy for Excess Property Coverage

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#### APPENDIX C - PLAN JPA Claims Summary

Separate Excel file provided.

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#### **APPENDIX D – Sample Professional Services Contract**

#### PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING March 28, 2024

March 28, 2024

#### Agenda Item 10.A

#### STATE OF THE MARKET

#### **SUBJECT:** State of the Market

#### **BACKGROUND AND HISTORY:**

Annually, Alliant Insurance Services, Inc. (Alliant) provides an update on the status of the current excess market and a strategy for the upcoming renewal of PLAN's reinsurance and excess policies.

Seth Cole, Senior Vice President, Alliant, will provide the Board of Directors with a marketing report for the 2024/25 Program Year. Mr. Cole will be present at the meeting to discuss this strategy as well as answer questions.

#### **<u>RECOMMENDATION</u>**:

None.

#### **<u>REFERENCE MATERIALS ATTACHED</u>**:

• Alliant State of the Market Report



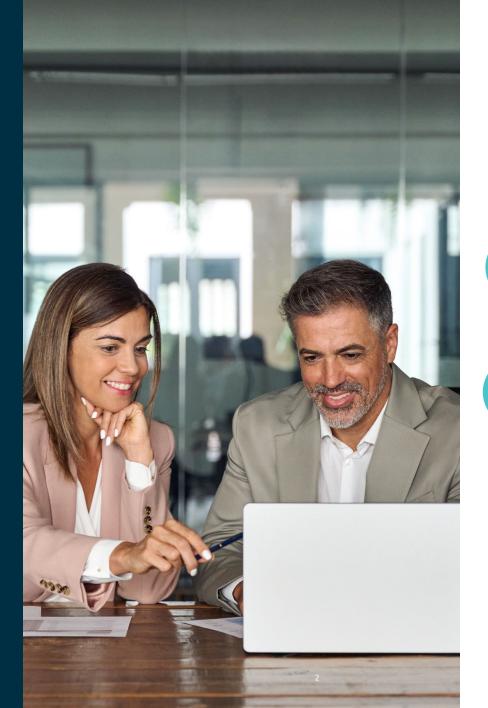
# Public Entity Insurance Marketplace, Trends, Industry Issues and Outlook

**PLAN JPA Board of Directors Meeting** March 28, 2024

Alliant Insurance Services www.alliant.com

(THIS INFORMATION HAS BEEN CONSOLIDATED FROM VARIOUS INDUSTRY SO

# Market Overview





**Financial Performance** 



Loss Trends & Market Disruptors



Toward the Future





# Insurance Market & Financial Performance



## Market Pressures...

Great Resignation & Quiet Quitting

Geo Political

Mass Shootings

2

Social Inflation/ Nuclear Verdicts & Legislation Cyber Attacks

Ukraine & Middle East War/Conflicts

### Q2 23 P/C industry combined ratio, net income at worst levels since 2011:

"While the aggregate industry balance sheet is strong enough to meet its contractual commitments and obligations to consumers and businesses, the ever-increasing challenges from claims cost and expense increases, extreme weather events, legal system abuse, and ongoing regulatory resistance to rate adequacy in a few jurisdictions, continue to have significant negative financial consequences for insures," Robert Gordon, senior vice president of policy, research and international for APCIA.





## **Market Conditions**

Impactful issues for insureds:

#### 01

#### **Property capacity reductions:**

- Further reduction in capacity from incumbents
- Coastal, Earthquake and wildfire capacity continue to be especially difficult
- Very few new entrants into the commercial property sector

## 02

Insurers produced negligible profit in 2022 – Nearly **\$125b in Global Insured CAT** losses in 2022 – **2**<sup>nd</sup> Worst Loss Year on Record.

 United States accounted for 75% of global insured losses

## Property

### 03

Insured natural catastrophe losses exceeded **\$100bn** for 2023, with SCS the largest driver, accounting for \$70b of the total. This marks the **4th consecutive** year global losses have topped \$100b.

#### 04

Consistent **increases in attritional property losses** (fires, water damage, tornados, hail, wildfires) – are secondary perils 'secondary' anymore?

## 05

Inflation continues to add to the issue of valuation across all property classes

## Liability

07

#### 06

Liability capacity pull back and withdrawals have been significant over the past two years

Social inflation & Litigation Financing driving up liability verdicts and settlements

#### **08**

Excess Workers Compensation remains stable, but retained layer may be experiencing increased claims volume

#### 09

Cyber capacity has improved and creating stabilized terms and conditions

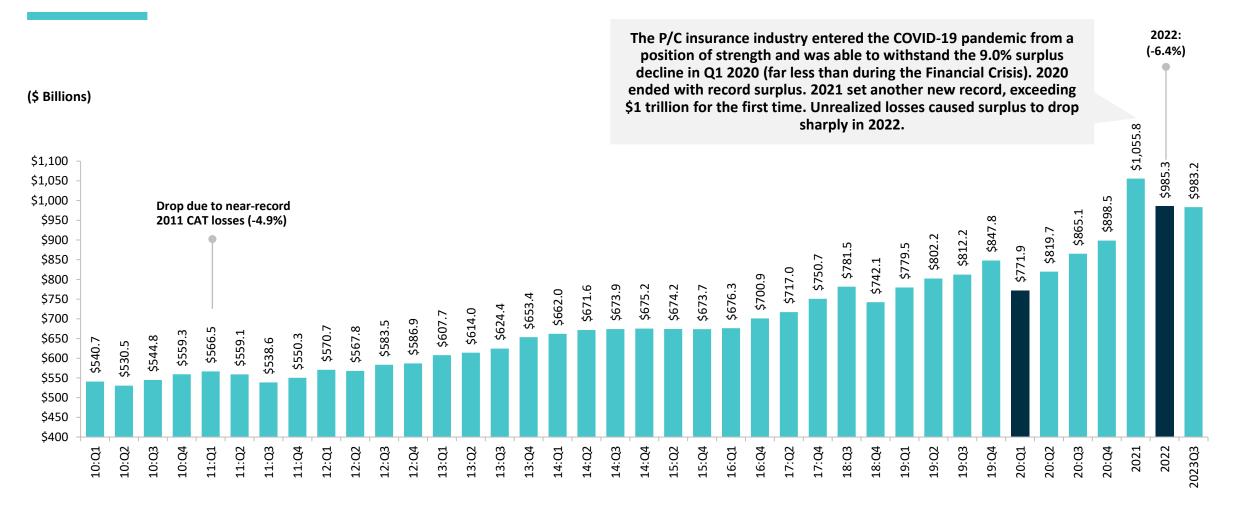
#### 10

Cyber

Ransomware cyber losses are systemic – Expecting \$10 Trillion by 2025



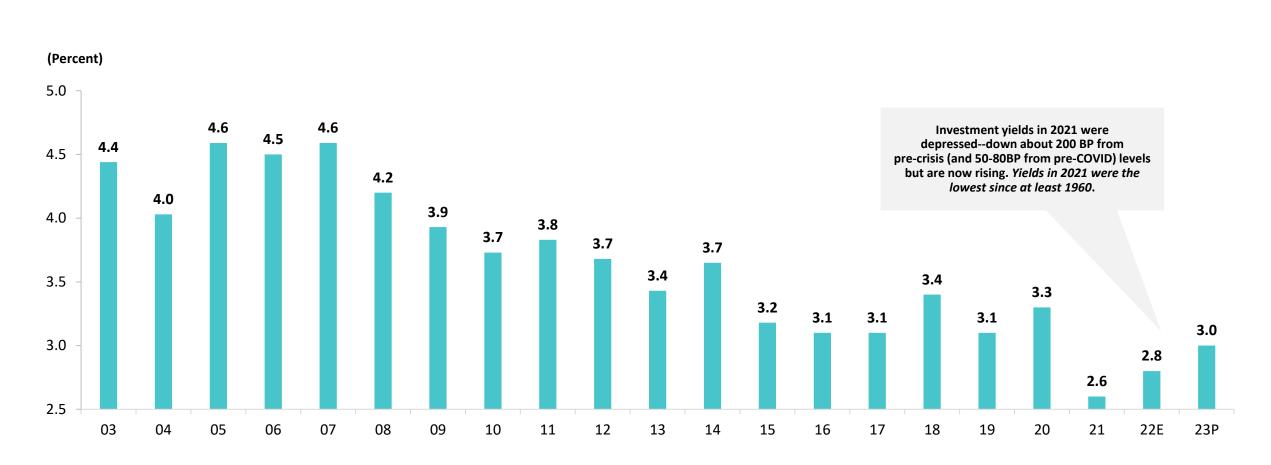
# Policyholder Surplus (Capacity), 2010: Q1 – 2023: Q3



Policyholder Surplus is the industry's financial cushion against large insured events, periods of economic stress and financial market volatility. It is also a source of capital to underwrite new risks.



# Net Investment Yield on Property/Casualty Insurance Invested Assets, 2003–2023P



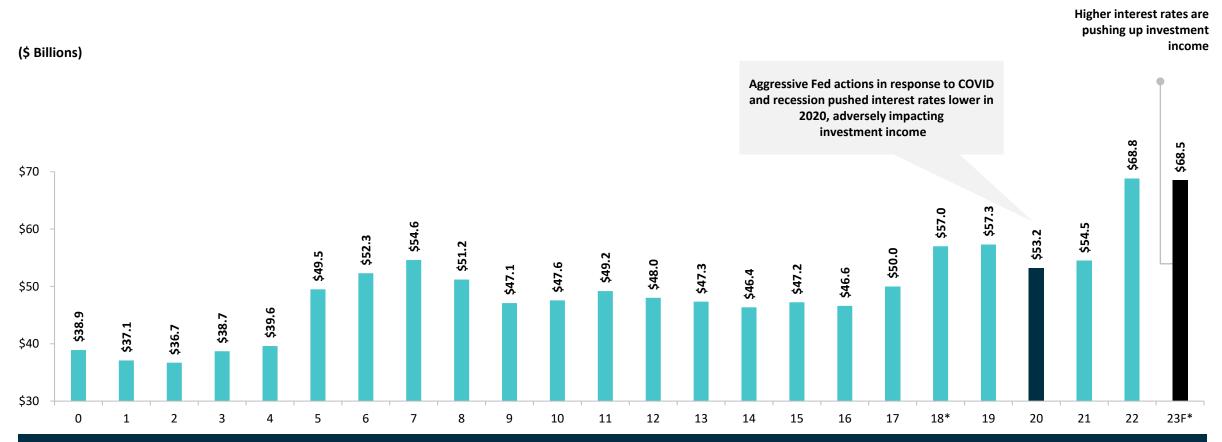
# The yield on invested assets remains depressed relative to pre-financial crisis and pre-COVID yields. Fed rate hikes in 2022 should begin to slowly lift yields.

Average: 1960-2019 = 4.9% | Low: 2.8% (1961) | High: 8.2% (1984/85)

► Allíant

Sources: NAIC data, sourced from S&P Global Market Intelligence; 2017-19 figures are from ISO. 2020-21 data from the APCIA. Risk and Uncertainty Management Center, Univ. of South Carolina.

# Property/Casualty Insurance Industry Investment Income: 2000–2023F\*

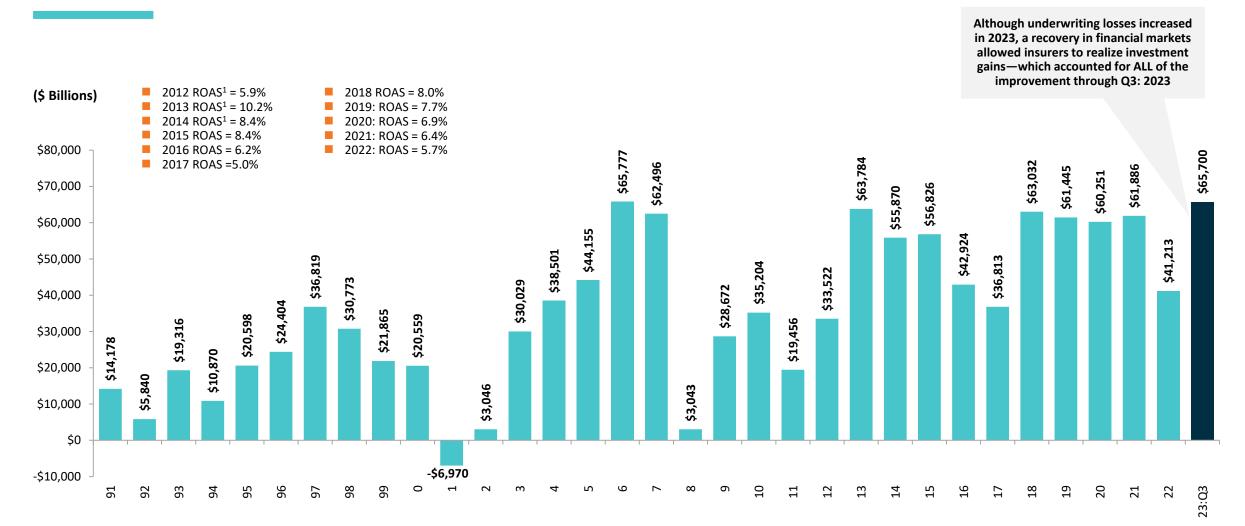


Due to persistently low interest rates, investment income remained below pre-crisis levels for a decade. Lower interest rates during COVID drove investment income down once again. Fed rate hikes in 2022 could reverse this trend.

2018-19 figures are distorted by provisions of the TCJA of 2017. Increase reflects such items as dividends from foreign subsidiaries. 1 Investment gains consist primarily of interest and stock dividends. Sources: ISO; University of South Carolina, Center for Risk and Uncertainty Management.



# P/C Industry Net Income After Taxes, 1991–2023: Q3

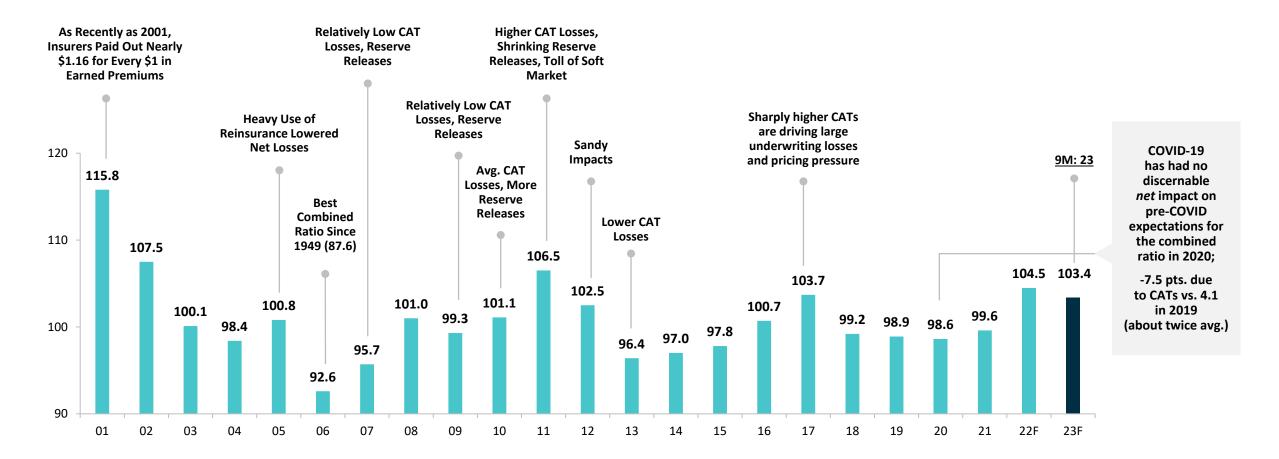


\*ROE figures are GAAP; <sup>1</sup>Return on avg. surplus. Excludes Mortgage & Financial Guaranty insurers for years (2009-2014). Sources: A.M. Best, ISO, APCIA.



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# P/C Insurance Industry Combined Ratio, 2001–2023 F\*



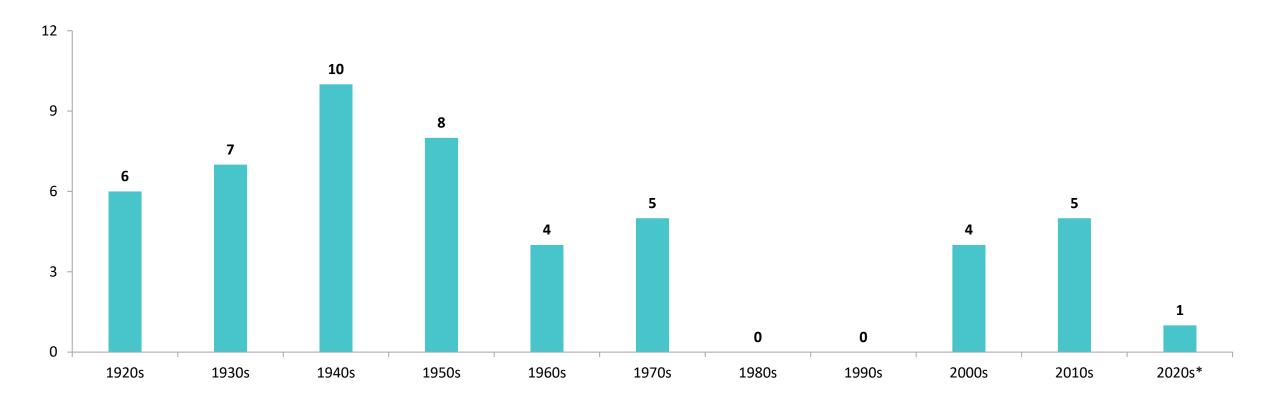
Pre-COVID 2020 Combined Ratio Est. 99.1 (A.M. Best)

Actual = 98



# Number of Years with Underwriting Profits by Decade, 1920s–2020s

Number of Years with Underwriting Profits



# Underwriting Profits Were Common Before the 1980s (40 of the 60 Years Before 1980 Had Combined Ratios Below 100) –But Then They Vanished. Not a Single Underwriting Profit Was Recorded in the 25 Years from 1979 Through 2003





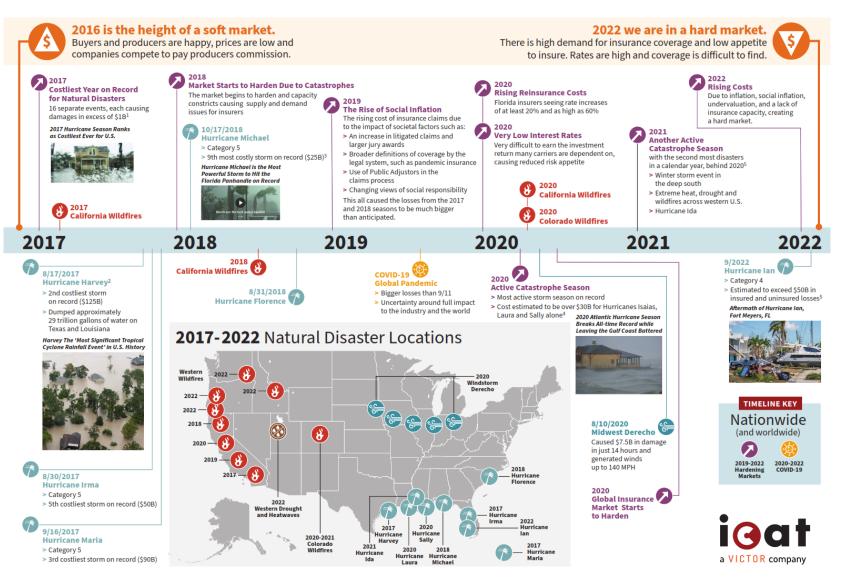
# Loss Trends & Market Disruptors



## **Recent CAT Losses**



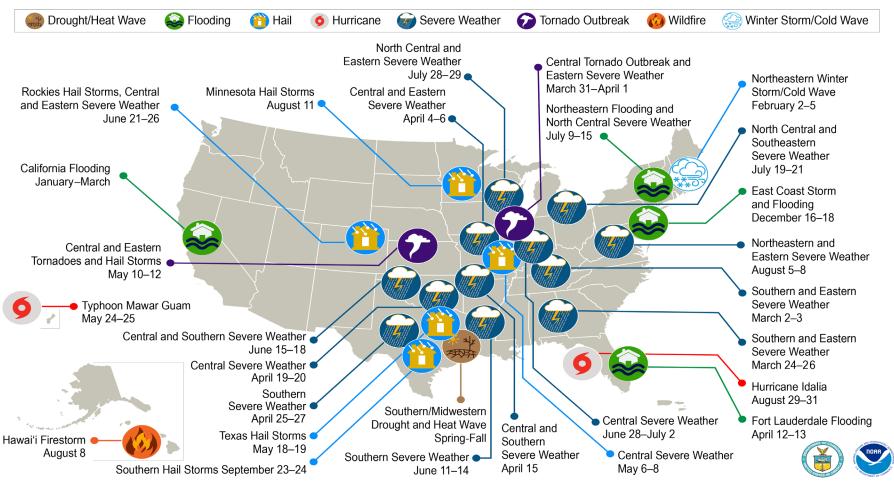
# The Makings of a Hard Market – Timeline





# Major U.S Losses in 2023

#### Another Record Breaking Year of \$1b CAT Losses



#### U.S. 2023 Billion-Dollar Weather and Climate Disasters

This map denotes the approximate location for each of the 28 separate billion-dollar weather and climate disasters that impacted the United States in 2023.

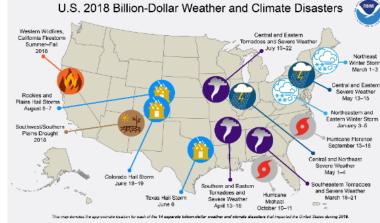


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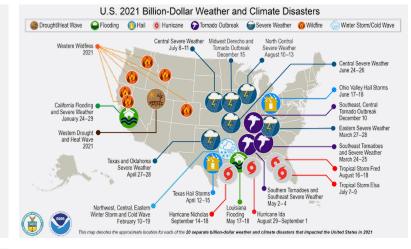
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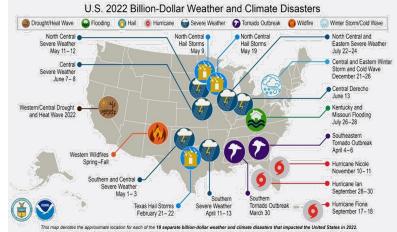
# Six Year CAT History: 104 \$1Billion+ Events





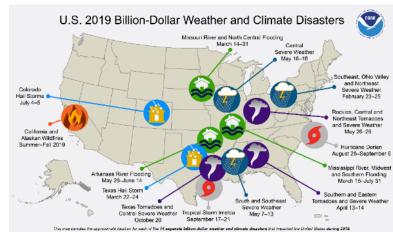








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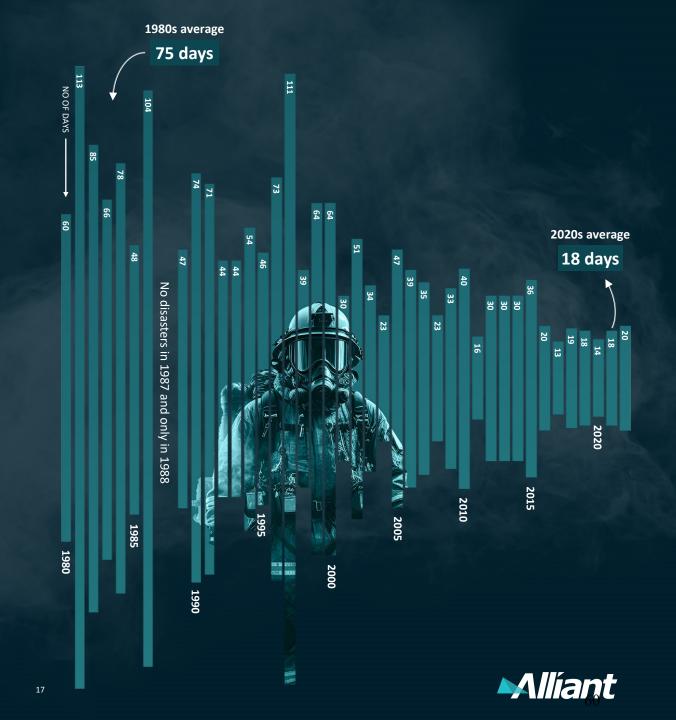


# Days between billion-dollar disasters

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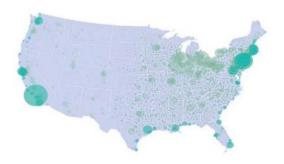
Since the 1980s, the U.S. has faced more frequent climate disasters with every passing decade. Between 2020 to 2022, the average number of days between billion-dollar disaster events within one year dropped to just 18.

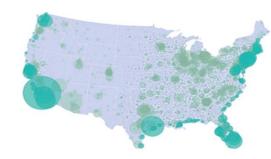
Billion-dollar disasters are events where overall damages/costs reached or exceeded \$1 billion (including CPI adjustment to 2023).

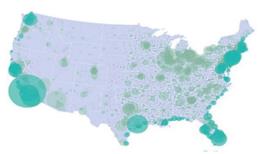


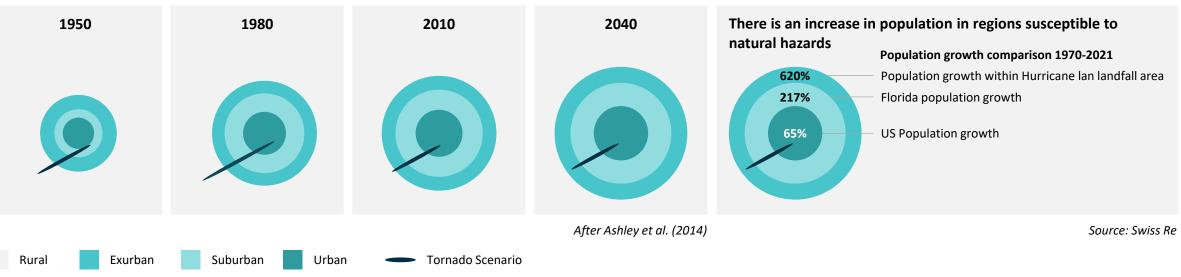
# **Population Growth and Bullseye Effect**





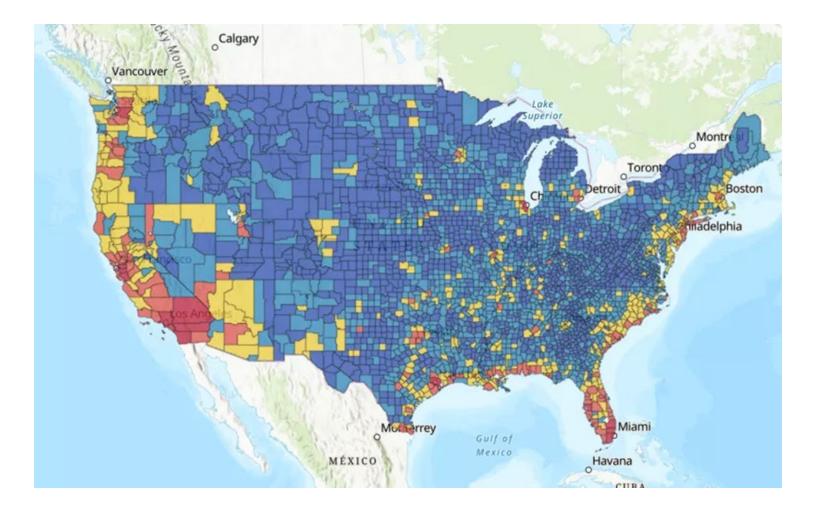








# FEMA National Risk Index Counties Map



#### **O** California

8 high-risk category (largest for a single state) 18 relatively high risk

#### **O** Florida

4 high-risk areas 19 relatively high-risk areas

#### O Texas

Houston high risk 16 other relatively high-risk areas

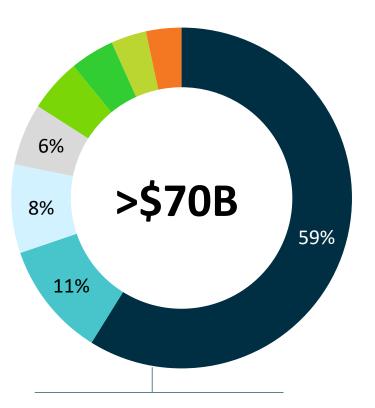
#### **O** East Coast

Miami only 'red' category NY, NJ and PA 13 relatively high-risk areas between them

#### **O** Non-Coastal

Utah County & Salt Lake County, UT Lubbock County, TX Douglas County, NE

# **Global Insured Losses by Peril in 2023**



Severe convective storm (SCS) events accounted for nearly 60% of global insured natural CAT losses during 2023

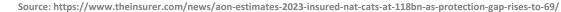
- Severe convective storm
- Flooding
- Drought
- Earthquake
- Tropical cyclone
- Wildfire
- Winter Weather
- European Windstorm



Secondary perils (including SCS) are of increasing concern to insurers and reinsurers 2023: > \$50B in SCS losses in U.S.

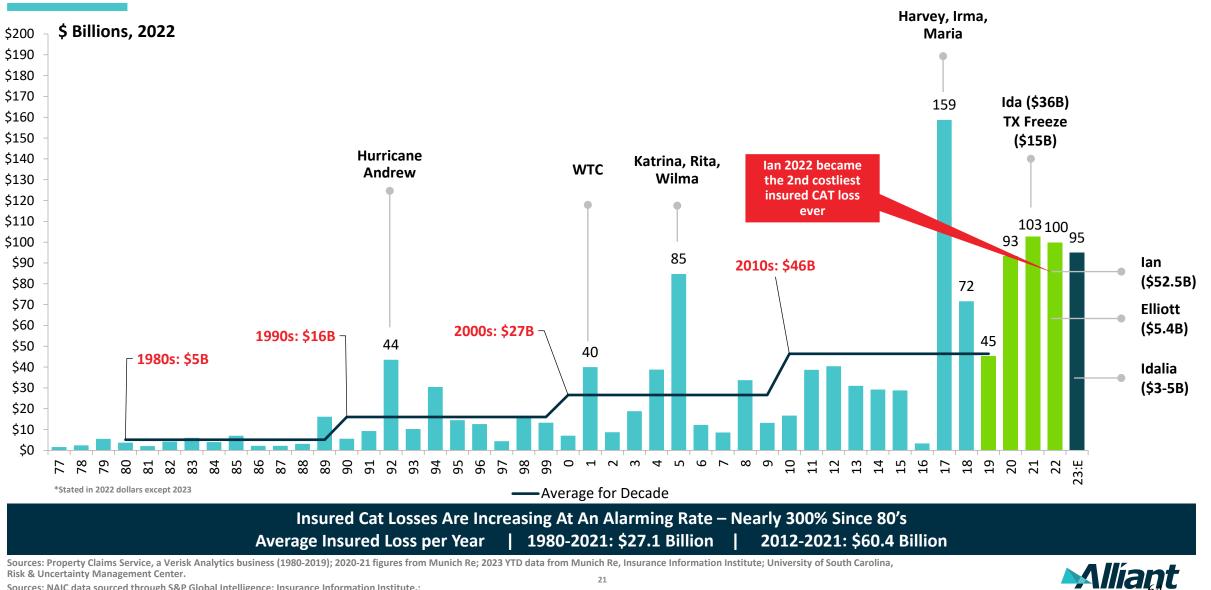


There have only been 3 years on record where US hurricane losses resulted in \$50B+ insured losses





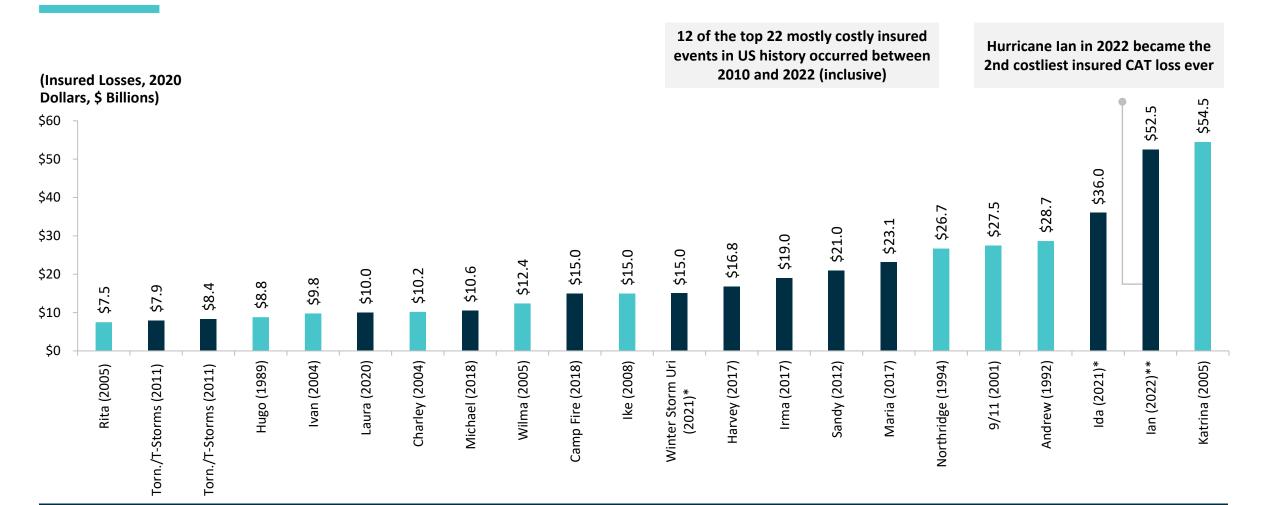
# U.S. Inflation-Adjusted Insured CAT Losses: 1977 – 2023



Sources: NAIC data sourced through S&P Global Intelligence; Insurance Information Institute.;

https://www.iii.org/fact-statistic/facts-statistics-us-catastrophes

# Top 22 Most Costly Disasters in U.S. History



18 of the 22 Most Expensive Insurance Events in US History Have Occurred Since 2004.

\*2021 dollars; \*\*2022 dollars (Aon insured loss estimate as of 1/25/23).

Sources: PCS, RMS, Aon, Karen Clark & Co; USC Center for Risk and Uncertainty Management adjustments to 2020 dollars using the CPI.



# Ascending CAT Perils: Wildfire and SCS



Wildfire



- **01** Climatic changes are resulting in larger and hotter wildfires occurring each summer and later into fall.
- **02** Beyond the physical damage and destruction of wildfires, intense smoke significantly impacts the health and economy of communities:
  - Reduced travel and tourism leading to loss of sales and occupancy taxes.
  - Reduced school attendance and outdoor activities.
  - Smoke can hurt your eyes, irritate your respiratory system, and worsen chronic heart and lung diseases.
- **03** Worsening conditions, from the future "warming world", that ultimately lead to wildfires strike concern for many insureds
- **04** Peril-specific retentions and sublimits are being pushed in at risk areas
- **05** Valuation in high density areas are particularly challenging (Coastal, West Los Angeles, Bay Area, etc.)



Hail

#### Severe Convective Storm (SCS)

- SCS insured losses have continued to increase their frequency at nearly 9% since 1990.
  - This is showcased by the fact that nearly 60% (\$71B) of all global Insured losses in 2023 were from SCS
  - According to Gallagher Re, six of the top 10 most expensive insured events of the year were SCS events in the U.S.
- SCS events are common, destructive, and largely unique to the United States due to its geography. Air masses in the U.S. have free rein to collide over the Midwest and Great Plains, generating destructive tornadoes and thunderstorms. Continued population growth in areas susceptible to hail and thunderstorms poses a growing challenge for the insurance industry.
- Due to the combination of event frequency not being well captured in statistical data as well as the continued volatility of SCS annual losses, insureds are continuing to develop new solutions to limit their exposure and ultimately their loss expectancy.

#### Severe convective Storm Hazards and Loss

Loss by SCS Hazard from Risk Management Solutions

Hail accounts for 70% of annual average loss. In any

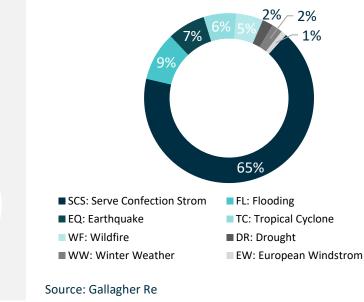
given year hail is 60-80% of the damage produced by

Wind &

Tornadoes

Hail

Insured loss by peril





severe convective storms

Wind & Tornadoes

Severe winds both from straight-line wind events

about 20% of average

Lightning, including fires

accounts for about 10%

started by lightning

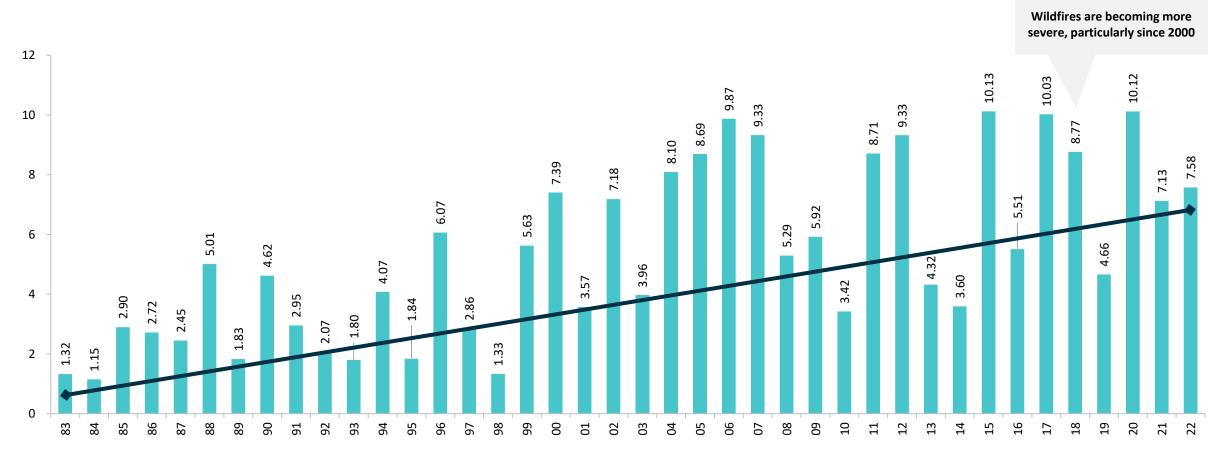
annual loss.

Lightning

and tornadoes account for

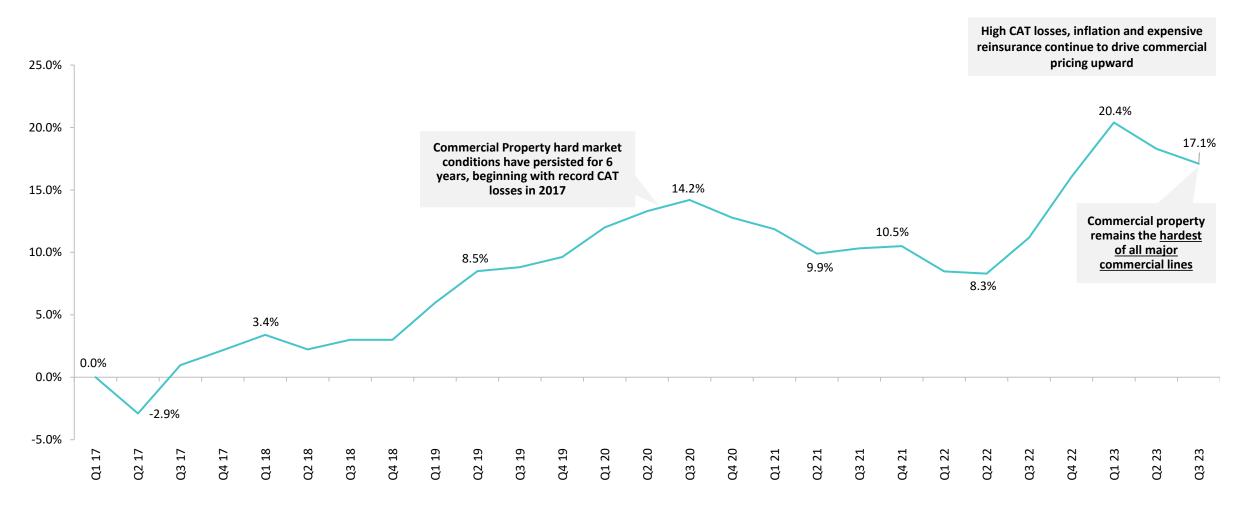
# U.S. Total Wildland Acres Burned, 1983–2022

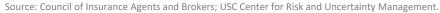
**Millions of Acres Burned** 





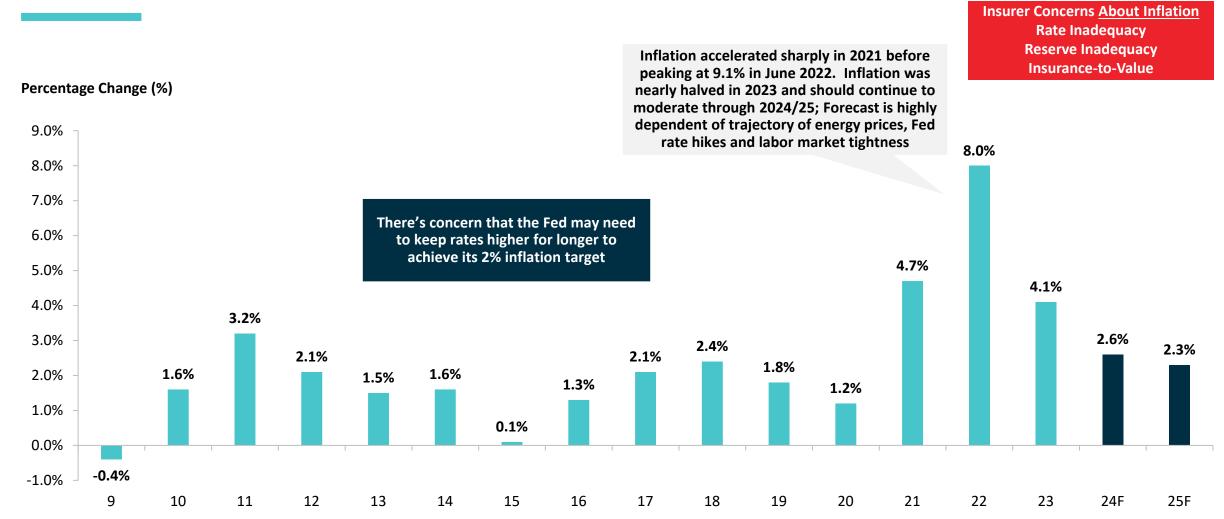
# Commercial Property Premium Changes, 2017:Q1 – 2023:Q3







# U.S. Inflation Rate: 2009-2025F\*

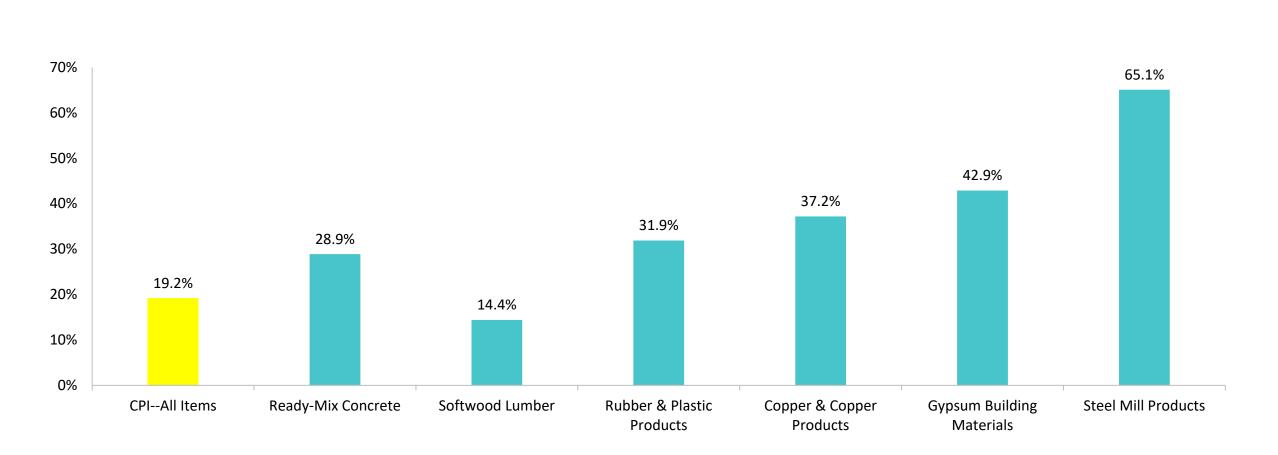


\*Annual change in Consumer Price Index for All Urban Consumers (CPI-U).

Source: U.S. Bureau of Labor Statistics; Wells Fargo Securities (1/24); USC Center for Risk and Uncertainty Management.



## Change in Cost Indicators for Selected Construction Inputs, Jan. 2020 – Dec. 2023



The rapid increase in and still-elevated cost of building materials has immediate and longer-term implications for property insurers and reinsurers



# **Casualty Market Major Disruptors**



## **Auto Liability**

- Cost of vehicles(inflation)
- Cost to repair (technology)
- Fatality Trends
- Distractive Driving Cell Phones
- Claims Frequency <u>and</u> Severity Trajectory
- Social Inflation



## Workers Compensation

- Opioids
- Mental Health
- Aging Workforce
- Medical Cost Inflation
- Cancer & PTSD Presumptions
- Workplace Violence
- Medical Service Delays
- Out of State Exposure



## **General Liability & Excess Liability**

- Increase in Catastrophic Losses
- Punitive Damage Awards
- Organized Plaintiff Bar
- Personal Injury Trends
- Litigation Financing
- Aging Infrastructure
- Sexual Misconduct
- Law Enforcement Liability



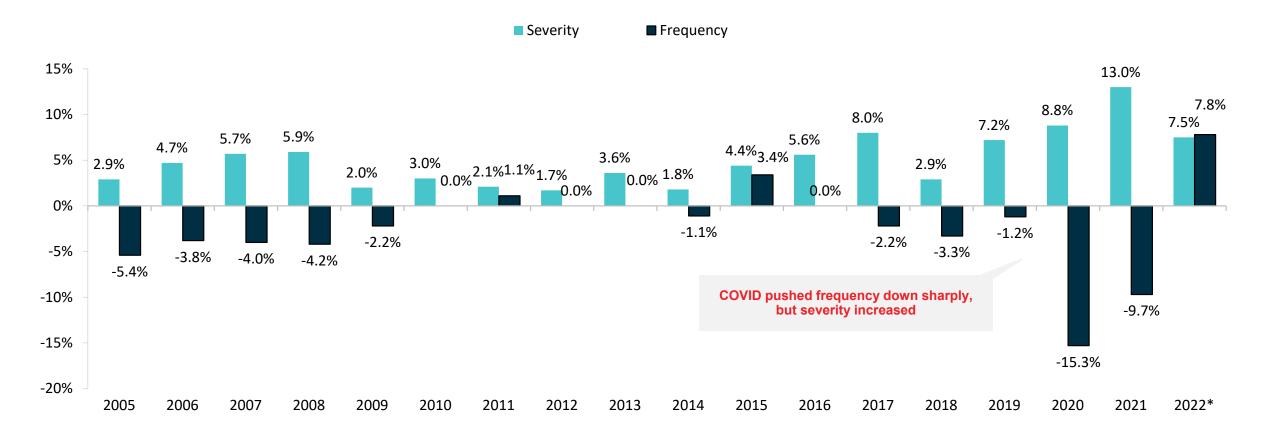
# **Increasing Impact on Liability Market**





### Auto Liability Bodily Injury Severity Trend Is Up, Frequency Plunge in 2020/21 Due to COVID Has Ended and Is Reversing

### Annual Change, 2005 through 2022\*



#### Frequency decline has ended. Q1 2022 BI frequency was +9.5% and Q4 2021 was +3.5%

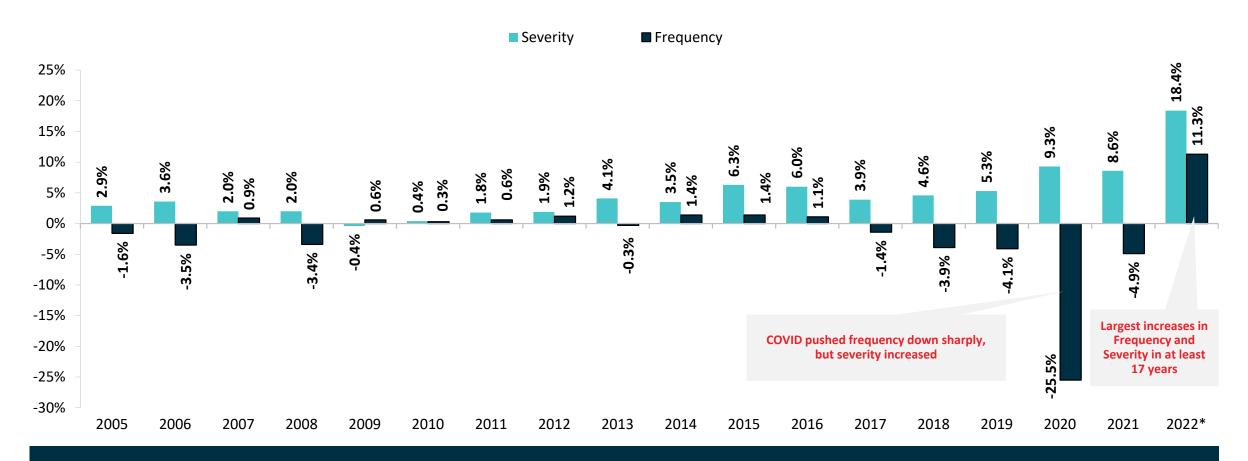
\*2022 figure is for the 4 quarters ending 2022:Q1.

Source: ISO/PCI *Fast Track data*; Center for Risk and Uncertainty Management, Univ. of South Carolina. eSlide – P6466 – The Financial Crisis and the Future of the P/C



### Property Damage Liability: Severity Trend Is Up, Frequency Plunge in 2020 Due to COVID Has Ended and Is Reversing

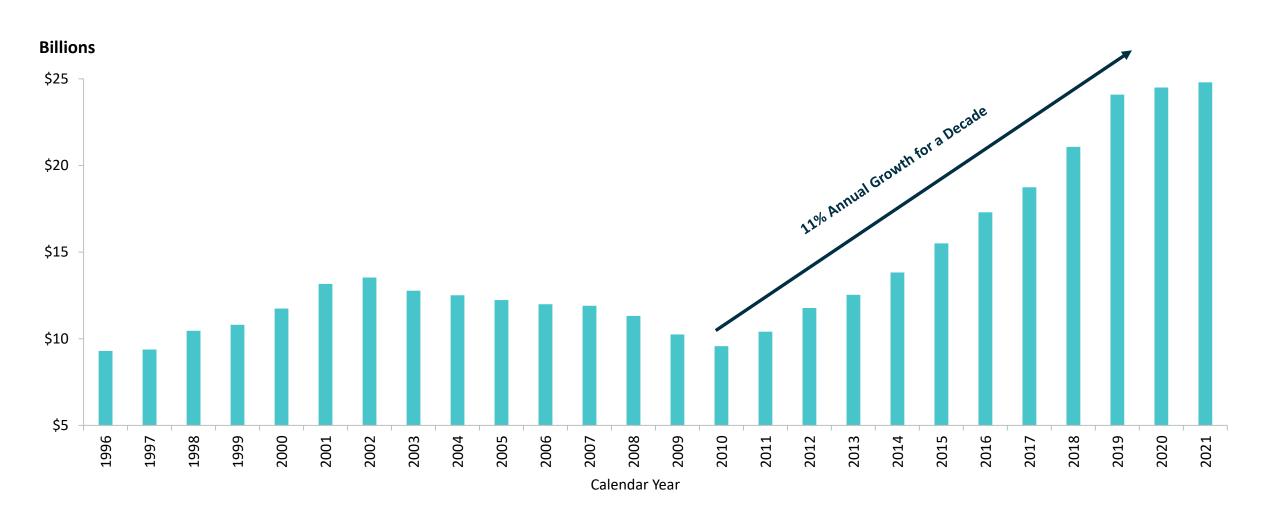
Annual Change, 2005 through 2022\*



#### Frequency decline has ended is reversing sharply as Severity Increases Accelerate



### **Upward Trend in Liability Claims**



Sources: NAIC data sourced from S&P Market Intelligence; Insurance Information Institute.



### Social Inflation: Many Interrelated Causes, Difficult to Manage



### **INSURANCE CLAIM COSTS**

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Increasing Size of Jury Propensity to Sue

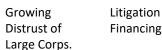
Awards

Courts/Juries Favoring

Plaintiffs

Growing Distrust of

1



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Aggressive Financing Plaintiff Bar Ads



Changes in Regulatory and Legal Environment



**Business Law** 

2022

\$30.844 Worker/workplace

Negligence

\$2,417

\$1,332

Motor Vehicle

\$1,160 Toxic Torts

Dollar Value of Top 100 verdicts by cause of action, in millions.

\$18.726

Intellectual

property

\$2,404

Employment

**TOP VERDICT CATEGORIES** 

\$13.131 Products Liability \$5.710 Intentional Torts

\$2,255 Professional Negligence

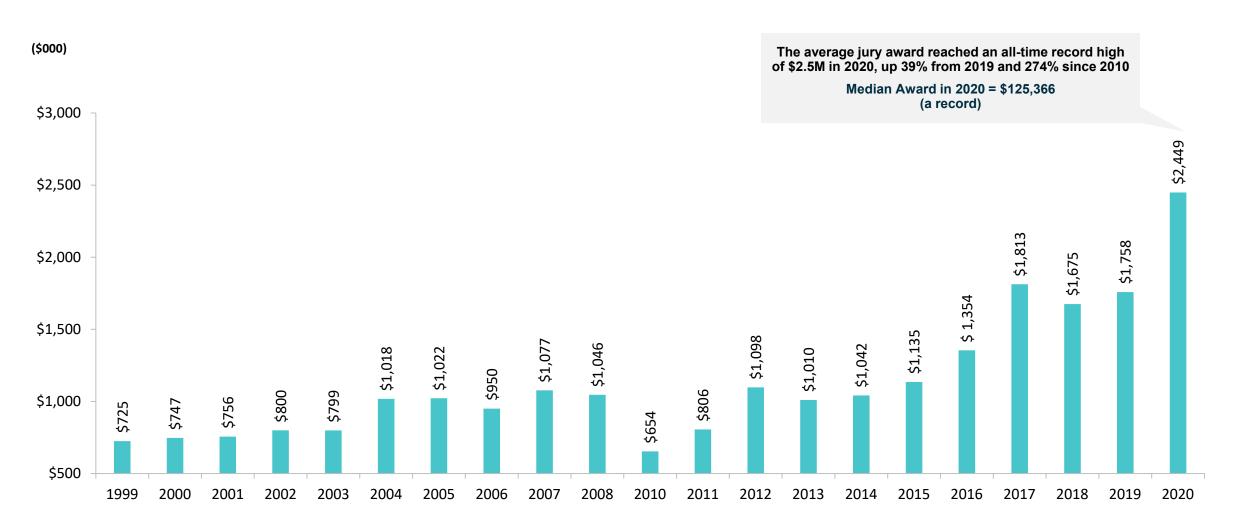
\$1,553 Medical Malpractice

► Allíant

Source: Risk and Uncertainty Management Center, Univ. of South Carolina, adapted from Verisk "Social Inflation" presentation (2020); VerdictSearch. Figures are rounded to the nearest \$1 million.

Source: VerdictSearch. Figures are rounded to the nearest \$1 million

### Average Jury Awards, 1999 – 2020 (latest available)

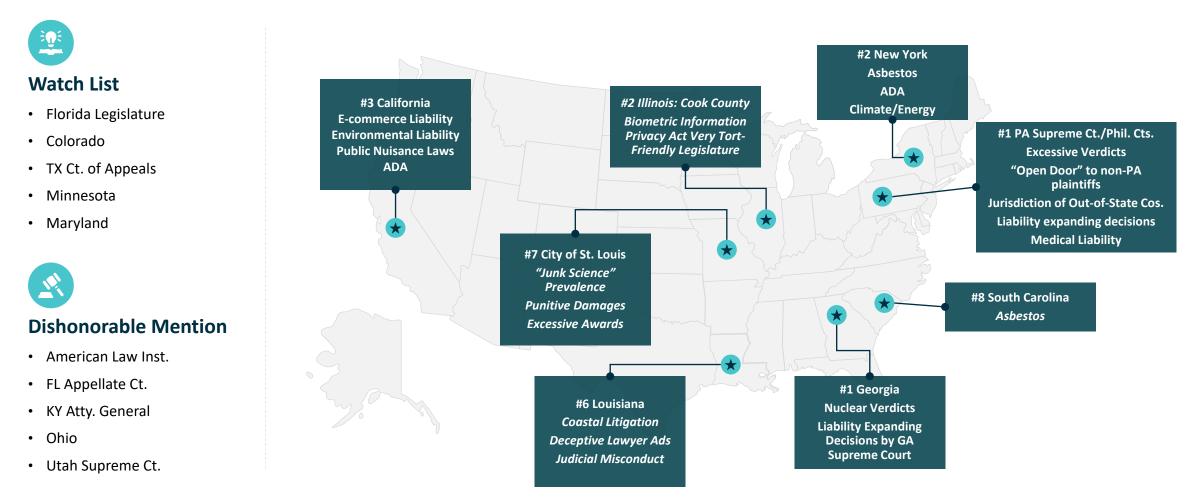


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Source: Jury Verdict Research; Current Award Trends in Personal Injury (61st Edition), Thomson Reuters; Risk and Uncertainty Management Center, Univ. of South Carolina.



### The Nation's Judicial Hellholes: 2023/2024

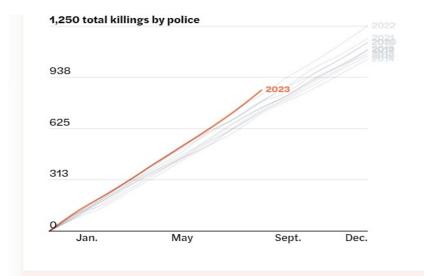


Source: American Tort Reform Association; Risk & Uncertainty Management Center, University of South Carolina.



### **Evolving Law Enforcement Environment**

### **Officer Involved Fatal Shootings**



According to MappingPoliceViolence.org

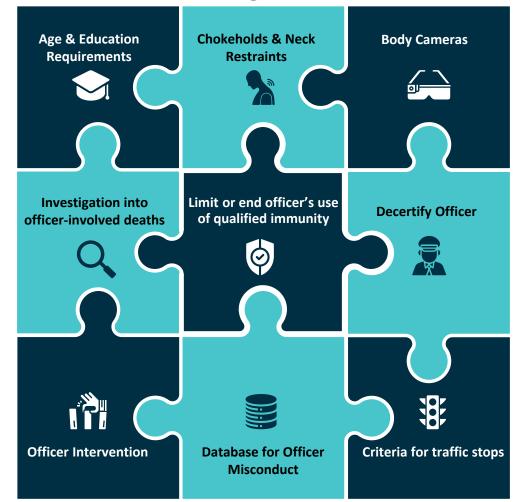
859 to date in 2023 (August)

1,176 in 2022

1,145 in 2021

1,152 in 2020

### **Policing Reform**





### State of the Cyber Market -



Europe May Surpass the United States as the Most Targeted Region for Ransomware

Ransomware continues to have a significant impact on businesses across the globe. While reports show that the U.S. is the country most targeted by ransomware attacks worldwide,<sup>1</sup> small indicators show that ransomware activity is decreasing in the United States and growing in other regions.<sup>2</sup> In Europe. the number of victims is increasing. and if that increase continues. Europe will likely become the most targeted region in 2023. The United States has been very outspoken on policies, sanctions and the potential of a response in the cyber domain concerning ransomware and other attacks. However, it is hard to conclude if the more aggressive stance on ransomware actually deters attacks.



### More Attacks by Non-Organized Attackers and Non-Nation State Attackers

In 2023 we expect to see more intrusions conducted by non-organized attackers and non-nation state attackers. More of the threat actors operating out of North America and Europe will likely be younger, and conducting intrusion operations not because they're interested in making money specifically or that governments have tasked them with doing it, but because they want to be able to brag to their friends or boast online that they've hacked into and brought embarrassment to prominent organizations. While they will be happy to achieve financial gain, that may not necessarily be their lead motivation.



Historically, cyber criminals have used ransomware to monetize access into a victim's network. Due to several high-profile and visible breaches last year, organizations see mitigating brand damage as a much more compelling reason to pay a ransom than regaining access to encrypted systems. Over the next year, we will continue to see criminals rely on extortion, but actual ransomware deployments may decline. Ransomware-as-aservice(RaaS) providers will modernize their software to focus on data exfiltration and 'leak sites' for public shaming.

Cyber Liability insurance providers continue to require clients to have better controls around cyber exposure. Implementation of MFA, use of EDR tools and strong backup policies are now requirements for most insurance carriers. Cyber liability pricing leveled off in 2023, particularly on primary layers. Excess layers is where we are seeing more significant decreases as underwriters lower their rates on line closer to historical norms. We are still seeing increases over expiring for clients with losses, poor cyber hygiene, or higher exposures. While lower than the 2021-2022 increases, we are seeing increases on average, anywhere from 5-15% depending on the particulars of a given risk. Clients with unfavorable controls will continue see modifications to their program. Carriers will exclude cyber extortion, impose co-insurance, or exclude coverages like computer hardware replacement, and reputational loss.



### Cyber Market – Cyber Liability Claims Trends



Ransomware losses continue to be a major concern, as it is the #1 cybersecurity threat to all businesses



MetaPixel and Movelt claims have skyrocketed and as such, underwriters are adding exclusions to those without sufficient controls



Select U.S. markets have begun inserting 'widespread event' or 'catastrophic first party loss' exclusions on their renewals



As the war in Ukraine continues, London underwriters are all deploying proprietary/Lloyd's war exclusion language



Despite some groups conducting politicallymotivated ransomware and data extortion attacks the vast majority of ransomware and data extortion attacks continue to be financially motivated. Fewer of these attacks involve encryption (locking) of data compared to years past



Expected increase in state and federal regulations and cyber related enforcement actions



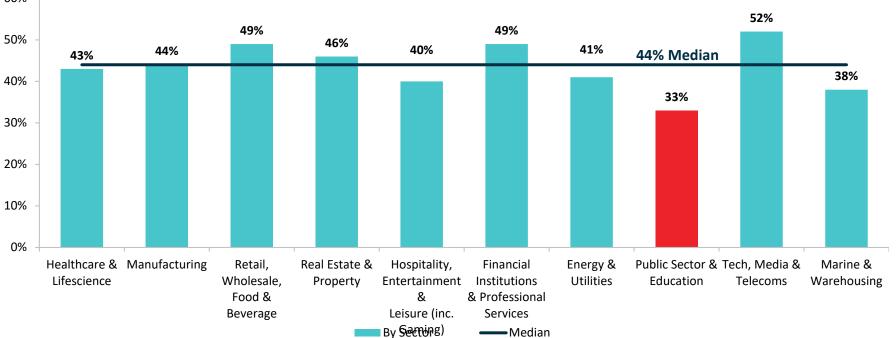
### **Targeting Public Entities**

Security standards across the marketplace:

- Multi-factor authentication
- Well managed end point detection
- Well managed RDP connections VPN, MFA, etc.
- Back Ups
- Planning and Training (and Frequency)
- Reasonable patching schedule/plan
- Plan or adequate measures in place to protect end of life software
- IT Security Budgets
- Email Security
- Identity Access Management
- Service Account Management

### Sector view on resilience to

cyber risk



Percentage of US and UK companies feeling 'very prepared' to anticipate and respond to cyber risk in 2021. Median line indicates the mid-point of the data set across all industries surveyed.

As a result, many markets are revisiting their appetite for new Public Entity cyber



### The Ransomware Epidemic



Ransomware surged in recent years, and there is no foreseeable slowdown. All industry segments were impacted. Manufacturing and professional services were particularly hard hit, followed closely by healthcare, education, and government entities.



Estimated global damage from ransomware.

2018	2019	2021
\$8 Billion	<b>\$11.5 Billion</b>	<b>\$20 Billion</b>
2024	2028	2031
<b>\$42 Billion</b>	<b>\$157 Billion</b>	<b>\$265 Billion</b>





## Toward the Future



### Liability Renewal Outlook

### **Excess liability continues to be a challenge**



#### **Specific Problem areas:**

- Aggregate limits Many carriers are looking to cap their exposure on pool programs
- Attachment point/Retentions are being closely examined
- Underwriter scrutiny on Law Enforcement and Sexual Abuse/Misconduct coverages
- Emerging Exclusions: PFAS, Biometric Identifiers, Legislative



Insurers reporting loss cost increases in the 10-15% rate. Pricing will be based on losses and jurisdiction



Engage incumbent carriers early to gain commitment on renewal. Seeking face time with underwriters for complex risks.



### Property Renewal Outlook





**(\$)** 

### Continued scrutiny of data (SOV, COPE, ITV with Increased Construction Cost)

- Must go to market with a compelling narrative
- Increased retentions and caps on certain types of exposure
- Windstorm & Severe Convective Storm

Rate increases expected and highly dependent on Wind Season, Reinsurance Market and individual client losses

#### Underwriter submission activity remains high – imperative to engage early and access global market

- For the first time in a number of renewal cycles, there are a few new markets writing in the property sector
- Many London markets are targeting premium growth in the 20-30% range, including increased rate on renewal business and inflation

#### Regional Underwriting: Property markets are affected differently across the nation.

• e.g., West: Wildfire/Earthquake, East: Hurricanes, Midwest: SCS, etc.

#### Unknown impact of RMS v23

- Atlantic wind model expected to show an average 5%-10% uplift to aggregate industry modelled losses for some areas, could be as much as 20-30%
- The most significant changes are to the Florida/Gulf/Southeast areas and commercial exposures
- Most carriers, however, are still testing/trialling this version
- Anticipated influence on insurer aggregates and pricing likely not fully realized until early 2024



Public Entity Space dislocation – leaving buyers underinsured



Earthquake/ DIC Renewal Outlook





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Earthquake is catastrophic in nature, it is priced and underwritten separately from Property risks.

**Current Market Conditions:** 

• Major underwriters are re-

way to deploy capital:

evaluating the most profitable

ilii

Over the previous 10 years, the earthquake market has remained stable, and pricing has remained relatively flat compared to other major lines of CAT coverage. That is now changing.



- Capacity is generally declining:
  - Current markets are shrinking appetites – the push for smaller limits continues
  - No new significant injection of capital for EQ markets

 Market conditions pushed many placements into non-admitted markets, and a backlog developed creating service delays

• CA EQ vs. Other CAT/ Florida Wind

• For 2024, the goal is to provide stability and faster underwriting processing



### Cyber Renewal Outlook

# Leading insurers have indicated "We may have hit rate equilibrium"

### 2024 Forecast:

- 5 to 10% increases, at a minimum, for "good" risks; increases higher for "poor" risks with worse controls
- Overall capacity remains flat; no new entrants into the primary PE space
- Increased per-claim, self-insured retentions for poor security posture
- Potential coinsurance percentages added for ransomware if controls remain weak
- Ransomware limits holding steady



### **Requirement to evidence security posture:**

- MFA
- Data Backups
- Endpoint Detection Response ("EDR")
- Employee Education & Training Programs



### Workers Compensation Leading Concerns



### **Rate Expectations: Account Specific**

### **Trends to Watch:**

- Increase in state legislative bills filed for Presumptive and PTSD benefits
- Opioid Epidemic
- Data analytics and AI emerging in claims handling
- Increased severity of workplace injuries
- Mental health exposures
- Medical marijuana
- Increasing Payroll's impact on premium



Wage Inflation's impact on premiums & Medical Expense Inflation



Underwriter Concerns: Per Occurrence exposure to CAT loss; rate adequacy; changes in the labor market



Remote Work: Out of State employees & impact on productivity and compliance



Investment Yield on Long Tail Coverage





### Thank you!

### Questions?

Please contact us if you would like a copy of this presentation.



Agenda Item 11.A

### ACTUARIAL UPDATE FOR THE GENERAL LIABILITY AND PROPERTY PROGRAMS

### SUBJECT: Actuarial Update for the General Liability and Property Programs

### **BACKGROUND AND HISTORY:**

#### **General Liability Program:**

The preliminary actuarial report provides the funding information for the upcoming 2024/25 Program Year. The actuary was able to compile the data using loss run as of December 31, 2023, and estimated payroll based off December 31, 2023, actual payroll. With the additional \$5M top layer, taking total limits to \$35M in 2023/24, below is PLAN JPA's current General Liability (GL) Program structure.



#### Agenda Item 11.A Page 2

Below is a current comparison of the funding for the PLAN JPA Primary Pool Layer of \$1M self-insured retention (SIR):

Liability	Discount			
Program	Factor	Expected	 60%	 70%
2024/25	2.0%	\$ 6,438,000	\$ 6,625,000	\$ 7,520,000
2023/24	2.0%	\$ 4,764,000	\$ 4,888,000	\$ 5,593,000
	Change	1,674,000	1,737,000	 1,927,000
	% Change	35.1%	35.5%	34.5%

For the upcoming 2024/25 Program Year, the Liability Program funding has increased by \$1,737,000, or 35.5% at the 60% confidence level, with a 2% discount. Based on the draft actuarial report dated March 11, 2024, these increases were due to substantial claim losses and adverse development, which were significantly more than originally anticipated since the prior actuarial report dated March 13, 2023. In addition to recent unfavorable claims development, the increase in the primary funding layer is also due to the 2024/25 estimated payroll increasing by 8.8% overall, or \$43M, for the pool.

### **Property Program:**

PLAN JPA's current Property Program structure is:



#### Agenda Item 11.A Page 3

The preliminary actuarial data provides funding analysis for the upcoming 2024/25 Program Year. The actuary was able to compile the data using loss run as of December 31, 2023, and Total Insured Values as of January 8, 2024.

Below is a current comparison of the funding for the PLAN JPA Primary Pool Layer of \$500K self-insured retention (SIR):

Property	Discount				
Program	Factor	Expected	70%	75%	80%
2024/25	2.0%	\$ 1,650,000	\$ 1,955,000	\$ 2,105,000	\$2,282,000
2023/24	2.0%	\$ 1,373,000	\$ 1,635,000	\$ 1,766,000	\$1,921,000
	Change	277,000	320,000	339,000	361,000
	% Change	20.2%	19.6%	19.2%	18.8%

As inflation and costs of replacing insured values have further elevated to record levels in an already challenging Property insurance market, PLAN member retention in the Property Program has remained steady at \$5,000 per occurrence. Meanwhile, PLAN has taken on more risk through an increase from \$100,000 per occurrence to \$500,000 per occurrence.

During the 2023/24 budget cycle, the Board of Directors approved the Property Program Rehabilitation Plan, which detailed a three-year repayment loan structure to provide immediate stability and to ensure the long-term viability of the Pooled Property Program. With the passing of Resolution 2023-1, this incorporated an increase in the confidence level funding, incrementally at +5% each program year, from 70% to 85%, over the same period.

As depicted in the current comparison above, in the upcoming 2024/25 Program Year, PLAN's Property Program pool layer at the 80% confidence level is experiencing an increase of \$361,000, or 18.8%, over 2023/24. While Alliant Property Insurance Program (APIP), PLAN's Excess Property provider, is working through the appraisal process with members, currently, the Total Insured Values (TIV) have increased from \$3.6B to \$3.8B, or 5.9%, over 2023/24 TIV. The 2024/25 TIV will be updated as staff progresses through this budget cycle.

Becky Richard, ACAS, MAAA, Partner from Bickmore Actuarial, will be in attendance to provide a thorough overview of the Draft General Liability Program and Property Program Actuarial Reports to the Board of Directors.

#### **STAFF RECOMMENDATION:**

None.

### **<u>REFERENCE MATERIALS ATTACHED</u>**:

- Draft General Liability Program Actuarial Report as of March 11, 2024
- Draft Property Program Actuarial Report as of March 11, 2024



### Actuarial Review of the Self-Insured Liability Program

Outstanding Liabilities as of June 30, 2024 Forecast for Program Year 2024-25

Presented to **PLAN JPA** 

March 11, 2024 - DRAFT



March 11, 2024

Pooled Liability Assurance Network Joint Powers Authority Attn: Eric Dahlen 1750 Creekside Oaks Drive, Suite 200 Sacramento, CA 95833

Re: Actuarial Review of the Self-Insured Liability Program

Dear Mr. Dahlen:

As you requested, we have completed our review of the Authority's self-insured liability program (the PLAN JPA). We estimate the ultimate cost of claims and expenses for claims incurred during the 2024-25 program year to be \$6,438,000 including allocated loss adjustment expenses (ALAE) and a discount for anticipated investment income (assuming a \$1 million retention). ALAE is basically the direct cost associated with the defense of individual claims. The discount for investment income is calculated based on the likely payout pattern of your claims, assuming a 2.0% return on investments per year. For budgeting purposes, the expected cost of 2024-25 claims translates to a rate of \$1.209 per \$100 payroll.

In addition, we estimate the program's liability for outstanding claims to be \$27,139,000 as of June 30, 2024, including ALAE, unallocated loss adjustment expenses (ULAE), and discounted for anticipated investment income, assuming a 2.0% discount rate. ULAE is the remainder of the cost to administer all claims to final settlement. Given estimated program assets of \$49,677,000 (including SIR Fund assets), the program is funded above the 95% confidence level (see Graph 1 on Page 8).

The \$27,139,000 estimate is the minimum liability to be booked by the PLAN in accordance with Governmental Accounting Standards Board (GASB) Statement #10. GASB #10 requires PLAN to accrue a liability on its financial statements for the ultimate cost of claims and expenses associated with all reported and unreported claims, including ALAE and ULAE. GASB #10 does not prohibit the discounting of losses to recognize investment income.

### Estimated Liability for Unpaid Loss and LAE at June 30, 2024

	Expected	70% CL	75% CL	80% CL	85% CL	Minimum 90% CL
Loss and ALAE	\$25,246,000					
ULAE (Claims Administration)	3,156,000					
Investment Income Offset @ 2%	(1,263,000)					
Discounted Loss and LAE	\$27,139,000	\$30,097,000	\$31,318,000	\$32,757,000	\$34,602,000	\$37,099,000
Program Assets Includes SIR Fund	49,677,000					
Redundancy	\$22,538,000	\$19,580,000	\$18,359,000	\$16,920,000	\$15,075,000	\$12,578,000

The following table shows estimated liability for unpaid loss and LAE at various discount rate assumptions at the expected confidence level.

Estimated Liability for Unpaid Loss and LAE at June 30, 2024

Discount Rate	Outstanding Liability
2.0%	\$27,139,000
3.0%	\$26,549,000
4.0%	\$25,986,000

GASB #10 does not address an actual funding requirement for the program, but only speaks of the liability to be recorded on the PLAN's financial statements. Because actuarial estimates of claims costs are subject to some uncertainty, we recommend that an amount in addition to the discounted expected loss costs be set aside as a margin for contingencies.

We generally recommend that risk pools <u>maintain assets for historical liabilities</u> at no less than the 90% confidence level. Per CAJPA accreditation requirements, the 98% CL discounted outstanding liabilities are \$50,245,000.

It should be noted that the \$49,677,000 of program assets can be broken downs as follows:

- \$27,139,000 of assets backing discounted loss and LAE liabilities at expected level
- \$9,960,000 of assets backing discounted loss and LAE liabilities from the expected level to the 90% confidence level (Risk-Margin Fund)
- \$12,578,000 of assets backing discounted loss and LAE liabilities above the 90% confidence level (SIR Fund)

The following tables show our funding recommendations for PLAN for the 2024-25 fiscal year assuming \$1 million limit at 2.0%, 3.0% and 4.0% discount rate assumptions.

_	2.0%	3.0%	4.0%
Expected Loss and ALAE	\$6,915,000	\$6,915,000	\$6,915,000
Discounted Loss and ALAE	\$6,438,000	\$6,219,000	\$6,011,000
 60% Confidence Level	6,625,000	6,399,000	6,185,000
70% Confidence Level	7,520,000	7,264,000	7,021,000
80% Confidence Level	8,698,000	8,402,000	8,121,000
90% Confidence Level	10,559,000	10,199,000	9,858,000

### Loss and ALAE Funding Guidelines

The funding recommendations above are for losses and allocated loss adjustment expense only. They do not include any provision for claims administration, excess insurance, loss control, overhead, and other expenses associated with the program.

We generally recommend that risk pools fund for <u>future costs</u> between the <u>75% and 85%</u> <u>confidence levels</u>.

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 PLAN's internal use. It is not intended for general circulation.

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

Sincerely,

**Bickmore Actuarial** 

#### DRAFT

Becky Richard, ACAS, MAAA Partner

#### DRAFT

Mike Harrington, FCAS, MAAA President and Managing Partner

#### DRAFT

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### I. BACKGROUND

PLAN JPA began its self-insured excess liability program on June 2, 1986. Excess liability coverage up to \$5 million limits is written for accident years 1986-87 through 1997-98. For accident years 1998-99, 1999-00 and 2000-01 the excess liability coverage is \$7 million. For accident years 2001-02 through 2014-15, the excess liability coverage is \$5 million. For accident years 2015-16 through 2020-21, the excess liability coverage is \$2.5 million. PLAN currently purchases reinsurance in excess of \$1 million per occurrence as follows:

Loss Layer	Reinsurer
\$1M - \$10M per occurrence	CARMA
\$10M - \$15M per occurrence	Safety National
\$15M - \$20M per occurrence	Everest
\$20M - \$25M per occurrence	Hallmark
\$25M - \$30M per occurrence	AWAC

Each member city retains a portion of each claim. Deductible options are: \$25,000, \$50,000, \$100,000, \$250,000 and \$500,000. Appendix D, page 3 summarizes the member cities' deductibles by year.

Claims administration services are provided by York. As of June 30, 2024, the PLAN JPA is expected to have available assets of \$49,677,000 for the program including SIR Fund.

In PLAN's loss history, there have been claims made relating to property development actions, specifically inverse condemnation claims. Effective July 1, 2008, the PLAN JPA Program Memorandum of Coverage (MOC) was amended with the intent to exclude all regulatory inverse condemnation claims going forward. However, there exists tail exposure for claims occurring prior to this date. For these claims, an agreement was reached to provide each member a \$1 million SIR for defense coverage for all prior inverse claims reported by June 30, 2013 (5-year reporting window).

The purpose of this review is to provide a guide to PLAN JPA to determine reasonable funding levels for its self-insurance program according to the funding policy PLAN JPA has adopted to comply with Governmental Accounting Standards Board Statements #10.

The specific objectives of the study are to estimate the Authority's liability for outstanding claims as of June 30, 2024, project ultimate loss cost for 2024-25 and provide funding guidelines to meet these liabilities and future costs.

### **II. CONCLUSIONS AND RECOMMENDATIONS**

### A. LIABILITY FOR OUTSTANDING CLAIMS AS OF JUNE 30, 2024

Graph 1 on the following page summarizes our assessment of the PLAN JPA's funding position as of June 30, 2024. The dark-colored bars indicate our estimates of the program's liability for outstanding claims before recognition of the investment income that can be earned on the assets held before the claim payments come due. The solid horizontal line across the graph indicates the PLAN JPA's available assets at June 30, 2024 including the SIR Fund.

Our best estimate of the full value of PLAN JPA's liability for outstanding claims within its self-insured retention (SIR) is \$28,402,000. This amount includes losses, allocated loss adjustment expenses (ALAE) and unallocated loss adjustment expenses (ULAE), and is shown at the far left of the graph. ALAE is basically the direct cost associated with the defense of individual claims (e.g. legal fees, investigation fees, court charges, etc.). ULAE is the additional cost to administer all claims to final settlement, which may be years into the future (e.g. claims adjusters' salaries, taxes, etc.), and is estimated to be 10% of outstanding loss and ALAE.

There is some measure of uncertainty associated with our best estimate because of the random nature of much of the process that determines ultimate claims costs. For this reason, we generally recommend that a program such as this include some funding margin for the possibility that actual loss costs will be greater than the best estimate. We generally measure the amount of this margin by thinking in terms of the probability distribution of actual possible results around our best estimate. As the margin grows, the probability that the corresponding funding amount will be sufficient to meet actual claim liabilities increases. We typically refer to this probability as the "confidence level" of funding. Graph 1 shows the liabilities for outstanding claims at several confidence levels that are typically of interest to risk managers in formulating funding policies for self-insurance programs.

60,000 50,000 49,677 38,826 37,099 T40,000 36,213 h 34,602 34,281 0 32,776 32,757 u 31,498 31,318 30,097 s a<sup>30,000</sup> 28,402 27,139 n d s 20,000 10,000 0 70% Expected 75% 80% 85% 90% **Confidence Levels** Discounted Undiscounted —Available Assets

PLAN JPA Available Assets vs Outstanding Liability (\$000's) at June 30, 2024

The PLAN can earn investment income on the assets it holds until claims payments come due. Assuming a long-term average annual return on investments of 2.0%, we estimate the impact of investment income earnings to be about 4.4% if the program is funded within the range indicated in Graph 1. Investment income earnings will be less than this when the program does not maintain sufficient funding, and more when there is excess funding. Thus, thinking in terms of liabilities discounted for investment income can actually mask funding deficiencies and redundancies that might otherwise be obvious. However, the discounted liabilities do represent legitimate funding targets. The light-colored bars on Graph 1 show our estimates of the PLAN's discounted liability for outstanding claims.

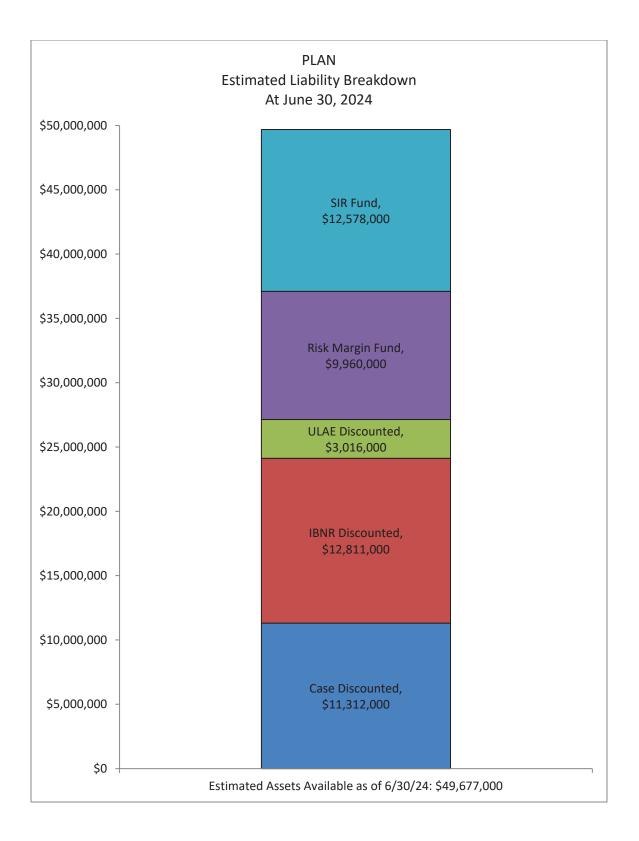
We estimate the program's expected discounted liability for outstanding claims to be \$27,139,000 again including ALAE and ULAE. With recognition of the investment income that can be earned on the assets held, the program is funded above the 90% confidence level. The information presented in Graph 1 is also summarized in tabular form below.

Ografialauraa	Liability for Outstanding Claims at 6/30/24					
Confidence Levels	Expected	70%	75%	80%	85%	90%
Not Discounted	\$28,402,000	\$31,498,000	\$32,776,000	\$34,281,000	\$36,213,000	\$38,826,000
Discounted	27,139,000	30,097,000	31,318,000	32,757,000	34,602,000	37,099,000
Assets Available at 6/30/24			\$49,677,000			

GASB #10 does not address an actual funding requirement for the program, but only speaks to the liability to be recorded on the PLAN's financial statements. Because actuarial estimates of claims costs are subject to some uncertainty, we recommend that an amount in addition to the discounted expected loss costs be set aside as a margin for contingencies.

We generally recommend that risk pools <u>maintain assets for historical liabilities</u> at no less than the <u>90% confidence level</u>.

The following chart shows the breakdown of PLAN's estimated assets available as of June 30, 2024. The discounted value of PLAN's estimated case reserves, IBNR and ULAE as of June 30, 2024 are \$11,312,000, \$12,811,000, and \$3,016,000, respectively. An additional \$9,960,000 increases the funding to 90% confidence.



### B. COSTS OF 2024-25 CLAIMS

The following chart shows our funding recommendations for PLAN for the 2024-25 fiscal year assuming \$1 million limit at 2.0%, 3.0% and 4.0% discount rate assumptions.

_	2.0%	3.0%	4.0%
Expected Loss and ALAE	\$6,915,000	\$6,915,000	\$6,915,000
Discounted Loss and ALAE	\$6,438,000	\$6,219,000	\$6,011,000
60% Confidence Level	6,625,000	6,399,000	6,185,000
70% Confidence Level	7,520,000	7,264,000	7,021,000
80% Confidence Level	8,698,000	8,402,000	8,121,000
90% Confidence Level	10,559,000	10,199,000	9,858,000

#### Loss and ALAE Funding Guidelines

The funding recommendations above are for losses and allocated loss adjustment expense only. They do not include any provision for claims administration, excess insurance, loss control, overhead, and other expenses associated with the program.

We generally recommend that risk pools fund for <u>future costs</u> between the <u>75% and 85%</u> <u>confidence levels</u>.

### C. 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 Statement #10.

GASB #10 does not address funding requirements. It does, however, allow a range of funded amounts to be recognized for accounting purposes, specifically GASB #10 allows recognition of a funding margin for unexpectedly adverse loss experience.

The amount of such a margin should be a question of long-term funding policy. We recommend that the margin be determined by thinking in terms of the probability that a given level of funding will prove to be adequate. If you elect to fund at a low confidence level, the chances are much greater that future events will prove that additional contributions should have been made for current claims.

We generally recommend that risk pools <u>maintain assets for historical liabilities</u> at no less than the <u>90% confidence level</u>, after recognition of investment income. The resulting risk margin is reasonably high that resulting funding should be sufficient to meet claim liabilities, yet the risk margin is not so large that they will cause most self-insured entities to experience undue financial hardship.

We generally recommend that risk pools fund for <u>future costs</u> between the <u>75% and 85%</u> <u>confidence levels</u>. The confidence level to which any future year is funded should be evaluated in light of the relative certainty of the assumptions underlying the actuarial analysis, PLAN JPA'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.

The following target funding ratios are used to further determine appropriate funding goals.

	Score		
Funding Benchmarks	<u>(SIR: \$1M)</u>	Target	Result
Net Assets to SIR	22.54	>5 : 1	Pass
SIR fund to SIR	12.58	> 2 : 1	Pass
Net Premium to Net Assets	0.29	< 2 : 1	Pass
Claim Reserve/IBNR to Net Assets	1.07	< 3 : 1	Pass
Ultimate Loss Development to Net Assets	21%	< 20%	Fail

#### Net Assets to SIR ratio: Target >5:1

This ratio is a measure of the maximum amount net assets could decline due to a single full limits loss. A high ratio is desirable.

#### SIR Fund to SIR ratio: Target >2:1

This ratio is a measure of the maximum amount the SIR Fund could decline due to a single full limits loss. A high ratio is desirable.

#### Net Premium to Net Assets ratio: Target <2:1

This ratio measure whether adverse loss development can be absorbed by new premium. Net premium equals premium received by PLAN, less premium paid by PLAN to others. A low ratio is desirable.

#### Claim Reserve/IBNR to Net Assets ratio: Target <3:1

The ratio is a measure of how net assets are leveraged against total undiscounted reserves. A low ratio is desirable.

#### Ultimate Loss Development to Net Assets ratio: Target <20%

This ratio is a measure of the development in prior year's ultimate losses from one year to the next. A low ratio is desirable.

We provide the following comparison of deposit premiums, which include ultimate loss and ALAE, claims administration, loss prevention, other administration and excess insurance costs at the 60% confidence level on a discounted basis (2.0%). This is shown in further detail on Exhibit 1, page 1.

SIR/Excess Member	2023-24 \$1.0M/\$30M Actual Funding	2024-25 \$1.0M/\$30M Proposed Funding	Dollar Change	Percent Change
	Ũ	0	0	0
American Canyon	\$530,737	\$610,275	\$79,538	15.0%
Atherton	285,607	421,711	136,104	47.7%
Benicia	1,109,128	1,226,782	117,654	10.6%
Burlingame	1,042,150	1,254,450	212,300	20.4%
Campbell	1,110,923	1,407,410	296,487	26.7%
Colma	146,635	153,601	6,966	4.8%
Cupertino	1,231,725	1,476,950	245,225	19.9%
Dublin	1,609,914	1,985,298	375,384	23.3%
East Palo Alto	714,359	791,558	77,199	10.8%
Foster City	796,891	972,818	175,927	22.1%
Half Moon Bay	309,245	408,482	99,237	32.1%
Hillsborough	398,478	581,618	183,141	46.0%
Los Altos Hills	222,350	288,379	66,029	29.7%
Los Gatos	765,879	980,402	214,524	28.0%
Millbrae	622,972	737,026	114,054	18.3%
Milpitas	2,112,548	2,511,412	398,864	18.9%
Morgan Hill	1,223,523	1,428,682	205,159	16.8%
Newark	1,131,751	1,403,310	271,558	24.0%
Pacifica	1,256,303	1,452,479	196,176	15.6%
Portola Valley	135,350	160,215	24,865	18.4%
Ross, Town of	93,737	122,592	28,855	30.8%
San Bruno	1,333,296	1,538,977	205,682	15.4%
San Carlos	850,969	1,187,580	336,611	39.6%
Saratoga	773,769	901,509	127,740	16.5%
South SF	1,468,714	1,829,916	361,202	24.6%
Suisun City	758,855	1,028,617	269,762	35.5%
Tiburon	273,970	343,882	69,912	25.5%
Woodside	164,061	205,070	41,009	25.0%
Total	\$22,473,839	\$27,411,000	\$4,937,161	22.0%

As shown in the previous table, total PLAN contributions are \$27,411,000, and can be broken down into four categories (1) Loss Funding, (2) Fixed Expenses, (3) Variable Expenses and (4) Loss Prevention Expenses. These costs are allocated to each individual member using the various methods discussed below.

The loss funding category actually can be broken down into two components: (1) PLAN loss fund contributions and (2) excess insurance. The PLAN loss fund contributions are based on the member's loss experience relative to the overall PLAN average and member's projected exposure (payroll) for 2024-25. The member's loss experience is factored into the allocation by using the experience modification factor developed in Exhibit 1, page 6. The experience modification factor calculation compares the prior five year's loss experience (2018-19 through 2022-23) per \$100 of payroll to the average of all PLAN members. A factor of 100% indicates that the member's loss experience is equal to the PLAN average.

The number of years of loss experience utilized depends on the degree of stability vs. responsiveness desired. Using more years in the calculation may stabilize year-to-year premium changes, but will not be responsive to changes in loss experience. On the other hand, using a limited number of years results in a quick response to changes in loss experience, but changes in year-to-year premiums by member will be dramatic. A five-year time period provides a reasonable balance between stability and responsiveness.

Furthermore, the experience modification factors are developed based on losses limited to \$250,000 per occurrence. Without such a loss limit, a member incurring one catastrophic loss will pay disproportionately higher premiums as long as that loss remains in the experience period. The member will not realize financial benefits from loss control, even though its claim frequency may have decreased.

The experience modification and deductible factors are applied to the selected funding rate to obtain the adjusted rate. The adjusted rate is multiplied by the members' payroll to determine the base deposit.

The excess insurance portion of the loss funding is allocated to each member based upon estimated member population. The assumption here is that losses in excess of the PLAN retention are random, and thus more appropriately related to exposure than loss experience. This calculation is shown on Exhibit 1, Page 3.

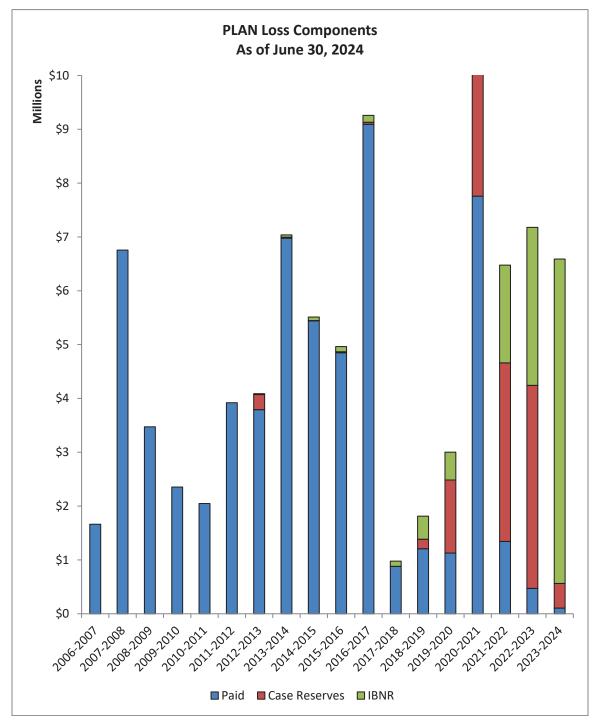
Total budgeted administrative costs for 2024-25 are \$2,537,000. Total PLAN administrative expenses of \$2,537,000 are split into \$2,029,600 for general liability and \$507,400 for property coverages then again split into fixed and variable portions. Thirty-three percent of these expenses are assumed to be fixed, and every individual member is initially allocated the same amount of fixed expense regardless of its size. Given total fixed expenses of \$837,210 and 28 members for the 2024-25 fiscal year, this results in an initial charge of \$29,900 per member.

The remaining sixty-seven percent of administrative expenses are assumed to vary by member and are initially allocated based upon one-third weight to reported claims greater than \$1 (i.e. excluding claims closed without payment) and two-thirds weight to paid

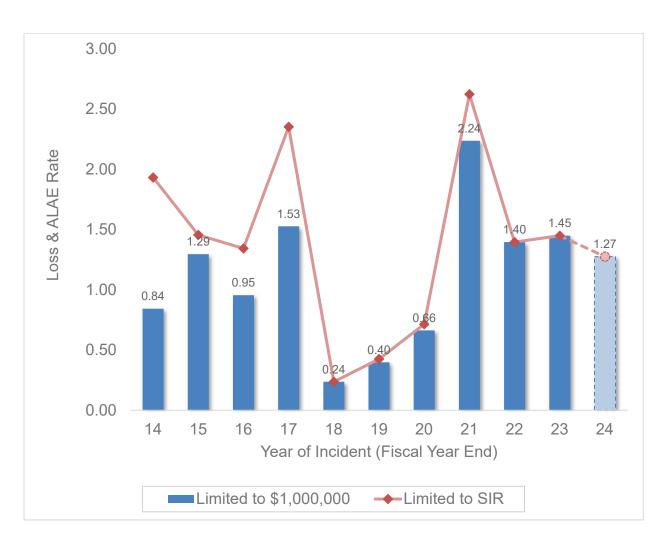
losses in the period 2018-19 through 2022-23. Liability and Property are treated separately for the allocation, then added into the premium in total.

# D. OTHER RESULTS

The following chart show each program year's ultimate loss broken down by paid losses, case reserves and IBNR reserves.



PLAN's pool loss rate per \$100 of payroll has varied significantly over the past ten years. The projected loss rate of \$1.27 per \$100 of payroll for the 2023-24 year is based on the long-term average at the \$1M limited layer.



**Pool Layer** Loss & ALAE Rate Trend<sup>1</sup> Ultimate Loss & ALAE / Payroll (\$100s)

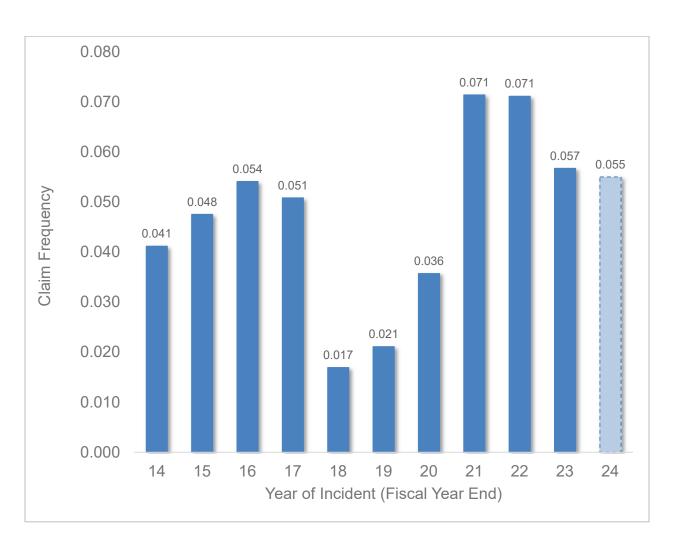
<sup>1</sup> Losses are at expected (no risk margin) and are not discounted to reflect net present value.

The program's cost per claim averaged \$245,000 per claim (limited to \$1M) during the period shown below. The projected severity for the 2023-24 program year of \$231,800 is based on this long-term trend.



Average Claim Size Trend<sup>1</sup> Ultimate Loss & ALAE / Ultimate Reported Claims

PLAN's claims frequency per \$1 million of payroll averaged 0.047 claims per \$1 million of payroll during the period shown below. The projected frequency for the 2023-24 program year of 0.055 is based on recent three-year average.



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

# E. COMPARISON WITH OUR PREVIOUS RESULTS

The prior report for PLAN was dated March 13, 2023. In the table below we display actual versus expected development of incurred losses and ALAE by accident year between the December 31, 2022 evaluation date of the prior report and the December 31, 2023 evaluation date of the current report.

Accident Year	Expected Incurred Development	Actual Incurred Development	Actual Minus Expected	
1986-03	\$0	\$0	\$0	
2003-04	0	0	0	
2004-05	0	0	0	
2005-06	0	0	0	
2006-07	0	0	0	
2007-08	0	0	0	
2008-09	0	0	0	
2009-10	0	0	0	
2010-11	0	0	0	
2011-12	12,000	42,000	30,000	
2012-13	24,000	0	(24,000)	
2013-14	35,000	0	(35,000)	
2014-15	54,000	0	(54,000)	
2015-16	73,000	(115,000)	(188,000)	
2016-17	20,000	888,000	868,000	
2017-18	66,000	(1,000)	(67,000)	
2018-19	236,000	(32,000)	(268,000)	
2019-20	1,268,000	1,692,000	424,000	
2020-21	1,837,000	3,729,000	1,892,000	
2021-22	1,576,000	3,633,000	2,057,000	
2022-23	845,000	3,868,000	3,023,000	
Total	\$6,046,000	\$13,704,000	\$7,658,000	

# Actual Versus Expected Pool Incurred Loss and ALAE Development

As shown, actual pool incurred development was more than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that incurred losses through accident year 2022-23 would increase by \$6,046,000 between the two evaluation dates. However, actual development was approximately \$13,704,000; or about \$7,658,000 more than expected.

In the table below we display actual versus expected development of paid losses and ALAE by accident year between the December 31, 2022 evaluation date of the prior report and the December 31, 2023 evaluation date of the current report.

Accident Year	Expected Paid Development	Actual Paid Development	Actual Minus Expected
1986-03	\$0	\$0	\$0
2003-04	0	0	0
2004-05	0	0	0
2005-06	0	0	0
2006-07	0	0	0
2007-08	0	0	0
2008-09	0	0	0
2009-10	0	0	0
2010-11	0	0	0
2011-12	45,000	97,000	52,000
2012-13	136,000	81,000	(55,000)
2013-14	30,000	0	(30,000)
2014-15	49,000	0	(49,000)
2015-16	49,000	4,000	(45,000)
2016-17	139,000	2,104,000	1,965,000
2017-18	44,000	(1,000)	(45,000)
2018-19	343,000	59,000	(284,000)
2019-20	1,051,000	642,000	(409,000)
2020-21	1,807,000	2,710,000	903,000
2021-22	796,000	515,000	(281,000)
2022-23	184,000	19,000	(165,000)
Total	\$4,673,000	\$6,230,000	\$1,557,000

# Actual Versus Pool Expected Paid Loss and ALAE Development

As shown, actual pool paid development was more than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that paid losses through accident year 2022-23 would increase by \$4,673,000 between the two evaluation dates. However, actual development was approximately \$6,230,000; or about \$1,557,000 more than expected. In the table below we display the change in our estimates of the program's ultimate losses and ALAE by accident year since our prior report.

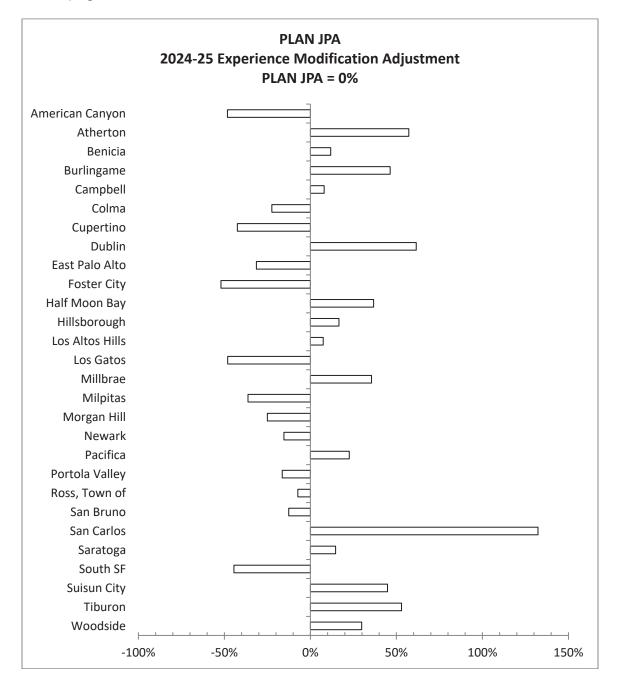
Accident Year	Prior Report	Current Report	Change
1986-03	\$43,442,000	\$43,442,000	\$0
2003-04	2,574,000	2,574,000	ψ0 0
2003-04 2004-05	1,874,000	1,874,000	0
2004-05	4,756,000	4,756,000	0
	, ,	, ,	
2006-07	1,662,000	1,662,000	0
2007-08	6,756,000	6,756,000	0
2008-09	3,473,000	3,473,000	0
2009-10	2,353,000	2,353,000	0
2010-11	2,047,000	2,047,000	0
2011-12	3,902,000	3,920,000	18,000
2012-13	4,105,000	4,088,000	(17,000)
2013-14	7,074,000	7,039,000	(35,000)
2014-15	5,566,000	5,512,000	(54,000)
2015-16	5,157,000	4,964,000	(193,000)
2016-17	8,351,000	9,259,000	908,000
2017-18	1,075,000	976,000	(99,000)
2018-19	2,079,000	1,812,000	(267,000)
2019-20	2,690,000	3,001,000	311,000
2020-21	8,725,000	11,393,000	2,668,000
2021-22	4,978,000	6,476,000	1,498,000
2022-23	4,720,000	7,178,000	2,458,000
	1,120,000	1,110,000	2,100,000
Total	\$127,359,000	\$134,555,000	\$7,196,000

# Change in Pool Loss and ALAE Ultimate Losses

As shown, overall we have increased our estimated ultimate losses by \$7,196,000 since our prior report. The changes in our estimates of ultimate losses take into account both the incurred and paid development listed on the previous two pages. The following table displays a comparison of the PLAN JPA's proposed 2023-24 funding and actual 2024-25 funding by member.

	2023-24	2024-25		
	Actual	Proposed	Dollar	Percent
Member	Funding	Funding	Change	Change
American Canyon	\$530,737	\$610,275	\$79,538	15.0%
Atherton	285,607	421,711	136,104	47.7%
Benicia	1,109,128	1,226,782	117,654	10.6%
Burlingame	1,042,150	1,254,450	212,300	20.4%
Campbell	1,110,923	1,407,410	296,487	26.7%
Colma	146,635	153,601	6,966	4.8%
Cupertino	1,231,725	1,476,950	245,225	19.9%
Dublin	1,609,914	1,985,298	375,384	23.3%
East Palo Alto	714,359	791,558	77,199	10.8%
Foster City	796,891	972,818	175,927	22.1%
Half Moon Bay	309,245	408,482	99,237	32.1%
Hillsborough	398,478	581,618	183,141	46.0%
Los Altos Hills	222,350	288,379	66,029	29.7%
Los Gatos	765,879	980,402	214,524	28.0%
Millbrae	622,972	737,026	114,054	18.3%
Milpitas	2,112,548	2,511,412	398,864	18.9%
Morgan Hill	1,223,523	1,428,682	205,159	16.8%
Newark	1,131,751	1,403,310	271,558	24.0%
Pacifica	1,256,303	1,452,479	196,176	15.6%
Portola Valley	135,350	160,215	24,865	18.4%
Ross, Town of	93,737	122,592	28,855	30.8%
San Bruno	1,333,296	1,538,977	205,682	15.4%
San Carlos	850,969	1,187,580	336,611	39.6%
Saratoga	773,769	901,509	127,740	16.5%
South SF	1,468,714	1,829,916	361,202	24.6%
Suisun City	758,855	1,028,617	269,762	35.5%
Tiburon	273,970	343,882	69,912	25.5%
Woodside	164,061	205,070	41,009	25.0%
Total	\$22,473,839	\$27,411,000	\$4,937,161	22.0%

The following table displays PLAN JPA members' 2024-25 experience modification adjustment. This is the experience modification factor minus 100%, and shows how each member performs relative to the pool average. A negative percentage indicates better than average performance, while a positive percentage indicates worse than average performance. A detailed calculation of the experience modification factors is shown in Exhibit 1, page 6.



# F. DATA ISSUES

Overall, the data utilized in preparing this report appears to be accurate as of the date of the current evaluation. However, it should be noted that certain assumptions have been made to allow for a lack of information on exposures.

We received loss data evaluated as of December 31, 2023. This data appeared to be consistent with the data provided for prior reviews.

We were provided with fiscal year payrolls for the 2022-23, 2023-24 and 2024-25 program years.

Excess insurance premium is estimated to be \$18,249,000 for the \$1 million to \$30 million layer. Premiums for individual layers are estimated based upon pool limits factors.

Tiburon has assumed liability coverage for the Tiburon-Belvedere library effective July 1, 2006. Tiburon-Belvedere library left the pool effective July 1, 2020.

# **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 PLAN. We have accepted all of this information without audit.
- We have also made use of loss statistics that have been developed from the information gathered and compiled from other California public entities with self-insured excess 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 liability programs in the aggregate form a reasonable basis of comparison to the patterns from PLAN's data.
- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial reviews of other California public entities with self-insured 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 cost of 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 costs associated with liability claims are increasing at 2.5% per year. We have assumed that the average claim size decreases at 0.5% per year and that the average number of claims per \$1 million increases at 3.0% per year.
- We have assumed that 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 annual return of 2%.
- The claims costs we have estimated include indemnity and medical payments, and all loss adjustment expenses. We have not provided estimates for excess insurance contributions, and other expenses associated with the program.
- Our funding recommendations do not include provision for catastrophic events not in the PLAN'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 PLAN's excess coverage.
- PLAN available assets have been estimated to be \$49,677,000 as of June 30, 2024 for use in this report.

# 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.)

**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 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 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.)

# Summary of 2024-25 Deposit by Retention Limit

	2023-24 Premium	Total Deposit \$1 Million Retention \$30 Million	Indicated Dollar	Indicated Percent	Total	Total Percent
Member (A)	Deposit (B)	Limit (C)	Change (D)	Change (E)	Deposit (F)	Change (G)
(A)	(B)	(C)	(D)	(⊏)	(٢)	(0)
American Canyon	\$530,737	\$610,275	\$79,538	15.0%	610,275	15.0%
Atherton	285,607	421,711	136,104	47.7%	421,711	47.7%
Benicia	1,109,128	1,226,782	117,654	10.6%	1,226,782	10.6%
Burlingame	1,042,150	1,254,450	212,300	20.4%	1,254,450	20.4%
Campbell	1,110,923	1,407,410	296,487	26.7%	1,407,410	26.7%
Colma	146,635	153,601	6,966	4.8%	153,601	4.8%
Cupertino	1,231,725	1,476,950	245,225	19.9%	1,476,950	19.9%
Dublin	1,609,914	1,985,298	375,384	23.3%	1,985,298	23.3%
East Palo Alto	714,359	791,558	77,199	10.8%	791,558	10.8%
Foster City	796,891	972,818	175,927	22.1%	972,818	22.1%
Half Moon Bay	309,245	408,482	99,237	32.1%	408,482	32.1%
Hillsborough	398,478	581,618	183,141	46.0%	581,618	46.0%
Los Altos Hills	222,350	288,379	66,029	29.7%	288,379	29.7%
Los Gatos	765,879	980,402	214,524	28.0%	980,402	28.0%
Millbrae	622,972	737,026	114,054	18.3%	737,026	18.3%
Milpitas	2,112,548	2,511,412	398,864	18.9%	2,511,412	18.9%
Morgan Hill	1,223,523	1,428,682	205,159	16.8%	1,428,682	16.8%
Newark	1,131,751	1,403,310	271,558	24.0%	1,403,310	24.0%
Pacifica	1,256,303	1,452,479	196,176	15.6%	1,452,479	15.6%
Portola Valley	135,350	160,215	24,865	18.4%	160,215	18.4%
Ross, Town of	93,737	122,592	28,855	30.8%	122,592	30.8%
San Bruno	1,333,296	1,538,977	205,682	15.4%	1,538,977	15.4%
San Carlos	850,969	1,187,580	336,611	39.6%	1,187,580	39.6%
Saratoga	773,769	901,509	127,740	16.5%	901,509	16.5%
South SF	1,468,714	1,829,916	361,202	24.6%	1,829,916	24.6%
Suisun City	758,855	1,028,617	269,762	35.5%	1,028,617	35.5%
Tiburon	273,970	343,882	69,912	25.5%	343,882	25.5%
Woodside	164,061	205,070	41,009	25.0%	205,070	25.0%
Total	\$22,473,839	\$27,411,000	\$4,937,161	22.0%	\$27,411,000	22.0%

(B) From provided by PLAN JPA.
(C) From Exhibit 1 - Page 2a
(D) (C) - (B)
(E) (C) / (B) - 1
(F) From Exhibit 1 - Page 2a

Split of 2024-25 Deposit Between Loss Funding and Administrative Expenses \$1.0M Retention / \$30M Limit

Member (A)	Loss Funding (B)	Excess Insurance (C)	Admin Expenses (D)	Total Deposit (E)
American Canyon	\$80,198	\$467,124	\$62,953	\$610,275
Atherton	215,444	146,193	60,074	421,711
Benicia	511,439	573,124	142,219	1,226,782
Burlingame	347,383	659,727	247,339	1,254,450
Campbell	373,379	935,059	98,973	1,407,410
Colma	82,126	29,751	41,724	153,601
Cupertino	117,665	1,294,979	64,306	1,476,950
Dublin	297,894	1,570,727	116,678	1,985,298
East Palo Alto	103,254	625,795	62,509	791,558
Foster City	179,586	715,923	77,309	972,818
Half Moon Bay	114,471	245,756	48,256	408,482
Hillsborough	241,631	239,976	100,011	581,618
Los Altos Hills	67,242	183,452	37,685	288,379
Los Gatos	183,629	724,658	72,116	980,402
Millbrae	172,550	492,278	72,198	737,026
Milpitas	546,964	1,774,691	189,757	2,511,412
Morgan Hill	339,681	1,004,652	84,349	1,428,682
Newark	290,858	1,038,956	73,495	1,403,310
Pacifica	454,320	811,787	186,372	1,452,479
Portola Valley	33,969	92,974	33,272	160,215
Ross, Town of	39,583	49,628	33,381	122,592
San Bruno	436,460	920,632	181,885	1,538,977
San Carlos	437,325	645,717	104,539	1,187,580
Saratoga	168,005	669,162	64,341	901,509
South SF	318,387	1,408,137	103,392	1,829,916
Suisun City	321,538	623,278	83,801	1,028,617
Tiburon	102,129	192,603	49,150	343,882
Woodside	47,890	112,260	44,919	205,070
Total	\$6,625,000	\$18,249,000	\$2,537,000	\$27,411,000

(B) From Exhibit 1, Page 2b.
(C) From Exhibit 1, Page 2b.
(D) From Exhibit 1, Page 2b.
(E) (B) + (C) + (D)

#### 2024-25 Deposit by Member \$1.0M Retention / \$30M Limit

			Adjusted Experience	2024-25	PLAN JPA	Balanced PLAN JPA		Adjusted	Indicated
		Deductible	Modification	Payroll	Loss Fund	Loss Fund	Excess	Adjusted Admin.	Total
Member	Deductible	Factor	Factor	(00)		Contribution	Insurance	Expenses	Deposit
(A)	(B)	(C)	(D)	(00) (E)	(F)	(G)	(H)	(I)	(J)
(/ ()	(8)	(0)	(D)	(ட)	(1)	(0)	(11)	(1)	(0)
American Canyon	25,000	1.337	52%	91,653	75,605	80,198	467,124	62,953	610,275
Atherton	25,000	1.337	157%	81,126	203,105	215,444	146,193	60,074	421,711
Benicia	25,000	1.337	112%	270,766	482,146	511,439	573,124	142,219	1,226,782
Burlingame	250,000	0.639	146%	293,919	327,486	347,383	659,727	247,339	1,254,450
Campbell	100,000	1.000	108%	273,522	351,994	373,379	935,059	98,973	1,407,410
Colma	50,000	1.193	78%	70,214	77,423	82,126	29,751	41,724	153,601
Cupertino	250,000	0.639	58%	253,305	110,925	117,665	1,294,979	64,306	1,476,950
Dublin	50,000	1.193	162%	122,342	280,832	297,894	1,570,727	116,678	1,985,298
East Palo Alto	100,000	1.000	69%	119,102	97,340	103,254	625,795	62,509	791,558
Foster City	100,000	1.000	48%	295,919	169,300	179,586	715,923	77,309	972,818
Half Moon Bay	50,000	1.193	137%	55,525	107,914	114,471	245,756	48,256	408,482
Hillsborough	50,000	1.193	117%	137,466	227,791	241,631	239,976	100,011	581,618
Los Altos Hills	25,000	1.337	107%	37,045	63,390	67,242	183,452	37,685	288,379
Los Gatos	50,000	1.193	52%	234,642	173,112	183,629	724,658	72,116	980,402
Millbrae	100,000	1.000	136%	100,737	162,667	172,550	492,278	72,198	737,026
Milpitas	100,000	1.000	64%	678,970	515,636	546,964	1,774,691	189,757	2,511,412
Morgan Hill	100,000	1.000	75%	358,385	320,226	339,681	1,004,652	84,349	1,428,682
Newark	100,000	1.000	85%	272,092	274,199	290,858	1,038,956	73,495	1,403,310
Pacifica	50,000	1.193	123%	245,795	428,299	454,320	811,787	186,372	1,452,479
Portola Valley	25,000	1.337	84%	24,046	32,023	33,969	92,974	33,272	160,215
Ross, Town of	25,000	1.337	93%	25,266	37,315	39,583	49,628	33,381	122,592
San Bruno	100,000	1.000	87%	395,094	411,462	436,460	920,632	181,885	1,538,977
San Carlos	100,000	1.000	232%	148,959	412,277	437,325	645,717	104,539	1,187,580
Saratoga	25,000	1.337	115%	86,742	158,383	168,005	669,162	64,341	901,509
South SF	100,000	1.000	56%	453,601	300,151	318,387	1,408,137	103,392	1,829,916
Suisun City	25,000	1.337	145%	131,395	303,122	321,538	623,278	83,801	1,028,617
Tiburon	50,000	1.193	153%	44,283	96,280	102,129	192,603	49,150	343,882
Woodside	25,000	1.337	130%	21,838	45,147	47,890	112,260	44,919	205,070
Total		1.045	93%	5,323,749	6,245,552	6,625,000	18,249,000	2,537,000	27,411,000

(B) Provided by PLAN

(C) From Exhibit 2, Page 2.

(D) From Exhibit 1, Page 6.

(E) From Exhibit 2, Page 1.

 (G) { [\$6,625,000 / Total (E)] x [(C) / Weighted Average of (C)] x (D) x (E)}.
 \$6,625,000 is the discounted expected loss & ALAE at 60% CL from Exhibit 2, Page 1a. (2.0% Discount Rate). (H) From Exhibit 1, page 3.

(I) [Total fixed expenses / Total number of members].

Total fixed expenses are equal to 33% of total expenses. Total expenses of \$2,537,000 projected by PLAN JPA. (J) (G) + (H) + (I)

2024-25 Allocation of Excess Insurance Premium by Member

Member (A)	2024-25 Population (B)	Percent 2024-25 Population (C)	2024-25 Excess Insurance \$29M XS \$1M (D)
American Canyon Atherton Benicia Burlingame Campbell Colma Cupertino Dublin East Palo Alto Foster City Half Moon Bay Hillsborough Los Altos Hills Los Gatos Millbrae Milpitas Morgan Hill Newark Pacifica Portola Valley Ross, Town of San Bruno San Carlos	21,338 6,678 26,180 30,136 42,713 1,359 59,154 71,750 28,586 32,703 11,226 10,962 8,380 33,102 22,487 81,067 45,892 47,459 37,082 4,247 2,267 42,054 29,496	2.56% 0.80% 3.14% 3.62% 5.12% 0.16% 7.10% 8.61% 3.43% 3.92% 1.35% 1.32% 1.01% 3.97% 2.70% 5.51% 5.69% 4.45% 0.51% 0.27% 5.04% 3.54%	467,124 146,193 573,124 659,727 935,059 29,751 1,294,979 1,570,727 625,795 715,923 245,756 239,976 183,452 724,658 492,278 1,774,691 1,004,652 1,038,956 811,787 92,974 49,628 920,632 645,717
Saratoga	30,567	3.67%	669,162
South SF	64,323	7.72%	1,408,137
Suisun City	28,471	3.42%	623,278
Tiburon	8,798	1.06%	192,603
Woodside	5,128	0.62%	112,260
Total	833,605	100.0%	18,249,000

(B) Provided by PLAN JPA.
(C) (B) / Total (B)
(D) (C) X Total (D)

#### 2024-25 Allocation of Variable Administrative Expenses by Member Liability Claims

Member (A)	Liability Reported Counts > \$1 2018-19 2022-23 (B)	Liability Paid Losses 2018-19 2022-23 (C)	Percent Liability Reported Counts > \$1 (D)	Percent Liability Paid Losses 2018-19 2022-23 (E)	Percent Liability Variable Administrative Expenses (G)	Liability Variable Administrative Expenses (H)
American Canyon	13	5,245	1.58%	0.03%	0.55%	7,450
Atherton	13	358,061	1.58%	2.18%	1.98%	26,952
Benicia	43	1,016,966	5.22%	6.20%	5.88%	79,897
Burlingame	79	3,146,526	9.60%	19.19%	15.99%	217,439
Campbell	37	515,849	4.50%	3.15%	3.60%	48,893
Colma	8	105,784	0.97%	0.65%	0.75%	10,253
Cupertino	25	286,540	3.04%	1.75%	2.18%	29,608
Dublin	22	680,969	2.67%	4.15%	3.66%	49,758
East Palo Alto	18	122,810	2.19%	0.75%	1.23%	16,702
Foster City	21	318,351	2.55%	1.94%	2.14%	29,163
Half Moon Bay	18	152,714	2.19%	0.93%	1.35%	18,355
Hillsborough	49	624,678	5.95%	3.81%	4.52%	61,517
Los Altos Hills	6	46,142	0.73%	0.28%	0.43%	5,855
Los Gatos	29	213,535	3.52%	1.30%	2.04%	27,776
Millbrae	25	455,544	3.04%	2.78%	2.86%	38,950
Milpitas	61	1,910,456	7.41%	11.65%	10.24%	139,200
Morgan Hill	34	271,653	4.13%	1.66%	2.48%	33,742
Newark	33	233,176	4.01%	1.42%	2.28%	31,064
Pacifica	36	1,863,627	4.37%	11.36%	9.03%	122,842
Portola Valley	2	14,322	0.24%	0.09%	0.14%	1,893
Ross, Town of	4	23,109	0.49%	0.14%	0.26%	3,480
San Bruno	74	1,555,247	8.99%	9.48%	9.32%	126,725
San Carlos	53	733,140	6.44%	4.47%	5.13%	69,716
Saratoga	12	407,342	1.46%	2.48%	2.14%	29,126
South SF	60	441,832	7.29%	2.69%	4.23%	57,469
Suisun City	21	545,829	2.55%	3.33%	3.07%	41,738
Tiburon	12	228,670	1.46%	1.39%	1.42%	19,249
Woodside	15	122,250	1.82%	0.75%	1.10%	15,019
Total	823	16,400,368	100.00%	100.00%	100.00%	1,359,832

(B) Based on reported claims count > \$1 for 2018-19 2022-23 from Appendix E, Page 8.

Based on paid losses limited to SIR for 2018-19 2022-23 from Appendix E, Page 6b.

(D) (D) (B) / Total (B)

(Ε)

(C) / Total (C) (D) x (1/3) + (E) x (2/3)(G)

(H) (G) x Total of (H)

Total variable liability expenses are equal to 53.6% of total expenses. Total expenses of \$2,537,000 projected by PLAN JPA.

#### 2024-25 Allocation of Variable Administrative Expenses by Member **Property Claims**

Member (A)	Property Reported Counts > \$1 2018-19 2022-23 (B)	Property Paid Losses 2018-19 2022-23 (C)	Percent Property Reported Counts > \$1 (D)	Percent Property Paid Losses 2018-19 2022-23 (E)	Percent Property Variable Administrative Expenses (G)	Property Variable Administrative Expenses (H)
American Canyon	17	400,674	7.94%	7.32%	7.53%	25,603
Atherton	4	26,617	1.87%	0.49%	0.95%	3,221
Benicia	19	539,679	8.88%	9.87%	9.54%	32,421
Burlingame	0	000,079	0.00%	0.00%	0.00%	0
Campbell	9	372,024	4.21%	6.80%	5.94%	20,180
Colma	2	12,337	0.93%	0.23%	0.46%	1,570
Cupertino	5	51,883	2.34%	0.95%	1.41%	4,797
Dublin	24	586,745	11.21%	10.73%	10.89%	37,019
East Palo Alto	13	217,771	6.07%	3.98%	4.68%	15,907
Foster City	10	312,551	4.67%	5.71%	5.37%	18,245
Half Moon Bay	0	0	0.00%	0.00%	0.00%	0
Hillsborough	11	66,814	5.14%	1.22%	2.53%	8,593
Los Altos Hills	1	33,797	0.47%	0.62%	0.57%	1,930
Los Gatos	8	246,264	3.74%	4.50%	4.25%	14,440
Millbrae	2	55,229	0.93%	1.01%	0.98%	3,347
Milpitas	17	281,287	7.94%	5.14%	6.08%	20,656
Morgan Hill	13	333,616	6.07%	6.10%	6.09%	20,706
Newark	10	174,620	4.67%	3.19%	3.69%	12,530
Pacifica	10	683,869	4.67%	12.50%	9.89%	33,630
Portola Valley	1	22,899	0.47%	0.42%	0.43%	1,478
Ross, Town of	0	0	0.00%	0.00%	0.00%	0
San Bruno	9	494,640	4.21%	9.04%	7.43%	25,260
San Carlos	5	54,917	2.34%	1.00%	1.45%	4,923
Saratoga	1	115,500	0.47%	2.11%	1.56%	5,315
South SF	12	233,361	5.61%	4.27%	4.71%	16,023
Suisun City	11	152,988	5.14%	2.80%	3.58%	12,163
Tiburon	0	0	0.00%	0.00%	0.00%	0
Woodside	0	0	0.00%	0.00%	0.00%	0
Total	214	5,470,081	100.00%	100.00%	100.00%	339,958

Based on reported claims count > \$1 for 2018-19 2022-23 from Appendix E, Page 8. (B)

Reported property claims for 2018-19 2022-23 included.

(C) Based on paid losses limited to SIR for 2018-19 2022-23 from Appendix E, Page 6b. Property paid losses limited to SIR for 2018-19 2022-23 from Append Property paid losses limited to SIR for 2018-19 2022-23 are included. (B) / Total (B) (C) / Total (C) (D) x (1/3) + (E) x (2/3)

(D)

(E)

(G)

(H)

(G) x Total of (H) Total variable liability expenses are equal to 13.4% of total expenses. Total expenses of \$2,537,000 projected by PLAN JPA.

## Calculation of Experience Modification Factors by Member

Member (A)	2018-19 2022-23 Limited Incurred Losses (B)	2018-19 2022-23 Payroll (00) (C)	Percent Incurred Losses (D)	Percent Payroll (E)	Indicated Differential (F)	Credibility (G)	2024-25 Indicated Experience Modification Factor (H)	2023-24 Capped Experience Modification Factor (I)	+/- 30% Capped Experience Modification Factor (J)	Change In Experience Modification Factor (K)
American Canyon	75,059	373,849	0.3%	1.7%	0.197	60%	52%	59.9%	51.8%	
Atherton	665,391	282,676	2.9%	1.3%	2.304	50%	165%	120.9%	157.2%	30.0%
Benicia	1,286,176	1,097,171	5.6%	4.9%	1.148	80%	112%	147.6%	111.8%	-24.2%
Burlingame	2,088,176	1,294,012	9.0%	5.7%	1.580	80%	146%	132.4%	146.4%	
Campbell	1,391,640	1,238,024	6.0%	5.5%	1.100	80%	108%	92.1%	108.0%	17.3%
Colma	105,934	235,832	0.5%	1.0%	0.440	40%	78%	99.9%	77.6%	
Cupertino	580,006	1,210,319	2.5%	5.4%	0.469	80%	58%	56.8%	57.5%	
Dublin	1,046,311	505,709	4.5%	2.2%	2.025	60%	162%	141.6%	161.5%	
East Palo Alto	267,757	549,742	1.2%	2.4%	0.477	60%	69%	93.6%	68.6%	-26.7%
Foster City	425,523	1,189,000	1.8%	5.3%	0.350	80%	48%	50.8%	48.0%	-5.5%
Half Moon Bay	792,095	233,174	3.4%	1.0%	3.325	40%	193%	105.2%	136.8%	30.0%
Hillsborough	1,430,938	577,259	6.2%	2.6%	2.427	70%	200%	89.7%	116.6%	
Los Altos Hills	183,218	143,719	0.8%	0.6%	1.248	30%	107%	84.4%	107.4%	27.3%
Los Gatos	944,960	1,007,402	4.1%	4.5%	0.918	80%	93%	39.9%	51.9%	30.0%
Millbrae	660,036	405,708	2.9%	1.8%	1.593	60%	136%	160.4%	135.6%	-15.5%
Milpitas	1,824,123	2,989,810	7.9%	13.2%	0.597	90%	64%	79.9%	63.8%	-20.2%
Morgan Hill	1,023,271	1,456,792	4.4%	6.4%	0.688	80%	75%	83.1%	75.0%	
Newark	903,850	1,095,775	3.9%	4.8%	0.807	80%	85%	79.6%	84.6%	6.3%
Pacifica	1,309,697	999,545	5.7%	4.4%	1.283	80%	123%	153.3%	122.6%	
Portola Valley	17,000	92,065	0.1%	0.4%	0.181	20%	84%	81.0%	83.6%	3.2%
Ross, Town of	124,128	115,632	0.5%	0.5%	1.051	30%	102%	71.3%	92.7%	30.0%
San Bruno	1,181,314	1,568,979	5.1%	6.9%	0.737	80%	79%	124.9%	87.4%	
San Carlos	1,588,802	485,170	6.9%	2.1%	3.206	60%	232%	204.6%	232.3%	13.6%
Saratoga	476,974	375,319	2.1%	1.7%	1.244	60%	115%	141.4%	114.6%	-18.9%
South SF	1,304,186	2,379,547	5.6%	10.5%	0.537	90%	58%	42.7%	55.5%	30.0%
Suisun City	717,821	402,120	3.1%	1.8%	1.747	60%	145%	122.9%	144.8%	17.9%
Tiburon	463,779	195,293	2.0%	0.9%	2.325	40%	153%	128.2%	153.0%	19.3%
Woodside	214,307	105,240	0.9%	0.5%	1.993	30%	130%	100.2%	129.8%	29.6%
Total	23,092,471	22,604,883	100.0%	100.0%	1.000	100%	99%		94%	

(B) Based on losses limited to \$250,000 for 2018-19 to 2022-23 from Exhibit 1, Page 7

(B) Based on losses limited to \$250,000 for 2018-19 to 2022-23 from Exhibit 1, Page 7
(C) Based on payroll for 2018-19 to 2022-23 from ,
(D) (B) / Total (B)
(E) (C) / Total (C)
(F) (D) / (E)
(G) [(C) / ((C) + 30,000,000)]. Limited to minimum of 10% and maximum of 90%, and rounded to the nearest 10%.
(H) ((F) x (G)) + (1.00 - (G))
(I) Prior X-Mod.
(I) Indicated x mod capped at ±/- 30%

(J) Indicated x-mod capped at +/- 30%.
 (K) (J) / (I) - 1

# Limited Incurred Losses

Member	2018-19	2019-20	2020-21	2021-22	2022-23
(A)	(B)	(C)	(D)	(E)	(F)
American Canyon	0	230	0	5,947	68,882
Atherton	3,542	204,134	249,892	30,463	177,360
Benicia	22,137	297,614	662,169	282,624	21,632
Burlingame	110,316	127,160	584,710	783,649	482,341
Campbell	11,050	536,895	27,315	172,659	643,721
Colma	5,416	4,774	94,728	0	1,015
Cupertino	85,643	105,192	260,537	109,183	19,452
Dublin	250,530	31,707	122,519	514,184	127,370
East Palo Alto	2,373	127,784	3,896	27,661	106,042
Foster City	26,791	183,437	35,895	13,414	165,986
Half Moon Bay	1,200	241,164	37,920	0	511,811
Hillsborough	53,735	34,097	19,572	715,564	607,970
Los Altos Hills	0	10,000	0	140,000	33,218
Los Gatos	5,875	8,444	69,539	123,399	737,703
Millbrae	17,641	5,789	100,297	511,716	24,594
Milpitas	260,902	423,136	374,982	205,129	559,974
Morgan Hill	21,527	172,494	486,225	332,362	10,662
Newark	58,362	133,052	136,834	100,000	475,603
Pacifica	353,218	4,177	516,873	246,348	189,081
Portola Valley	0	0	0	1,000	16,000
Ross, Town of	0	0	33,797	0	90,331
San Bruno	67,238	318,303	311,821	243,264	240,686
San Carlos	480,331	236,567	10,517	19,834	841,553
Saratoga	332,995	50,517	0	684	92,778
South SF	41,180	29,898	281,822	474,679	476,607
Suisun City	48,660	330,587	202,677	970	134,928
Tiburon	0	21,676	324,344	5,759	112,001
Woodside	0	865	65,580	8,455	139,407
Total	2,260,662	3,639,693	5,014,461	5,068,947	7,108,708

#### PLAN JPA Pool Layer

#### Funding Options for 2024-2025 Losses 2.0% Discount Rate

			\$1M Retention \$30M Limit	\$2M Retention \$30M Limit	\$2.5M Retention \$30M Limit	\$4M Retention \$30M Limit	\$5M Retention \$30M Limit
(A)	Payroll (\$00's)		5,323,749	5,323,749	5,323,749	5,323,749	5,323,749
(B)	Average SIR Discount factor:		104.5%	104.5%	104.5%	104.5%	104.5%
(C)	Base Loss Rate:		\$1.243	\$1.603	\$1.714	\$1.885	\$1.960
(D)	PLAN JPA Expected Losses:		\$6,915,000	\$8,917,000	\$9,531,000	\$10,483,000	\$10,902,000
(E)	Discount Factor for Future Funding: at 2% interest		93.1%	93.1%	93.1%	93.1%	93.1%
(F)	Estimated Cost of Excess Insurance		\$18,249,000	\$12,965,000	\$11,344,000	\$8,831,000	\$7,727,000
(G)	Estimated Administration Expenses		\$2,537,000	\$2,537,000	\$2,537,000	\$2,537,000	\$2,537,000
(H)	Discounted Losses w/ Excess Insurance		\$27,224,000	\$23,804,000	\$22,755,000	\$21,128,000	\$20,414,000
(I)	60% Confidence Margin 70% Confidence Margin 80% Confidence Margin 90% Confidence Margin	1.029 1.168 1.351 1.640	187,000 1,082,000 2,260,000 4,120,000	241,000 1,395,000 2,914,000 5,313,000	258,000 1,491,000 3,115,000 5,679,000	283,000 1,640,000 3,426,000 6,247,000	294,000 1,705,000 3,563,000 6,496,000
(J)	Funding at the 60% confidence Level: Funding at the 70% confidence Level: Funding at the 80% confidence Level: Funding at the 90% confidence Level:		27,411,000 28,306,000 29,484,000 31,344,000	24,045,000 25,199,000 26,718,000 29,117,000	23,013,000 24,246,000 25,870,000 28,434,000	21,411,000 22,768,000 24,554,000 27,375,000	20,708,000 22,119,000 23,977,000 26,910,000

(A) From , .

(B) Based on , .

(B) Based on , .
(C) From Exhibit 2, Page 2.
(D) (A) x (B) x (C)
(E) Based on \$100K to \$1M Rate Analysis Appendix F
(F) Based on \$18,249,000 in Excess Insurance Premium for the \$1M to \$30M layer and ILF factors.
(G) Provided by PLAN JPA.
(H) (D) x (E) + (F) + (G)
(I) Based on \$100K to \$1M Rate Analysis Appendix G
(J) (H) + (I)

Exhibit 2 Page 1b

# PLAN JPA Pool Layer

# Funding Options for 2024-2025 Losses 2.0% Discount Rate

		\$1M Retention \$30M Limit
(A)	Payroll (\$00's)	5,323,749
(B)	Average SIR Discount factor:	104.5%
(C)	Base Loss Rate:	\$1.243
(D)	PLAN JPA Expected Losses:	\$6,915,000
(E)	Discount Factor for Future Funding: at 2% interest	93.1%
(F)	Estimated Cost of Excess Insurance	\$18,249,000
(G)	Estimated Administration Expenses	\$2,537,000
(H)	Discounted Losses w/ Excess Insurance	\$27,224,000
(I)	60% Confidence Margin 70% Confidence Margin 80% Confidence Margin 90% Confidence Margin	187,000 1,082,000 2,260,000 4,120,000
(J)	Funding at the 60% confidence Level: Funding at the 70% confidence Level: Funding at the 80% confidence Level: Funding at the 90% confidence Level:	27,411,000 28,306,000 29,484,000 31,344,000
(B) (C) (D) (E)	From , . Based on , . From Exhibit 2, Page 2. (A) x (B) x (C) Based on \$100K to \$1M Rate Analysis Appendix F Provided by PLAN JPA.	

(F) Provided by PLAN JPA.
(G) Provided by PLAN JPA.
(H) (D) x (E) + (F) + (G)
(I) Based on \$100K to \$1M Rate Analysis Appendix G
(J) (H) + (I)

#### PLAN JPA Pool Layer

## Selected 2024-2025 Base Loss Rate (\$100K - \$1M Layer)

		Current 2024-2025	Prior 2023-2024
(A)	Estimated based on \$1M Ultimate Less \$100K Ultimate	\$1.248	\$0.979
(B)	Estimated based on \$100K - \$1M Analysis:	1.223	0.994
(C)	Estimated based on \$100K Analysis & Size of Loss Factors:	1.314	1.024
(D)	Selected Base Loss Rate (\$100K - \$1M Layer):	1.243	0.990
(E)	Factor to \$1.0M Retention Factor to \$2.0M Retention Factor to \$2.5M Retention Factor to \$3.0M Retention Factor to \$3.5M Retention Factor to \$4.0M Retention Factor to \$5.0M Retention	1.000 1.290 1.378 1.438 1.438 1.485 1.516 1.577	1.000 1.252 1.328 1.379 1.403 1.418 1.459
(F)	Selected Base Loss Rate for \$1.0M Retention : Selected Base Loss Rate for \$2.0M Retention : Selected Base Loss Rate for \$2.5M Retention : Selected Base Loss Rate for \$3.0M Retention : Selected Base Loss Rate for \$3.5M Retention : Selected Base Loss Rate for \$4.0M Retention : Selected Base Loss Rate for \$5.0M Retention :	\$1.243 1.603 1.714 1.787 1.846 1.885 1.960	\$0.990 1.240 1.315 1.365 1.389 1.404 1.444

- From County of Blank Workers' Compensation, Appendix B, Page 1. From PLAN JPA Liability Program (\$100K to \$1M Analysis), \$100K to \$1M Rate Analysis Exhibit 1, Page 1. From PLAN JPA Liability Program (\$100K and \$1M Analysis), \$100K and \$1M Rate Analysis Exhibit 1, Page 1. Based on (A) (C). Based on PLAN JPA and Industry experience.
- (A) (B) (C) (D) (E) (F)
- (D) x (E).

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PLAN JPA Historical Payroll By Mer

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Exhibit 2 Page 2

# PLAN JPA

## Member Deductibles

Member	2024-25	2023-24
American Canyon	25,000	25,000
Atherton	25,000	25,000
Benicia	25,000	25,000
Burlingame	250,000	250,000
Campbell	100,000	100,000
Colma	50,000	50,000
Cupertino	250,000	250,000
Dublin	50,000	50,000
East Palo Alto	100,000	100,000
Foster City	100,000	100,000
Half Moon Bay	50,000	50,000
Hillsborough	50,000	50,000
Los Altos Hills	25,000	25,000
Los Gatos	50,000	50,000
Millbrae	100,000	100,000
Milpitas	100,000	100,000
Morgan Hill	100,000	100,000
Newark	100,000	100,000
Pacifica	50,000	50,000
Portola Valley	25,000	25,000
Ross, Town of	25,000	25,000
San Bruno	100,000	100,000
San Carlos	100,000	100,000
Saratoga	25,000	25,000
South SF	100,000	100,000
Suisun City	25,000	25,000
Tiburon	50,000	50,000
Woodside	25,000	25,000

## Funding Guidelines for Outstanding Liabilities and Funding Options for Program Year 2024-2025

At Various Discount Rates and Confidence Levels

I. Funding Guidelines for Discounted Outstanding Liabilities at 6/30/24

Investment Rate	Expected Confidence Level	70% Confidence Level	75% Confidence Level	80% Confidence Level	85% Confidence Level	90% Confidence Level
1.0%	\$27,757,000	\$30,810,000	\$32,059,000	\$33,558,000	\$35,446,000	\$38,027,000
1.5%	27,445,000	30,464,000	31,699,000	33,181,000	35,047,000	37,600,000
2.0%	27,140,000	30,125,000	31,347,000	32,812,000	34,658,000	37,182,000
2.5%	26,842,000	29,795,000	31,003,000	32,452,000	34,277,000	36,774,000
3.0%	26,550,000	29,471,000	30,665,000	32,099,000	33,904,000	36,374,000
3.5%	26,265,000	29,154,000	30,336,000	31,754,000	33,540,000	35,983,000
4.0%	25,986,000	28,844,000	30,014,000	31,417,000	33,184,000	35,601,000

# II. Funding Options for Program Year 2024-2025

Investment Rate	Expected Confidence Level	60% Confidence Level	70% Confidence Level	80% Confidence Level	90% Confidence Level
1.0%	\$27,456,000	\$27,649,000	\$28,577,000	\$29,797,000	\$31,725,000
1.5%	27,339,000	27,529,000	28,440,000	29,639,000	31,533,000
2.0%	27,224,000	27,411,000	28,306,000	29,484,000	31,344,000
2.5%	27,113,000	27,296,000	28,176,000	29,334,000	31,162,000
3.0%	27,005,000	27,185,000	28,050,000	29,188,000	30,985,000
3.5%	26,900,000	27,077,000	27,927,000	29,046,000	30,813,000
4.0%	26,797,000	26,971,000	27,807,000	28,907,000	30,644,000

# PLAN JPA - Liability Program (\$100K and \$1M Analysis)

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

Accident Year	Ultimate Limited Losses (A)	Trend Factor (B)	Trended Limited Losses (C)	Trended Payroll (\$00) (D)	Trended Limited Loss Rate (E)
2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019	4,646,965 3,509,537 2,444,607 2,947,359 3,128,868 3,147,259 2,711,703 2,538,522 2,013,526 2,824,647 3,309,000 2,229,780 2,938,392 3,126,000 2,886,000 1,853,000 1,600,000	2.281 2.193 2.108 2.028 1.949 1.875 1.803 1.733 1.667 1.603 1.541 1.482 1.425 1.370 1.317 1.267 1.218	10,599,727 7,696,415 5,153,232 5,977,244 6,098,164 5,901,111 4,889,201 4,399,259 3,356,548 4,527,909 5,099,169 3,304,534 4,187,209 4,282,620 3,800,862 2,347,751 1,948,800	5,465,603 5,571,062 5,593,010 5,546,164 5,635,518 5,801,505 5,863,583 5,568,244 4,873,997 4,650,324 4,565,996 4,390,436 4,434,603 4,506,901 4,680,337 4,797,059 4,828,712 4,828,712	$\begin{array}{c} 1.939\\ 1.381\\ 0.921\\ 1.078\\ 1.082\\ 1.017\\ 0.834\\ 0.790\\ 0.689\\ 0.974\\ 1.117\\ 0.753\\ 0.944\\ 0.950\\ 0.812\\ 0.489\\ 0.404 \end{array}$
2019-2020 2020-2021 2021-2022 2022-2023	2,592,000 3,327,000 3,657,000 6,403,000	1.171 1.125 1.082 1.040	3,035,232 3,742,875 3,956,874 6,659,120	4,798,147 4,735,362 4,877,311 5,079,532	0.633 0.790 0.811 1.311
Totals 19/20-22/23 20/21-22/23	\$63,834,165 15,979,000 13,387,000		\$100,963,856 17,394,101 14,358,869	106,263,406 19,490,352 14,692,205	\$0.950 0.892 0.977
			Prior	d Limited Rate: Prior \$100K: \$100K to \$1M:	\$0.814 \$0.735 \$0.994
(L) Projected L	or: te: yroll (\$00): Program Losses:		\$1,000,000 2023-2024 2.496 1.000 \$2.031 5,168,687 10,498,000 0 \$10,498,000	\$100,000 2024-2025 1.000 \$0.846 5,168,687 4,373,000 0 \$4,373,000	\$1,000,000 2024-2025 2.553 1.040 \$2.160 5,323,749 11,499,000 0 \$11,499,000

Notes appear on the next page.

PLAN JPA - Liability Program (\$100K and \$1M Analysis)

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

#### Notes:

- (A) From \$100K and \$1M Rate Analysis Not Included, Page 2, Column (F). For purposes of projecting future losses, losses are capped at \$100,000 per occurrence.
- (B) From \$100K and \$1M Rate Analysis Appendix E, Page 1, Column (B).
- (C) (A) x (B).
- (D) From \$100K and \$1M Rate Analysis Appendix I, Column (C).
- (E) (C) / (D).
- (F) Selected based on (E).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) From \$100K and \$1M Rate Analysis Appendix E.
- (I) (F) x (G) x (H).
- (J) From \$100K and \$1M Rate Analysis Appendix I, Column (C).
- (K) (I) x (J).
- (L) Based on an estimated claim closing pattern and the Authority's historical claims administration expenses.
- (M) (K) + (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.

#### PLAN JPA - Liability Program (\$100K and \$1M Analysis)

#### Reported Loss Development

	Limited Reported	Reported Loss	Ultimate	Program Reported	Reported Loss	Ultimate
Accident	Losses as	Development	Limited	Losses	Development	Program
Year	of 12/31/23	Factor	Losses	of 12/31/23	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
(~)	(D)	(0)	(D)	(⊏)	(1)	(0)
2002-2003	\$4,646,965	1.000	\$4,646,965	\$8,884,428	1.000	\$8,884,428
2003-2004	3,509,537	1.000	3,509,537	5,715,419	1.000	5,715,419
2004-2005	2,444,607	1.000	2,444,607	3,869,337	1.000	3,869,337
2005-2006	2,947,359	1.000	2,947,359	5,631,680	1.000	5,631,680
2006-2007	3,128,868	1.000	3,128,868	4,548,052	1.000	4,548,052
2007-2008	3,147,259	1.000	3,147,259	5,798,628	1.000	5,798,628
2008-2009	2,711,703	1.000	2,711,703	5,365,088	1.000	5,365,088
2009-2010	2,538,522	1.000	2,538,522	3,874,500	1.000	3,874,500
2010-2011	2,013,526	1.000	2,013,526	3,571,075	1.000	3,571,075
2011-2012	2,824,647	1.000	2,824,647	6,334,961	1.001	6,341,296
2012-2013	3,308,601	1.000	3,308,601	7,008,017	1.003	7,029,041
2013-2014	2,229,780	1.000	2,229,780	4,318,084	1.005	4,339,674
2014-2015	2,938,392	1.000	2,938,392	6,737,773	1.008	6,791,675
2015-2016	3,125,745	1.000	3,125,745	6,145,693	1.013	6,225,587
2016-2017	2,883,424	1.001	2,886,307	8,215,217	1.021	8,387,737
2017-2018	1,848,977	1.002	1,852,675	2,623,377	1.026	2,691,585
2018-2019	1,594,003	1.004	1,600,379	2,589,734	1.032	2,672,605
2019-2020	2,556,665	1.012	2,587,345	4,590,988	1.050	4,820,537
2020-2021	3,254,240	1.022	3,325,833	10,164,997	1.284	13,051,856
2021-2022	3,421,687	1.119	3,828,868	7,327,072	1.752	12,837,030
2022-2023	5,526,799	1.757	9,710,586	8,599,708	3.135	26,960,085
Totals	\$62,601,306		\$67,307,504	\$121,913,828		\$149,406,915

#### Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority. These losses exclude amounts over \$100,000 per occurrence.
- (C) From \$100K and \$1M Rate Analysis Appendix A, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over \$100,000 per occurrence.
- (E) Losses capped at the Authority's SIR. Amounts are provided by the Authority.
- (F) Derived from factors on \$100K and \$1M Rate Analysis Appendix A, Page 4.
- (G) (E) x (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.

# DRAFT

## PLAN JPA - Liability Program (\$100K and \$1M Analysis) Reported Loss Development

Reported Loss Development Limited Losses Reported as of:											
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	1,341,283	3,829,893	4,293,424	4,604,949	4,740,657	4,821,491	4,811,984	4,901,984	4,966,984	5,011,984	4,977,421
2003-2004	702,623	2,248,188	2,863,892	3,229,117	3,366,140	3,528,698	3,560,692	3,460,542	3,560,542	3,560,542	3,560,542
2004-2005	909,032	2,172,504	3,103,889	2,811,093	3,026,321	2,861,424	2,893,524	2,858,702	2,866,202	2,866,202	2,866,155
2005-2006	584,388	2,569,384	3,328,173	3,524,433	3,669,875				3,795,674	3,789,394	3,789,394
2006-2007	776,086	2,403,595	2,905,504	3,039,627	3,179,650		3,391,424		3,394,936	3,394,936	3,394,936
2007-2008	1,054,492	2,921,920	3,743,710	4,332,780	4,420,360		4,358,070			4,259,284	4,259,284
2008-2009	543,401	2,839,064	3,484,984	3,288,639	3,398,037		3,345,621			3,347,708	3,336,906
2009-2010	763,697	3,371,740	3,848,137	3,115,304 2,650,741	3,131,959	3,127,921	3,127,921 2,409,001	3,127,921	3,127,921	3,127,921	3,127,921 2,396,051
2010-2011 2011-2012	510,509 602,255	2,770,955 3,518,281	2,742,484 3,631,019	2,650,741 3,415,805	3,302,356				2,396,051 3,127,725	2,396,051 3,127,725	2,396,051 3,127,725
2012-2013	465,105	4,254,395	3,881,185	3,547,144	3,502,651	3,489,052		3,459,906		3,559,906	3,559,906
2013-2014	842,948	2,251,578	2,694,553	2,631,490	2,671,389		2,539,618	, ,	, ,		2,529,575
2014-2015	325,035	2,666,242	3,946,907	3,795,367				3,281,784			,,
2015-2016	371,511	2,328,347	3,291,200	3,149,726	3,155,562			3,125,745			
2016-2017	290,633	1,930,274	2,754,128	2,812,484	2,851,248	2,931,044	2,925,720	2,883,424			
2017-2018	199,803	1,368,867	1,871,566	1,908,433	1,873,364	1,849,975	1,848,977				
2018-2019	65,888	691,395	1,364,408	1,596,209	1,570,788	1,594,003					
2019-2020	184,043	934,320	2,260,330	2,491,627	2,556,665						
2020-2021	299,593	2,532,027	2,901,375	3,254,240							
2021-2022 2022-2023	415,421 113,903	2,085,409 5,526,799	3,421,687								
2023-2023	738,344	5,520,735									
2020 2021	100,011										
			ss Developn		-						
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	2.855	1.121	1.073	1.029	1.017	0.998	1.019	1.013	1.009	0.993	1.000
2003-2004 2004-2005	3.200 2.390	1.274 1.429	1.128 0.906	1.042 1.077	1.048 0.946	1.009 1.011	0.972 0.988	1.029 1.003	1.000 1.000	1.000 1.000	1.000 1.001
2004-2005	4.397	1.429	1.059	1.077	1.005	1.011	1.001	1.003	0.998	1.000	1.001
2006-2007	3.097	1.209	1.035	1.046	1.003	1.021	1.001	1.007	1.000	1.000	1.000
2007-2008	2.771	1.281	1.157	1.020	0.991	0.995	0.977	1.000	1.000	1.000	0.977
2008-2009	5.225	1.228	0.944	1.033	1.010	0.975	1.001	0.999	1.001	0.997	1.003
2009-2010	4.415	1.141	0.810	1.005	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2010-2011	5.428	0.990	0.967	0.951	0.975	0.981	1.000	0.995	1.000	1.000	1.000
2011-2012	5.842	1.032	0.941	0.967	0.980	0.966	1.000	1.000	1.000	1.000	1.000
2012-2013	9.147	0.912	0.914	0.987	0.996	0.989	1.003	1.029	1.000	1.000	1.000
2013-2014	2.671	1.197	0.977	1.015	0.951	1.000	1.000	1.000	0.996	1.000	
2014-2015 2015-2016	8.203 6.267	1.480 1.414	0.962 0.957	0.883 1.002	0.982 0.996	0.997 0.997	1.000 0.997	1.000 1.000	1.000		
2016-2017	6.642	1.427	1.021	1.002	1.028	0.998	0.986	1.000			
2017-2018	6.851	1.367	1.020	0.982	0.988	0.999	0.000				
2018-2019	10.493	1.973	1.170	0.984	1.015						
2019-2020	5.077	2.419	1.102	1.026							
2020-2021	8.452	1.146	1.122								
2021-2022	5.020	1.641									
2022-2023	48.522										
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	7.475	1.349	1.015	1.006	0.998	0.998	0.996	1.005	1.000	0.999	0.998
Dollar-Weighted											
Averages											
3-yr	12.238	1.546	1.125	1.001	1.013	0.998	0.994	1.000	0.999	1.000	1.000
4-yr	10.937	1.593	1.102	1.005	1.007	0.998	0.996	1.008	0.999	1.000	1.000
Comparative	0.400	4 004	4 0 4 0	4 000	4 004	4 004	4 004	4 004	4 004	4 004	4 000
Factors Prior	3.166 6.750	1.361 1.545	1.046 1.060	1.006 1.010	1.004 1.003	1.004 1.002	1.004 1.001	1.004 1.001	1.004 1.000	1.004 1.000	1.003 1.000
Selected	6.992	1.570	1.095	1.010	1.008	1.002	1.001	1.001	1.000	1.000	1.000
Cumulated	12.284	1.757	1.119	1.022	1.012	1.004	1.002	1.001	1.000	1.000	1.000
50				1.022	1.012	1.004	1.002	1.001	1.000	1.000	

# PLAN JPA - Liability Program (\$100K and \$1M Analysis) Reported Loss Development

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Reported Loss Development Limited Losses Reported as of:											
Accident Year 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023 2023-2024	138 Months 4,977,421 3,560,542 2,867,654 3,789,394 3,394,936 4,159,284 3,347,708 3,127,921	150 Months 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921	162 Months 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921 2,396,056	174 Months 4,977,421 3,560,542 2,867,654 3,788,958 3,425,837 4,259,284 3,347,708 3,127,921	186 Months 4,977,421 3,560,542 2,867,654 3,788,958 3,408,506 4,259,284 3,347,708	3,788,958 3,408,506	2,867,654 3,788,958	2,867,654	234 Months 4,977,421 3,560,542 2,867,654	246 Months 4,977,421 3,560,542	258 Months 4,977,421
2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023	Reported Lo 138-150 Months 1.000 1.000 1.000 1.002 1.024 1.000 1.000 1.000 1.000	ss Developm 150-162 Months 1.000 1.000 1.000 1.000 1.000 1.000 1.000	nent Factors: 162-174 Months 1.000 1.000 1.000 1.000 1.000 1.000	174-186 Months 1.000 1.000 1.000 0.995 1.000 1.000	186-198 Months 1.000 1.000 1.000 1.000 1.000	198-210 Months 1.000 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000	234-246 Months 1.000 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted Averages	138-150 Months 1.003	150-162 Months 1.000	162-174 Months 1.001	174-186 Months 0.999	186-198 Months 1.000	198-210 Months 1.000	210-222 Months 1.000	222-234 Months 1.000	234-246 Months 1.000	246-258 Months 1.000	258-Ult. Months
3-yr 4-yr Comparative	1.000 1.000	1.000 1.000	1.000 1.002	0.998 0.999	1.000 1.000	1.000 1.000	1.000 1.000	1.000			
Factors Prior	1.003	1.003	1.002	1.002 1.000	1.002	1.002	1.002	1.001	1.001	1.001	1.005
Prior Selected	1.000 1.000	1.000 1.000	1.000 1.000	1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000
Cumulated	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

#### Paid Loss Development

	Limited			Program		
	Paid	Paid Loss	Ultimate	Paid	Paid Loss	Ultimate
Accident	Losses as	Development	Limited	Losses	Development	Program
Year	of 12/31/23	Factor	Losses	of 12/31/23	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
2002-2003	\$4,646,965	1.000	\$4,646,965	\$8,884,428	1.000	\$8,884,428
2003-2004	3,509,537	1.000	3,509,537	5,715,419	1.000	5,715,419
2004-2005	2,444,607	1.000	2,444,607	3,869,337	1.000	3,869,337
2005-2006	2,947,359	1.000	2,947,359	5,631,680	1.000	5,631,680
2006-2007	3,128,868	1.000	3,128,868	4,548,052	1.000	4,548,052
2007-2008	3,147,259	1.000	3,147,259	5,798,628	1.000	5,798,628
2008-2009	2,711,703	1.000	2,711,703	5,365,088	1.000	5,365,088
2009-2010	2,538,522	1.000	2,538,522	3,874,500	1.000	3,874,500
2010-2011	2,013,526	1.000	2,013,526	3,571,075	1.000	3,571,075
2011-2012	2,824,647	1.000	2,824,647	6,334,961	1.001	6,341,296
2012-2013	3,308,601	1.001	3,311,910	6,613,044	1.004	6,639,496
2013-2014	2,229,780	1.002	2,234,240	4,318,084	1.005	4,339,674
2014-2015	2,938,392	1.004	2,950,146	6,737,773	1.009	6,798,413
2015-2016	3,125,745	1.007	3,147,625	6,130,786	1.013	6,210,486
2016-2017	2,883,424	1.011	2,915,142	8,178,080	1.043	8,529,737
2017-2018	1,848,975	1.019	1,884,106	2,623,375	1.072	2,812,258
2018-2019	1,572,174	1.028	1,616,195	2,422,650	1.142	2,766,666
2019-2020	2,073,903	1.052	2,181,746	2,589,280	1.238	3,205,529
2020-2021	2,473,160	1.164	2,878,758	6,756,376	1.691	11,425,032
2021-2022	1,560,201	1.688	2,633,619	1,911,606	2.952	5,643,061
2022-2023	921,281	3.916	3,607,736	921,281	7.994	7,364,720
Totals	\$54,848,629		\$59,274,216	\$102,795,503		\$119,334,575

#### Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority. These losses exclude amounts over \$100,000 per occurrence.
- (C) From \$100K and \$1M Rate Analysis Appendix B, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over \$100,000 per occurrence.
- (E) Losses capped at the Authority's SIR. Amounts are provided by the Authority.
- (F) Derived from factors on \$100K and \$1M Rate Analysis Appendix B, Page 4.
- (G) (E) x (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.

# DRAFT

# PLAN JPA - Liability Program (\$100K and \$1M Analysis) Paid Loss Development

		linethe -l.l	Delite	<i>c</i> .	Paid L	oss Develop	oment				
Accident	6	Limited Loss 18	<u>ses Paid as c</u> 30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	368,341	1,921,924	3,419,382	4,159,574	4,572,735	4,708,622	4,811,984	4,820,255	4,893,323	4,930,307	4,962,508
2003-2004	173,413	1,278,587	2,112,645	2,806,518	3,216,963	3,398,305	3,452,557	3,460,542	3,560,542	3,560,542	3,560,542
2004-2005	92,583	901,463	2,122,845	2,612,734	2,848,049	2,845,394	2,853,463	2,858,654	2,866,154	2,866,154	2,866,154
2005-2006	91,777	1,099,067	1,733,718	3,299,822	3,599,286	3,654,071	3,764,224	3,766,533	3,780,292	3,789,394	3,789,394
2006-2007	178,735	1,234,100	2,253,938	2,920,430	3,103,547	3,253,555	3,391,424		3,394,936	3,394,936	3,394,936
2007-2008	149,993	1,300,794	2,635,467		4,101,554			4,256,077		4,259,284	4,259,284
2008-2009	161,539	1,020,079	2,186,680	2,792,089	3,110,459				3,346,029	3,347,708	3,336,906
2009-2010	301,727	1,046,459	2,274,617		2,998,274		3,115,424		3,127,921	3,127,921	3,127,921
2010-2011 2011-2012	106,645	872,432	1,692,195 2,112,380	2,287,500	2,319,013		2,396,051 3,127,725		2,396,051	2,396,051	2,396,051
2011-2012	114,916 98,607	832,713 934,308	2,112,380	3,124,392	3,122,242 3,371,990				3,127,725 3,559,906	3,127,725 3,559,906	3,127,725 3,559,906
2012-2013	130,461	888,140	1,780,866	2,316,155	2,654,568		, ,	2,539,618	, ,		2,529,575
2014-2015	91,368	1,387,749	2,717,926	3,379,346	3,268,352			3,281,784			2,020,010
2015-2016	98,110	679,755	1,782,598	2,795,127				3,125,745		-, ,	
2016-2017	30,679	920,995	1,975,490	2,421,836	2,773,661		2,883,289				
2017-2018	31,268	758,485	1,188,193	1,713,864	1,800,791	1,848,975	1,848,975				
2018-2019	16,322	417,918	867,701	1,337,293	1,545,763	1,572,174					
2019-2020	65,521	413,661	1,128,779	1,716,520	2,073,903						
2020-2021	54,421	793,126	1,741,631	2,473,160							
2021-2022	40,902	597,050	1,560,201								
2022-2023	19,868	921,281									
2023-2024	70,221										
		Paid Loss D	evelopment	Factors:							
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	5.218	1.779	1.216	1.099	1.030	1.022	1.002	1.015	1.008	1.007	1.003
2003-2004	7.373	1.652	1.328	1.146	1.056	1.016	1.002	1.029	1.000	1.000	1.000
2004-2005	9.737	2.355	1.231	1.090	0.999	1.003	1.002	1.003	1.000	1.000	1.001
2005-2006	11.975	1.577	1.903	1.091	1.015	1.030	1.001	1.004	1.002	1.000	1.000
2006-2007	6.905	1.826	1.296	1.063	1.048	1.042	1.001	1.000	1.000	1.000	1.000
2007-2008 2008-2009	8.672 6.315	2.026 2.144	1.385 1.277	1.124 1.114	1.026 1.073	1.005 1.002	1.007 1.001	1.001 0.999	1.000 1.001	1.000 0.997	0.977 1.003
2008-2009	3.468	2.144	1.238	1.064	1.073	1.002	1.001	1.000	1.001	1.000	1.003
2010-2011	8.181	1.940	1.352	1.014	1.023	1.000	1.000	1.000	1.000	1.000	1.000
2011-2012	7.246	2.537	1.302	1.135	0.999	1.003	1.000	1.000	1.000	1.000	1.000
2012-2013	9.475	2.451	1.364	1.079	1.023	1.000	1.003	1.029	1.000	1.000	1.000
2013-2014	6.808	2.005	1.301	1.146	0.957	1.000	1.000	1.000	0.996	1.000	
2014-2015	15.189	1.959	1.243	0.967	1.004	1.000	1.000	1.000	1.000		
2015-2016	6.928	2.622	1.568	1.073	1.045	1.000	0.997	1.000			
2016-2017	30.020	2.145	1.226	1.145	1.022	1.017	1.000				
2017-2018 2018-2019	24.258	1.567	1.442	1.051	1.027	1.000					
2018-2019	25.605 6.313	2.076 2.729	1.541 1.521	1.156 1.208	1.017						
2020-2021	14.574	2.729	1.420	1.200							
2021-2022	14.597	2.613	1.120								
2022-2023	46.370										
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	13.106	2.119	1.377	1.098	1.023	1.010	1.001	1.006	1.001	1.000	0.999
Dollar-Weighted Averages											
3-yr	20.066	2.456	1.479	1.137	1.022	1.006	0.999	1.000	0.999	1.000	1.000
4-yr	15.080	2.385	1.470	1.140	1.030	1.004	0.999	1.008	0.999	1.000	1.000
Comparative											
Factors	4.739	2.203	1.449	1.153	1.049	1.019	1.015	1.013	1.010	1.008	1.007
Prior	18.000	2.184	1.421	1.076	1.025	1.012	1.008	1.004	1.003	1.002	1.001
Selected	19.033	2.320	1.450	1.106	1.024	1.009	1.008	1.004	1.003	1.002	1.001
Cumulated	74.534	3.916	1.688	1.164	1.052	1.028	1.019	1.011	1.007	1.004	1.002

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# PLAN JPA - Liability Program (\$100K and \$1M Analysis) Paid Loss Development

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2003/2004         3.580.342 <t< th=""><th></th><th>Limited Loop</th><th>oo Doid oo c</th><th>.<del>.</del>.</th><th>Paid L</th><th>oss Develop</th><th>oment</th><th></th><th></th><th></th><th></th><th></th></t<>		Limited Loop	oo Doid oo c	. <del>.</del> .	Paid L	oss Develop	oment					
138-150         150-162         162-174         174-186         166-198         198-210         210-222         222.234         234-246         246-258         258-UII.           2002-2003         1.000 <td< td=""><td>Year 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023</td><td>138 Months 4,977,421 3,560,542 2,867,654 3,789,394 3,394,936 4,159,284 3,347,708 3,127,921 2,396,051 3,127,725</td><td>150 Months 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921 2,396,051</td><td>162 Months 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921</td><td>Months 4,977,421 3,560,542 2,867,654 3,788,958 3,403,249 4,259,284 3,347,708</td><td>Months 4,977,421 3,560,542 2,867,654 3,788,958 3,408,506 4,259,284</td><td>Months 4,977,421 3,560,542 2,867,654 3,788,958 3,408,506</td><td>Months 4,977,421 3,560,542 2,867,654 3,788,958</td><td>Months 4,977,421 3,560,542 2,867,654</td><td>Months 4,977,421 3,560,542</td><td>Months 4,977,421</td><td></td></td<>	Year 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023	138 Months 4,977,421 3,560,542 2,867,654 3,789,394 3,394,936 4,159,284 3,347,708 3,127,921 2,396,051 3,127,725	150 Months 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921 2,396,051	162 Months 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921	Months 4,977,421 3,560,542 2,867,654 3,788,958 3,403,249 4,259,284 3,347,708	Months 4,977,421 3,560,542 2,867,654 3,788,958 3,408,506 4,259,284	Months 4,977,421 3,560,542 2,867,654 3,788,958 3,408,506	Months 4,977,421 3,560,542 2,867,654 3,788,958	Months 4,977,421 3,560,542 2,867,654	Months 4,977,421 3,560,542	Months 4,977,421	
Months         Months<	2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022	138-150 Months 1.000 1.000 1.000 1.002 1.024 1.000 1.000 1.000	150-162 Months 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	162-174 Months 1.000 1.000 1.000 1.000 1.001 1.000 1.000	Months 1.000 1.000 1.000 1.000 1.002 1.000	Months 1.000 1.000 1.000 1.000 1.000	Months 1.000 1.000 1.000 1.000	Months 1.000 1.000 1.000	Months 1.000 1.000	Months 1.000	Months	
4-yr         1.000         1.000         1.000         1.000         1.000         1.000         1.000           Comparative Factors         1.006         1.005         1.004         1.003         1.002         1.002         1.002         1.002         1.002         1.002         1.001         1.001         1.000	Dollar-Weighted Averages	Months 1.003	Months 1.000	Months 1.000	Months 1.000	Months 1.000	Months 1.000	Months 1.000	Months 1.000	Months	Months	
Factors         1.006         1.005         1.004         1.004         1.003         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.002         1.001         1.000         <	4-yr								1.000			
Selected         1.001         1.000												1.003 1.000
Cumulated 1.001 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000												1.000
	Cumulated	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

# Exposure and Development Method Based on Reported Losses

				Percentage		Incurred	
	Trended	Reported	Loss	of Losses		but not	Ultimate
Accident	Payroll	Losses as	Development	Yet to Be	Program	Reported	Program
Year	(\$00)	of 12/31/23	Factor	Reported	Rate	(IBNR)	Losses
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
2002-2003	5,465,603	8,884,428	1.000	0.000	1.350	0	8,884,428
2003-2004	5,571,062	5,715,419	1.000	0.000	1.019	0	5,715,419
2004-2005	5,593,010	3,869,337	1.000	0.000	0.721	0	3,869,337
2005-2006	5,546,164	5,631,680	1.000	0.000	0.893	0	5,631,680
2006-2007	5,635,518	4,548,052	1.000	0.000	0.952	0	4,548,052
2007-2008	5,801,505	5,798,628	1.000	0.000	0.949	0	5,798,628
2008-2009	5,863,583	5,365,088	1.000	0.000	0.827	0	5,365,088
2009-2010	5,568,244	3,874,500	1.000	0.000	0.834	0	3,874,500
2010-2011	4,873,997	3,571,075	1.000	0.000	0.771	0	3,571,075
2011-2012	4,650,324	6,334,961	1.001	0.001	1.159	5,390	6,340,351
2012-2013	4,565,996	7,008,017	1.003	0.003	1.414	19,369	7,027,386
2013-2014	4,390,436	4,318,084	1.005	0.005	1.014	22,260	4,340,344
2014-2015	4,434,603	6,737,773	1.008	0.008	1.353	48,000	6,785,773
2015-2016	4,506,901	6,145,693	1.013	0.013	1.448	84,838	6,230,531
2016-2017	4,680,337	8,215,217	1.021	0.021	1.317	129,444	8,344,661
2017-2018	4,797,059	2,623,377	1.026	0.025	0.843	101,098	2,724,475
2018-2019	4,828,712	2,589,734	1.032	0.031	1.467	219,595	2,809,329
2019-2020	4,798,147	4,590,988	1.050	0.048	1.560	359,285	4,950,273
2020-2021	4,735,362	10,164,997	1.284	0.221	1.661	1,738,261	11,903,258
2021-2022	4,877,311	7,327,072	1.752	0.429	1.766	3,695,119	11,022,191
2022-2023	5,079,532	8,599,708	3.135	0.681	1.878	6,496,305	15,096,013
Totals	106,263,406	\$121,913,828				\$12,918,964	\$134,832,792

#### Notes:

- (A) From \$100K and \$1M Rate Analysis Appendix I, Column (C).
- (B) Provided by the Authority. These losses exclude amounts incurred above the Authority's SIR for each year.
- (C) From \$100K and \$1M Rate Analysis Appendix A, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From \$100K and \$1M Rate Analysis Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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 12/31/23 (B)	Loss Development Factor (C)	Percentage of Losses Yet to Be Paid (D)	Program Rate (E)	Incurred but not Paid (F)	Ultimate Program Losses (G)
2002-2003	5,465,603	8,884,428	1.000	0.000	1.350	0	8,884,428
2003-2004	5,571,062	5,715,419	1.000	0.000	1.019	0	5,715,419
2004-2005	5,593,010	3,869,337	1.000	0.000	0.721	0	3,869,337
2005-2006	5,546,164	5,631,680	1.000	0.000	0.893	0	5,631,680
2006-2007	5,635,518	4,548,052	1.000	0.000	0.952	0	4,548,052
2007-2008	5,801,505	5,798,628	1.000	0.000	0.949	0	5,798,628
2008-2009	5,863,583	5,365,088	1.000	0.000	0.827	0	5,365,088
2009-2010	5,568,244	3,874,500	1.000	0.000	0.834	0	3,874,500
2010-2011	4,873,997	3,571,075	1.000	0.000	0.771	0	3,571,075
2011-2012	4,650,324	6,334,961	1.001	0.001	1.159	5,390	6,340,351
2012-2013	4,565,996	6,613,044	1.004	0.004	1.414	25,825	6,638,869
2013-2014	4,390,436	4,318,084	1.005	0.005	1.014	22,260	4,340,344
2014-2015	4,434,603	6,737,773	1.009	0.009	1.353	54,000	6,791,773
2015-2016	4,506,901	6,130,786	1.013	0.013	1.448	84,838	6,215,624
2016-2017	4,680,337	8,178,080	1.043	0.041	1.317	252,724	8,430,804
2017-2018	4,797,059	2,623,375	1.072	0.067	0.843	270,943	2,894,318
2018-2019	4,828,712	2,422,650	1.142	0.124	1.467	878,381	3,301,031
2019-2020	4,798,147	2,589,280	1.238	0.192	1.560	1,437,141	4,026,421
2020-2021	4,735,362	6,756,376	1.691	0.409	1.661	3,216,963	9,973,339
2021-2022	4,877,311	1,911,606	2.952	0.661	1.766	5,693,412	7,605,018
2022-2023	5,079,532	921,281	7.994	0.875	1.878	8,346,941	9,268,222
Totals	106,263,406	\$102,795,503				\$20,288,818	\$123,084,321

#### Notes:

- (A) From \$100K and \$1M Rate Analysis Appendix I, Column (C).
- (B) Provided by the Authority. These losses exclude amounts paid above the Authority's SIR for each year.
- (C) From \$100K and \$1M Rate Analysis Appendix B, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From \$100K and \$1M Rate Analysis Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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 Year	Trended Payroll (\$00) (A)	Ultimate Limited Losses (B)	Trend Factor (C)	Trended Limited Losses (D)	Trended Limited Loss Rate (E)	Limited Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
2002-2003	5,465,603	4,646,965	2.281	10,599,727	1.939	0.850	1.589	1.350
2003-2004	5,571,062	3,509,537	2.193	7,696,415	1.381	0.630	1.618	1.019
2004-2005	5,593,010	2,444,607	2.108	5,153,232	0.921	0.437	1.650	0.721
2005-2006	5,546,164	2,947,359	2.028	5,977,244	1.078	0.531	1.681	0.893
2006-2007	5,635,518	3,128,868	1.949	6,098,164	1.082	0.555	1.715	0.952
2007-2008	5,801,505	3,147,259	1.875	5,901,111	1.017	0.542	1.751	0.949
2008-2009	5,863,583	2,711,703	1.803	4,889,201	0.834	0.462	1.790	0.827
2009-2010	5,568,244	2,538,522	1.733	4,399,259	0.790	0.456	1.828	0.834
2010-2011	4,873,997	2,013,526	1.667	3,356,548	0.689	0.413	1.867	0.771
2011-2012	4,650,324	2,824,647	1.603	4,527,909	0.974	0.607	1.910	1.159
2012-2013	4,565,996	3,309,000	1.541	5,099,169	1.117	0.725	1.951	1.414
2013-2014	4,390,436	2,229,780	1.482	3,304,534	0.753	0.508	1.996	1.014
2014-2015	4,434,603	2,938,392	1.425	4,187,209	0.944	0.663	2.041	1.353
2015-2016	4,506,901	3,126,000	1.370	4,282,620	0.950	0.694	2.086	1.448
2016-2017	4,680,337	2,886,000	1.317	3,800,862	0.812	0.617	2.134	1.317
2017-2018	4,797,059	1,853,000	1.267	2,347,751	0.489	0.386	2.184	0.843
2018-2019	4,828,712	1,600,000	1.218	1,948,800	0.404	0.657	2.234	1.467
2019-2020	4,798,147	2,587,000	1.171	3,029,377	0.631	0.683	2.283	1.560
2020-2021	4,735,362	3,326,000	1.125	3,741,750	0.790	0.711	2.335	1.661
2021-2022	4,877,311	3,709,000	1.082	4,013,138	0.823	0.739	2.390	1.766
2022-2023	5,079,532	6,354,000	1.040	6,608,160	1.301	0.769	2.442	1.878
Total/Avg	106,263,406	\$63,831,165		\$100,962,180	\$0.950			
18/19-22/23	24,319,064	17,576,000		19,341,225	0.795			
19/20-22/23	19,490,352	15,976,000		17,392,425	0.892			
			Selecte	d Limited Rate:	\$0.800			
				Prior:	\$0.725			

# Notes:

- (A) From \$100K and \$1M Rate Analysis Appendix I, Column (C).
- (B) Selected average of results from Appendices and .
- (C) From \$100K and \$1M Rate Analysis Appendix E, Page 1, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected Limited Rate / (C). For 2017-2018 and prior (B) / (A).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) (F) x (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 Year	Ultimate Program Severity (A)	Adjusted Ultimate Claims (B)	Ultimate Program Losses (C)
2002-2003	\$9,777	755	\$7,381,635
2003-2004	9,056	627	5,678,112
2004-2005	7,125	566	4,032,750
2005-2006	8,817	562	4,955,154
2006-2007	9,302	577	5,367,254
2007-2008	8,327	662	5,512,474
2008-2009	8,227	590	4,853,930
2009-2010	8,943	519	4,641,417
2010-2011	8,993	418	3,759,074
2011-2012	12,458	433	5,394,314
2012-2013	13,066	494	6,454,604
2013-2014	10,115	440	4,450,600
2014-2015	12,680	473	5,997,640
2015-2016	13,420	486	6,522,120
2016-2017	12,053	511	6,159,083
2017-2018	8,292	488	4,046,496
2018-2019	17,567	428	7,518,676
2019-2020	18,758	431	8,084,698
2020-2021	20,059	384	7,702,656
2021-2022	21,446	431	9,243,226
2022-2023	22,900	659	15,091,100
Total		10,934	\$132,847,013

#### Notes:

(A) From \$100K and \$1M Rate Analysis Appendix D, Page 2, Colu

(B) From \$100K and \$1M Rate Analysis Appendix D, Page 2, Colu

(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 Limited Losses	Adjusted Ultimate Claims	Ultimate Limited Severity	Trend Factor	Trended Limited Severity	Limited Severity	Factor to SIR	Program Severity
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
2002-2003	\$4,646,965	755	\$6,155	2.519	\$15,504	\$6,155	1.589	\$9,777
2003-2004	3,509,537	627	5,597	2.410	13,489	5,597	1.618	9,056
2004-2005	2,444,607	566	4,319	2.307	9,964	4,319	1.650	7,125
2005-2006	2,947,359	562	5,244	2.208	11,579	5,244	1.681	8,817
2006-2007	3,128,868	577	5,423	2.113	11,459	5,423	1.715	9,302
2007-2008	3,147,259	662	4,754	2.022	9,613	4,754	1.751	8,327
2008-2009	2,711,703	590	4,596	1.935	8,893	4,596	1.790	8,227
2009-2010	2,538,522	519	4,891	1.852	9,058	4,891	1.828	8,943
2010-2011	2,013,526	418	4,817	1.772	8,536	4,817	1.867	8,993
2011-2012	2,824,647	433	6,523	1.696	11,063	6,523	1.910	12,458
2012-2013	3,309,000	494	6,698	1.623	10,871	6,698	1.951	13,066
2013-2014	2,229,780	440	5,068	1.553	7,871	5,068	1.996	10,115
2014-2015	2,938,392	473	6,212	1.486	9,231	6,212	2.041	12,680
2015-2016	3,126,000	486	6,432	1.422	9,146	6,432	2.086	13,420
2016-2017	2,886,000	511	5,648	1.361	7,687	5,648	2.134	12,053
2017-2018	1,853,000	488	3,797	1.302	4,944	3,797	2.184	8,292
2018-2019	1,600,000	428	3,738	1.246	4,658	7,865	2.234	17,567
2019-2020	2,592,000	431	6,014	1.193	7,175	8,215	2.283	18,758
2020-2021	3,327,000	384	8,664	1.141	9,886	8,589	2.335	20,059
2021-2022	3,657,000	431	8,485	1.092	9,266	8,974	2.390	21,446
2022-2023	6,403,000	659	9,716	1.045	10,153	9,378	2.442	22,900

Average Limited Severity:	\$9,526
Average 17/18-20/21 Limited Severity:	6,666
Average 20/21-22/23 Limited Severity:	9,768

Selected Limited Severity:	\$9,800
Prior:	\$7,500

Notes:

- (A) Selected average of results from Appendices , , and .
- (B) \$100K and \$1M Rate Analysis Appendix D, Page 3, Column (C).

(C) (A) / (B).

(D) From \$100K and \$1M Rate Analysis 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) (F) x (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) (D)	Claim Frequency (E)	Trend Factor (F)	Trended Claim Frequency (G)
2002-2003	755	755	755	546.6	1.381	0.897	1.239
2003-2004	627	627	627	557.1	1.125	0.902	1.015
2004-2005	566	566	566	559.3	1.012	0.906	0.917
2005-2006	562	562	562	554.6	1.013	0.910	0.922
2006-2007	577	577	577	563.6	1.024	0.914	0.936
2007-2008	662	662	662	580.2	1.141	0.919	1.049
2008-2009	590	590	590	586.4	1.006	0.924	0.930
2009-2010	519	519	519	556.8	0.932	0.929	0.866
2010-2011	418	418	418	487.4	0.858	0.934	0.801
2011-2012	433	434	433	465.0	0.931	0.939	0.874
2012-2013	494	494	494	456.6	1.082	0.944	1.021
2013-2014	440	442	440	439.0	1.002	0.949	0.951
2014-2015	473	475	473	443.5	1.067	0.954	1.018
2015-2016	486	488	486	450.7	1.078	0.959	1.034
2016-2017	511	514	511	468.0	1.092	0.964	1.053
2017-2018	488	494	488	479.7	1.017	0.970	0.986
2018-2019	428	432	428	482.9	0.886	0.975	0.864
2019-2020	431	424	431	479.8	0.898	0.980	0.880
2020-2021	384	374	384	473.5	0.811	0.985	0.799
2021-2022	431	423	431	487.7	0.884	0.990	0.875
2022-2023	659	741	659	508.0	1.297	0.995	1.291
Total	10,934	11,011	10,934	10,626.3			0.969
17/18-21/22	2,162	2,147	2,162	2,403.7			0.881
					(H) Selec	ted Frequency:	0.900
						Prior:	0.850
	Program Year:			2023-2024	2024-2025		

	Program Year:	2023-2024	2024-2025
(I)	Trend Factor:	1.000	0.995
(J)	Selected Frequency:	0.900	0.896
(K)	Est. Payroll (\$000,000):	516.9	532.4
(L)	Ultimate Claims:	465	477

#### Notes:

- (A) From \$100K and \$1M Rate Analysis Appendix D, Page 4, (C).
- (B) From \$100K and \$1M Rate Analysis Appendix D, Page 5, (C).
- (C) Selected from (A) and (B).
- (D) From \$100K and \$1M Rate Analysis Appendix I, Column (C) / 10,000.
- (E) (C) / (D).
- (F) From \$100K and \$1M Rate Analysis Appendix E, Page 1, Column (H).

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

- (G) (E) x (F).
- (H) The selected frequency of 0.900 is based on (G).
- (I) From \$100K and \$1M Rate Analysis Appendix E, Page 1
- (J) (H) x (I).
- (K) From \$100K and \$1M Rate Analysis Appendix I, Column
- (L) (J) x (K).

# Frequency and Severity Method Reported Claim Count Development

Accident Year	Claims Reported as of 12/31/2023 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2002-2003	755	1.000	755	1.239
2003-2004	627	1.000	627	1.015
2004-2005	566	1.000	566	0.917
2005-2006	562	1.000	562	0.922
2006-2007	577	1.000	577	0.936
2007-2008	662	1.000	662	1.049
2008-2009	590	1.000	590	0.930
2009-2010	519	1.000	519	0.866
2010-2011	418	1.000	418	0.801
2011-2012	433	1.000	433	0.874
2012-2013	494	1.000	494	1.021
2013-2014	440	1.000	440	0.951
2014-2015	473	1.000	473	1.018
2015-2016	486	1.000	486	1.034
2016-2017	511	1.000	511	1.052
2017-2018	488	1.001	488	0.987
2018-2019	427	1.003	428	0.864
2019-2020	428	1.006	431	0.880
2020-2021	380	1.010	384	0.799
2021-2022	421	1.023	431	0.875
2022-2023	614	1.074	659	1.291
Total	10,871		10,934	0.969

# Notes:

(A) Provided by the Authority.

(B) From \$100K and \$1M Rate Analysis Appendix D, Page 6.

(C) (A) x (B).

(D) (C) / [\$100K and \$1M Rate Analysis Appendix D, Page 3, (D)] x [\$100K and \$1M Rate Analysis 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 Authority. 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.

# Frequency and Severity Method Closed Claim Count Development

Accident Year	Claims Closed as of 12/31/2023 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2002-2003	755	1.000	755	1.239
2003-2004	627	1.000	627	1.015
2004-2005	566	1.000	566	0.917
2005-2006	562	1.000	562	0.922
2006-2007	577	1.000	577	0.936
2007-2008	662	1.000	662	1.049
2008-2009	590	1.000	590	0.930
2009-2010	519	1.000	519	0.866
2010-2011	418	1.001	418	0.801
2011-2012	433	1.002	434	0.876
2012-2013	493	1.003	494	1.021
2013-2014	440	1.004	442	0.955
2014-2015	473	1.005	475	1.022
2015-2016	485	1.007	488	1.038
2016-2017	509	1.010	514	1.059
2017-2018	487	1.014	494	0.999
2018-2019	424	1.019	432	0.872
2019-2020	413	1.026	424	0.866
2020-2021	357	1.049	374	0.778
2021-2022	369	1.145	423	0.859
2022-2023	418	1.773	741	1.452
Total	10,577		11,011	0.976

Notes:

(A) Provided by the Authority.

(B) From \$100K and \$1M Rate Analysis Appendix D, Page 7.

(C) (A) x (B).

(D) (C) / [\$100K and \$1M Rate Analysis Appendix D, Page 3, (D)] x [\$100K and \$1M Rate Ar

This exhibit shows the calculation of estimated ultimate claims for each year based on closed claims as provided by the Authority. 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.

# PLAN JPA - Liability Program (\$100K and \$1M Analysis) Reported Claim Count Development

		Claims Re	eported as		orted Cla	III Count	Developin	ent						
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	253	775	796	790	791	792	792	806	807	807	807	807	807	807
2003-2004	206	637	631	652	656	656	668	667	668	666	667	667	667	667
2004-2005	244	619	720	721	723	728	729	730	730	730	731	731	731	731
2005-2006	192	669	695	697	706	708	710	710	711	711	711	711	711	711
2006-2007	234	660	677	696	696	700	701	702	702	702	702	702	703	703
2007-2008	242	659	803	809	814	814	814	814	814	814	814	810	814	814
2008-2009	243	693	716	721	724	724	724	724	724	724	709	724	724	724
2009-2010	238	632	647	646	646	646	646	646	647	647	647	647	647	647
2010-2011	168	494	505	506	508	509	510	510	510	510	513	514	514	514
2011-2012	129	452	465	467	470	471	471	470	470	470	470	470	470	
2012-2013	169	499	520	523	523	524	525	527	528	528	526	526		
2013-2014	144	455	467	471	473	466	466	466	467	460	461			
2014-2015	161	489	510	514	502	503	504	512	492	499				
2015-2016	170	487	502	490	492	492	497	460	486					
2016-2017	108	501	508	511	512	512	488	511						
2017-2018	152	473	481	483	489	469	488							
2018-2019	123	394	421	430	412	427								
2019-2020	144	413	431	412	428									
2020-2021	124	353	346	380										
2021-2022	151	370	422											
2022-2023	116	615												
2023-2024	165													
					opment Fa									
	6-18	18-30	30-42	42-54	54-66	66-78	78-90		102-114					
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	3.063	1.027	0.992	1.001	1.001	1.000	1.018	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2003-2004	3.092	0.991	1.033	1.006	1.000	1.018	0.999	1.001	0.997	1.002	1.000	1.000	1.000	1.000
2004-2005	2.537	1.163	1.001	1.003	1.007	1.001	1.001	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2005-2006	3.484	1.039	1.003	1.013	1.003	1.003	1.000	1.001	1.000	1.000	1.000	1.000	1.000	1.000
2006-2007	2.821	1.026	1.028	1.000	1.006	1.001	1.001	1.000	1.000	1.000	1.000	1.001	1.000	1.001
2007-2008	2.723	1.219	1.007	1.006	1.000	1.000	1.000	1.000	1.000	1.000	0.995	1.005	1.000	1.000
2008-2009	2.852	1.033	1.007	1.004	1.000	1.000	1.000	1.000	1.000	0.979	1.021	1.000	1.000	1.000
2009-2010	2.655	1.024	0.998	1.000	1.000	1.000	1.000	1.002	1.000	1.000	1.000	1.000	1.000	1.002
2010-2011	2.940	1.022	1.002	1.004	1.002	1.002	1.000	1.000	1.000	1.006	1.002	1.000	1.000	
2011-2012	3.504	1.029	1.004	1.006	1.002	1.000	0.998	1.000	1.000	1.000	1.000	1.000		
2012-2013	2.953	1.042	1.006	1.000	1.002	1.002	1.004	1.002	1.000	0.996	1.000			
2013-2014	3.160	1.026	1.009	1.004	0.985	1.000	1.000	1.002	0.985	1.002				
2014-2015	3.037 2.865	1.043	1.008 0.976	0.977	1.002	1.002	1.016	0.961	1.014					
2015-2016 2016-2017		1.031		1.004	1.000	1.010	0.926	1.057						
	4.639	1.014	1.006	1.002 1.012	1.000 0.959	0.953	1.047							
2017-2018 2018-2019	3.112	1.017	1.004	0.958	1.036	1.041								
2018-2019	3.203 2.868	1.069 1.044	1.021 0.956	1.039	1.030									
2020-2021	2.808	0.980	1.098	1.039										
2020-2021	2.450	1.141	1.090											
2022-2023	5.302	1.141												
2022-2023	0.002													
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	3.148	1.049	1.008	1.002	1.000	1.002	1.001	1.002	1.000	0.999	1.002	1.001	1.000	1.000
Claim-Weighted														
Averages														
3-yr	3.422	1.055	1.020	1.003	0.996	1.000	0.996	1.005	1.000	0.999	1.001	1.000	1.000	1.000
4-yr	3.273	1.059	1.015	1.003	0.997	1.001	0.997	1.004	1.000	1.001	1.000	1.000	1.000	1.001
Comparative														
Factors	2.659	1.141	1.013	1.008	1.005	1.004	1.003	1.003	1.003	1.003	1.003	1.003	1.003	1.003
Prior	2.909	1.036	1.007	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	3.188	1.050	1.013	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	2 4 9 4	4 074	4 000	1 0 4 0	1 000	1 000	1 004	4 000	1 000	1 000	1 000	1 000	4 000	1 000
Cumulated	3.424	1.074	1.023	1.010	1.006	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000

# PLAN JPA - Liability Program (\$100K and \$1M Analysis) Closed Claim Development

					Closed C	laim Deve	elopment							
		Claims Cl							100		100	100		
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months													
2002-2003	44	536	734	766	783	789	791	805	805	805	806	806	806	806
2003-2004	36	465	585	636	648	649	662	663	666	666	667	667	667	667
2004-2005 2005-2006	54	414 487	668 637	706 672	712 692	726 701	727 707	730 707	730 707	730 710	730 711	731 711	731 711	731
	50		632		692 687			707				711	711	711
2006-2007 2007-2008	83 94	518 480	742	681 786	800	692 808	699 811	813	702 814	702 814	702 814	810	814	702 814
2008-2009	94 89	480 509	664	700	712	718	723	724	724	724	709	724	724	724
2008-2009	45	464	599	631	643	644	645	645	647	647	647	647	647	647
2010-2011	43	331	470	497	503	507	509	509	510	510	513	514	514	514
2010-2011	27	285	421	451	459	467	470	469	469	469	469	469	470	514
2012-2012	36	332	471	506	515	518	524	526	527	527	525	525	410	
2013-2014	28	304	430	456	467	464	465	466	467	460	461	020		
2014-2015	23	354	457	491	492	501	504	512	492	499				
2015-2016	43	336	450	470	481	488	496	459	485					
2016-2017	19	316	465	491	499	506	484	509						
2017-2018	22	310	445	473	486	468	487							
2018-2019	19	234	366	411	407	424								
2019-2020	36	227	363	383	413									
2020-2021	18	209	299	357										
2021-2022	41	189	370											
2022-2023	23	419												
2023-2024	65													
				t Develop										
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102					150-162	
	Months													
2002-2003	12.182	1.369	1.044	1.022	1.008	1.003	1.018	1.000	1.000	1.001	1.000	1.000	1.000	1.000
2003-2004	12.917	1.258	1.087	1.019	1.002	1.020	1.002	1.005	1.000	1.002	1.000	1.000	1.000	1.000
2004-2005	7.667	1.614	1.057	1.008	1.020	1.001	1.004	1.000	1.000	1.000	1.001	1.000	1.000	1.000
2005-2006 2006-2007	9.740 6.241	1.308	1.055	1.030 1.009	1.013 1.007	1.009	1.000 1.003	1.000	1.004 1.000	1.001 1.000	1.000 1.000	1.000	1.000	1.000
		1.220	1.078			1.010		1.001				1.001	0.999	1.001
2007-2008 2008-2009	5.106 5.719	1.546 1.305	1.059 1.060	1.018 1.011	1.010 1.008	1.004 1.007	1.002 1.001	1.001 1.000	1.000 1.000	1.000 0.979	0.995 1.021	1.005 1.000	1.000 1.000	1.000 1.000
2008-2009	10.311	1.303	1.000	1.011	1.008	1.007	1.001	1.000	1.000	1.000	1.021	1.000	1.000	1.000
2010-2011	7.196	1.420	1.055	1.013	1.002	1.002	1.000	1.003	1.000	1.000	1.000	1.000	1.000	1.002
2011-2012	10.556	1.477	1.071	1.012	1.017	1.006	0.998	1.002	1.000	1.000	1.002	1.002	1.000	
2012-2012	9.222	1.419	1.074	1.018	1.006	1.012	1.004	1.002	1.000	0.996	1.000	1.002		
2013-2014	10.857	1.414	1.060	1.024	0.994	1.002	1.002	1.002	0.985	1.002	1.000			
2014-2015	15.391	1.291	1.074	1.002	1.018	1.006	1.016	0.961	1.014					
2015-2016	7.814	1.339	1.044	1.023	1.015	1.016	0.925	1.057						
2016-2017	16.632	1.472	1.056	1.016	1.014	0.957	1.052							
2017-2018	14.091	1.435	1.063	1.027	0.963	1.041								
2018-2019	12.316	1.564	1.123	0.990	1.042									
2019-2020	6.306	1.599	1.055	1.078										
2020-2021	11.611	1.431	1.194											
2021-2022	4.610	1.958												
2022-2023	18.217													
						~~ ~~		~~ . ~ ~						
	6-18	18-30	30-42	42-54	54-66	66-78	78-90						150-162	
A	Months													
Average	10.224	1.437	1.072	1.019	1.009	1.006	1.002	1.002	1.000	0.999	1.002	1.001	1.000	1.000
Claim-Weighted														
Averages	9.963	1.651	1.120	1.031	1.004	1.003	0.997	1.005	1.000	0.999	1.001	1.001	1.000	1.000
3-yr 4-yr	9.963 8.847	1.627	1.120	1.031	1.004	1.003	0.997	1.005	1.000	1.001	1.001	1.001	1.000	1.000
Comparative	0.047	1.027	1.103	1.027	1.007	1.004	0.990	1.004	1.000	1.001	1.000	1.000	1.000	1.001
Factors	3.699	1.523	1.094	1.036	1.017	1.008	1.007	1.006	1.005	1.005	1.005	1.005	1.005	1.005
Prior	8.508	1.478	1.034	1.030	1.007	1.005	1.007	1.000	1.003	1.003	1.003	1.003	1.003	1.003
Selected	9.386	1.548	1.091	1.023	1.007	1.005	1.004	1.003	1.002	1.001	1.001	1.001	1.001	1.001
<b>o</b>	10.0.1													
Cumulated	16.641	1.773	1.145	1.049	1.026	1.019	1.014	1.010	1.007	1.005	1.004	1.003	1.002	1.001

# Loss Trend Factors

Accident Year	Benefit Level Factor (A)	Factor to 2023-2024 Loss Rate Level (B)	Factor to 2024-2025 Loss Rate Level (C)	Factor to 2025-2026 Loss Rate Level (D)	Factor to 2026-2027 Loss Rate Level (E)	Factor to 2023-2024 Frequency Level (F)	Factor to 2024-2025 Frequency Level (G)	Factor to 2025-2026 Frequency Level (H)	Factor to 2026-2027 Frequency Level (I)	Factor to 2023-2024 Severity Level (J)
2002-2003	1.000	2.281	2.372	2.467	2.566	0.897	0.893	0.888	0.884	2.519
2003-2004	1.000	2.193	2.280	2.372	2.467	0.902	0.897	0.892	0.888	2.410
2004-2005	1.000	2.108	2.192	2.281	2.372	0.906	0.901	0.896	0.892	2.307
2005-2006	1.000	2.028	2.108	2.193	2.281	0.910	0.905	0.901	0.896	2.208
2006-2007	1.000	1.949	2.027	2.109	2.193	0.914	0.909	0.905	0.900	2.113
2007-2008	1.000	1.875	1.949	2.028	2.109	0.919	0.914	0.910	0.905	2.022
2008-2009	1.000	1.803	1.874	1.950	2.028	0.924	0.919	0.915	0.910	1.935
2009-2010	1.000	1.733	1.802	1.875	1.950	0.929	0.924	0.920	0.915	1.852
2010-2011	1.000	1.667	1.733	1.803	1.875	0.934	0.929	0.925	0.920	1.772
2011-2012	1.000	1.603	1.666	1.734	1.803	0.939	0.934	0.930	0.925	1.696
2012-2013	1.000	1.541	1.603	1.667	1.734	0.944	0.939	0.935	0.930	1.623
2013-2014	1.000	1.482	1.541	1.603	1.667	0.949	0.944	0.940	0.935	1.553
2014-2015	1.000	1.425	1.482	1.541	1.603	0.954	0.949	0.945	0.940	1.486
2015-2016	1.000	1.370	1.424	1.482	1.541	0.959	0.955	0.950	0.945	1.422
2016-2017	1.000	1.317	1.370	1.425	1.482	0.964	0.960	0.955	0.950	1.361
2017-2018	1.000	1.267	1.317	1.370	1.425	0.970	0.965	0.960	0.955	1.302
2018-2019	1.000	1.218	1.266	1.317	1.370	0.975	0.970	0.965	0.960	1.246
2019-2020	1.000	1.171	1.217	1.266	1.317	0.980	0.975	0.970	0.965	1.193
2020-2021	1.000	1.125	1.170	1.217	1.266	0.985	0.980	0.975	0.970	1.141
2021-2022	1.000	1.082	1.125	1.170	1.217	0.990	0.985	0.980	0.975	1.092
2022-2023	1.000	1.040	1.081	1.125	1.170	0.995	0.990	0.985	0.980	1.045
2023-2024	1.000	1.000	1.040	1.082	1.125	1.000	0.995	0.990	0.985	1.000
2024-2025	1.000		1.000	1.040	1.082		1.000	0.995	0.990	
2025-2026	1.000			1.000	1.040			1.000	0.995	
2026-2027	1.000				1.000				1.000	

Notes:

No benefit level adjustment applied. (A)

(A) adjusted for a 4.0% annual loss rate trend.(A) adjusted for a -0.5% annual frequency trend. (B) - (E)

(F) - (I)

(A) adjusted for a 4.5% annual severity trend. (J)

> 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**

Accident Year	Initial Estimate of Ultimate Limited Losses (A)	Ultimate Reported Claims (B)	BLF (C)	Adjusted Limited Severity (D)	Trended Payroll (\$00) (E)	Ultimate Frequency (F)
2002-2003	\$4,646,965	755	1.000	6,155	5,465,603	1.381
2003-2004	3,509,537	627	1.000	5,597	5,571,062	1.125
2004-2005	2,444,607	566	1.000	4,319	5,593,010	1.012
2005-2006	2,947,359	562	1.000	5,244	5,546,164	1.013
2006-2007	3,128,868	577	1.000	5,423	5,635,518	1.024
2007-2008	3,147,259	662	1.000	4,754	5,801,505	1.141
2008-2009	2,711,703	590	1.000	4,596	5,863,583	1.006
2009-2010	2,538,522	519	1.000	4,891	5,568,244	0.932
2010-2011	2,013,526	418	1.000	4,817	4,873,997	0.858
2011-2012	2,824,647	433	1.000	6,523	4,650,324	0.931
2012-2013	3,309,000	494	1.000	6,698	4,565,996	1.082
2013-2014	2,229,780	440	1.000	5,068	4,390,436	1.002
2014-2015	2,938,392	473	1.000	6,212	4,434,603	1.067
2015-2016	3,126,000	486	1.000	6,432	4,506,901	1.078
2016-2017	2,886,000	511	1.000	5,648	4,680,337	1.092
2017-2018	1,853,000	488	1.000	3,797	4,797,059	1.017
2018-2019	1,600,000	428	1.000	3,738	4,828,712	0.886
2019-2020	2,587,000	431	1.000	6,002	4,798,147	0.898
2020-2021	3,326,000	384	1.000	8,661	4,735,362	0.811
2021-2022	3,709,000	431	1.000	8,606	4,877,311	0.884
2022-2023	6,354,000	659	1.000	9,642	5,079,532	1.297

Severity Tre	end Factors	Frequency Trend Factors
2011-2012 through 2020-2021	0.992	0.980
2012-2013 through 2021-2022	1.023	0.971
2017-2018 through 2021-2022	1.281	0.964
Prior	1.035	0.995
Default	1.030	0.975
Selected Residual Trend	1.045	0.995

Notes:

(A) Selected average of results from \$100K and \$1M Rate Analysis Appendix A and \$100K

(B) \$100K and \$1M Rate Analysis Appendix D, Page 3, Column (C).

(C) \$100K and \$1M Rate Analysis Appendix E, Page 1, (A).

(D) (A) x (C) / (B).

(E) From \$100K and \$1M Rate Analysis Appendix I, Column (C).

(F) (B) / (E) x 10,000.

#### Calculation of Discount Factors

Payment Year	Payment Pattern	Return on Investment	Discounted Reserves	Undiscounted Reserves	Discount Factor
(A)	(B)	(C)	(D)	(E)	(F)
( )		(-)		( )	( )
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.0%	2.0%	0.000	0.000	1.000
15	0.0%	2.0%	0.000	0.000	1.000
14	0.1%	2.0%	0.001	0.001	0.990
13	0.2%	2.0%	0.003	0.003	0.984
12	0.2%	2.0%	0.005	0.005	0.975
11	0.2%	2.0%	0.007	0.007	0.965
10	0.4%	2.0%	0.010	0.011	0.962
9	1.8%	2.0%	0.028	0.029	0.973
8	3.0%	2.0%	0.058	0.059	0.972
7	4.5%	2.0%	0.101	0.104	0.969
6	6.5%	2.0%	0.163	0.169	0.965
5	14.6%	2.0%	0.304	0.315	0.967
4	23.5%	2.0%	0.531	0.549	0.966
3	22.6%	2.0%	0.744	0.776	0.960
2	16.0%	2.0%	0.888	0.936	0.949
1	6.4%	2.0%	0.934	1.000	0.934
		(G) Discount Factor	for Future Funding:	2023-2024 2024-2025	0.944 0.944

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 \$100K and \$1M Rate Analysis 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, 88.8% = [74.4% / 1.020] + [16.0% / (1.010)].
- (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 0.94, on a discounted basis, 0.94 must be budgeted for every 1 that will actually be paid on claims that will be incurred in the next fiscal year.

# Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	1.791	1.551
90% 85%	1.559 1.418	1.373 1.278
80%	1.311	1.210
75%	1.225	1.156
70% 65%	1.152 1.088	1.112 1.072
60%	1.030	1.037
55%	0.977	1.004
50% 45%	0.926 0.878	0.974 0.944
40%	0.831	0.916
35%	0.784	0.887
30% 25%	0.737 0.688	0.859 0.829

To read table:	For the above retention, there is a 90% chance
	that final loss settlements will be less than
	1.559 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.

#### Incurred Losses as of 12/31/23

										Incurred
		Additions	Subtractions			Incurred	Incurred	Incurred	Incurred	Capped at
Accident	Unlimited	to	from	Adjusted	Incurred	Over	Capped at	\$100,000	Capped at	SIR &
Year	Incurred	Losses	Losses	Incurred	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
2002-2003	\$12,459,622	\$0	\$0	\$12,459,622	\$3,575,194	\$7,812,657	\$4,646,965	\$4,237,463	\$8,884,428	\$8,884,428
2003-2004	5,715,419	ψ0 0		5,715,419	0	2,205,881	3,509,537	2,205,881	5,715,419	5,715,419
2004-2005	3,909,704	0	0	3,909,704	40.367	1,465,098	2,444,607	1,424,731	3,869,337	3,869,337
2005-2006	7,274,863	0	-	7,274,863	1,643,182	4,327,503	2,947,359	2,684,321	5,631,680	5,631,680
2006-2007	4,548,052	0	-	4,548,052	1,040,102	1,419,184	3,128,868	1,419,184	4,548,052	4,548,052
2007-2008	5,982,106	0		5,982,106	183.478	2,834,846	3,147,259	2,651,369	5,798,628	5,798,628
2008-2009	5,485,923	0	-	5,485,923	120.835	2,774,220	2.711.703	2,653,385	5,365,088	5,365,088
2009-2010	3,874,500	0	-	3,874,500	120,000	1,335,978	2,538,522	1,335,978	3,874,500	3,874,500
2010-2011	3,571,075	0	-	3,571,075	0	1,557,549	2,013,526	1,557,549	3,571,075	3,571,075
2011-2012	6,357,185	0	-	6,357,185	22.224	3,532,539	2,824,647	3,510,315	6,334,961	6,334,961
2012-2013	7,108,017	0	-	7,108,017	100.000	3,799,416	3,308,601	3,699,416	7,008,017	7,008,017
2013-2014	9,703,564	0	-	9,703,564	5,385,480	7,473,784	2,229,780	2,088,304	4,318,084	4,318,084
2014-2015	7,286,913	0	-	7,286,913	549.140	4,348,520	2,938,392	3,799,381	6,737,773	6,737,773
2015-2016	8,386,266	0	-	8,386,266	2.240.574	5,260,522	3,125,745	3,019,948	6,145,693	6,145,693
2016-2017	38,732,335	0	0	38,732,335	30,517,119	35,848,912	2,883,424	5,331,793	8,215,217	8,215,217
2017-2018	2,623,377	0	0	2,623,377	0	774,401	1,848,977	774,401	2,623,377	2,623,377
2018-2019	2,589,734	0	0	2,589,734	0	995,732	1,594,003	995,732	2,589,734	2,589,734
2019-2020	4,590,988	0	0	4,590,988	0	2,034,323	2,556,665	2,034,323	4,590,988	4,590,988
2020-2021	44.727.172	0	0	44.727.172	34.562.175	41.472.932	3.254.240	6.910.757	10,164,997	10,164,997
2021-2022	17,563,072	0	0	17,563,072	10,236,000	14,141,384	3,421,687	3,905,384	7,327,072	7,327,072
2022-2023	8,599,708	0	0	8,599,708	0	3,072,909	5,526,799	3,072,909	8,599,708	8,599,708
2023-2024	858,344	0	0	858,344	0	120,000	738,344	120,000	858,344	858,344
Total	\$211,947,938	\$0	\$0	\$211,947,938	\$89,175,767	\$148,608,290	\$63,339,648	\$59,432,524	\$122,772,172	\$122,772,172

#### Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Authority.

(C)

(D)
(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 \$100K and \$1M Rate Analysis Not Included.

#### Paid Losses as of 12/31/23

										Paid
		Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$100,000	Capped at	SIR &
Year	Paid	Losses	Losses	Paid	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)
2002-2003	\$12.459.622	\$0	\$0	\$12.459.622	\$3.575.194	\$7,812,657	\$4.646.965	\$4.237.463	\$8.884.428	\$8,884,428
2003-2004	5,715,419	0	0	5,715,419	0	2,205,881	3,509,537	2,205,881	5,715,419	5,715,419
2004-2005	3,909,704	0	0	3,909,704	40,367	1,465,098	2,444,607	1,424,731	3,869,337	3,869,337
2005-2006	7,274,863	0	0	7,274,863	1,643,182	4,327,503	2,947,359	2,684,321	5,631,680	5,631,680
2006-2007	4,548,052	0	0	4,548,052	0	1,419,184	3,128,868	1,419,184	4,548,052	4,548,052
2007-2008	5,982,106	0	0	5,982,106	183,478	2,834,846	3,147,259	2,651,369	5,798,628	5,798,628
2008-2009	5,485,923	0	0	5,485,923	120,835	2,774,220	2,711,703	2,653,385	5,365,088	5,365,088
2009-2010	3,874,500	0	0	3,874,500	0	1,335,978	2,538,522	1,335,978	3,874,500	3,874,500
2010-2011	3,571,075	0	0	3,571,075	0	1,557,549	2,013,526	1,557,549	3,571,075	3,571,075
2011-2012	6,357,185	0	0	6,357,185	22,224	3,532,539	2,824,647	3,510,315	6,334,961	6,334,961
2012-2013	6,613,044	0	0	6,613,044	0	3,304,442	3,308,601	3,304,442	6,613,044	6,613,044
2013-2014	9,703,564	0	0	9,703,564	5,385,480	7,473,784	2,229,780	2,088,304	4,318,084	4,318,084
2014-2015	7,286,913	0	0	7,286,913	549,140	4,348,520	2,938,392	3,799,381	6,737,773	6,737,773
2015-2016	8,371,359	0	0	8,371,359	2,240,574	5,245,615	3,125,745	3,005,041	6,130,786	6,130,786
2016-2017	38,537,696	0	0	38,537,696	30,359,615	35,654,272	2,883,424	5,294,657	8,178,080	8,178,080
2017-2018	2,623,375	0	0	2,623,375	0	774,401	1,848,975	774,401	2,623,375	2,623,375
2018-2019	2,422,650	0	0	2,422,650	0	850,476	1,572,174	850,476	2,422,650	2,422,650
2019-2020	2,589,280	0	0	2,589,280	0	515,377	2,073,903	515,377	2,589,280	2,589,280
2020-2021	41,055,551	0	0	41,055,551	34,299,175	38,582,392	2,473,160	4,283,217	6,756,376	6,756,376
2021-2022	1,911,606	0	0	1,911,606	0	351,404	1,560,201	351,404	1,911,606	1,911,606
2022-2023	921,281	0	0	921,281	0	0	921,281	0	921,281	921,281
2023-2024	70,221	0	0	70,221	0	0	70,221	0	70,221	70,221
Total	\$181,284,987	\$0	\$0	\$181,284,987	\$78,419,263	\$126,366,138	\$54,918,849	\$47,946,875	\$102,865,724	\$102,865,724

#### Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Authority.

(C)

(D)

(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 \$100K and \$1M Rate Analysis Not Included.

#### Case Reserves as of 12/31/23

		Additions	Subtractions			Reserves	Decemica	Reserves	Decemica	Reserves
Accident	Unlimited	to	from	Adjusted	Reserves	Over	Reserves Capped at	\$100.000	Reserves Capped at	Capped at SIR &
Year	Reserves	Losses	Losses	Reserves	Over SIR	\$100.000	\$100,000	to SIR Laver	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	φ100,000 (H)	(I)	(J)	(K)
(ন)	(D)	(0)	(D)	(Ľ)	(1)	(0)	(11)	(1)	(5)	(14)
2002-2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2003-2004	0	0	0	0	0	0	0	0	0	0
2004-2005	0	0	0	0	0	0	0	0	0	0
2005-2006	0	0	0	0	0	0	0	0	0	0
2006-2007	0	0	0	0	0	0	0	0	0	0
2007-2008	0	0	0	0	0	0	0	0	0	0
2008-2009	0	0	0	0	0	0	0	0	0	0
2009-2010	0	0	0	0	0	0	0	0	0	0
2010-2011	0	0	0	0	0	0	0	0	0	0
2011-2012	0	0	0	0	0	0	0	0	0	0
2012-2013	494,974	0	0	494,974	100,000	494,974	0	394,974	394,974	394,974
2013-2014	0	0	0	0	0	0	0	0	0	0
2014-2015	0	0	0	0	0	0	0	0	0	0
2015-2016	14,907	0	0	14,907	0	14,907	0	14,907	14,907	14,907
2016-2017	194,640	0	0	194,640	157,504	194,640	0	37,136	37,136	37,136
2017-2018	2	0	0	2	0	0	2	0	2	2
2018-2019	167,084	0	0	167,084	0	145,256	21,828	145,256	167,084	167,084
2019-2020	2,001,708	0	0	2,001,708	0	1,518,946	482,762	1,518,946	2,001,708	2,001,708
2020-2021	3,671,620	0	0	3,671,620	263,000	2,890,541	781,080	2,627,541	3,408,620	3,408,620
2021-2022	15,651,466	0	0	15,651,466	10,236,000	13,789,980	1,861,486	3,553,980	5,415,466	5,415,466
2022-2023	7,678,427	0	0	7,678,427	0	3,072,909	4,605,518	3,072,909	7,678,427	7,678,427
2023-2024	788,123	0	0	788,123	0	120,000	668,123	120,000	788,123	788,123
Total	\$30,662,951	\$0	\$0	\$30,662,951	\$10,756,504	\$22,242,152	\$8,420,799	\$11,485,649	\$19,906,448	\$19,906,448

#### Notes:

(A) Years are 7/1 to 6/30.

(B) \$100K and \$1M Rate Analysis Appendix H, Page 1, Column (B) - \$100K and \$1M Rate Analysis Appendix H, Page 2, Column (B).

(C) \$100K and \$1M Rate Analysis Appendix H, Page 1, Column (C) - \$100K and \$1M Rate Analysis Appendix H, Page 2, Column (C).

(D) \$100K and \$1M Rate Analysis Appendix H, Page 1, Column (D) - \$100K and \$1M Rate Analysis 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) (G) (F).
- (J) (E) (F).

(K) Minimum of (J) and the aggregate stop loss. See \$100K and \$1M Rate Analysis Not Included.

#### Claim Counts as of 12/31/23

Accident Year (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 Claims (J)	Adjusted Open Claims (K)
2002-2003	755	0	0	755	755	0	0	755	0	0
2003-2004	627	0	0	627	627	0	0	627	0	0
2004-2005	566	0	0	566	566	0	0	566	0	0
2005-2006	562	0	0	562	562	0	0	562	0	0
2006-2007	577	0	0	577	577	0	0	577	0	0
2007-2008	662	0	0	662	662	0	0	662	0	0
2008-2009	590	0	0	590	590	0	0	590	0	0
2009-2010	519	0	0	519	519	0	0	519	0	0
2010-2011	418	0	0	418	418	0	0	418	0	0
2011-2012	433	0	0	433	433	0	0	433	0	0
2012-2013	494	0	0	494	493	0	0	493	1	1
2013-2014	440	0	0	440	440	0	0	440	0	0
2014-2015	473	0	0	473	473	0	0	473	0	0
2015-2016	486	0	0	486	485	0	0	485	1	1
2016-2017	511	0	0	511	509	0	0	509	2	2
2017-2018	488	0	0	488	487	0	0	487	1	1
2018-2019	427	0	0	427	424	0	0	424	3	3
2019-2020	428	0	0	428	413	0	0	413	15	15
2020-2021	380	0	0	380	357	0	0	357	23	23
2021-2022	421	0	0	421	369	0	0	369	52	52
2022-2023	614	0	0	614	418	0	0	418	196	196
2023-2024	165	0	0	165	65	0	0	65	100	100
Total	11,036	0	0	11,036	10,642	0	0	10,642	394	394

#### Notes:

- (A) Years are 7/1 to 6/30.(B) Provided by the Authority.

- (B) Fronde by the Automy.
  (C)
  (D)
  (E) (B) + (C) (D).
  (F) Provided by the Authority.
- (G) (H)
- (I) (F) + (G) (H).(J) (B) (F).(K) (E) (I).

# Exposure Measures

Accident Year	Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
2002-2003	3,255,273	1.679	5,465,603
2003-2004	3,401,137	1.638	5,571,062
2004-2005	3,500,006	1.598	5,593,010
2005-2006	3,557,514	1.559	5,546,164
2006-2007	3,705,140	1.521	5,635,518
2007-2008	3,909,370	1.484	5,801,505
2008-2009	4,049,436	1.448	5,863,583
2009-2010	3,940,725	1.413	5,568,244
2010-2011	3,534,443	1.379	4,873,997
2011-2012 2012-2013 2013-2014 2014-2015	3,457,490 3,480,180 3,430,028 3,550,523	1.345 1.312 1.280 1.249	4,650,324 4,565,996 4,390,436
2014-2015	3,550,523	1.249	4,434,603
2015-2016	3,697,212	1.219	4,506,901
2016-2017	3,936,364	1.189	4,680,337
2017-2018	4,135,396	1.160	4,797,059
2018-2019	4,265,647	1.132	4,798,712
2019-2020	4,346,148	1.104	4,798,147
2020-2021	4.396,808	1.077	4,735,362
2021-2022	4,640,638	1.051	4,877,311
2022-2023	4,955,641	1.025	5,079,532
2023-2024	5,168,687	1.000	5,168,687
2024-2025	5,323,749	1.000	5,323,749

- Notes:
- (A)
- Provided by the Authority. Based on industry factors.
- (B) (C) (A) x (B).

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

Accident Year	Ultimate Limited Losses	Trend Factor	Trended Limited Losses	Trended Payroll (\$00)	Trended Limited Loss Rate
	(A)	(B)	(C)	(D)	(E)
2002-2003	4,237,463	1.679	7,114,700	5,465,603	1.302
2003-2004	2,205,881	1.638	3,613,233	5,571,062	0.649
2004-2005	1,424,731	1.598	2,276,720	5,593,010	0.407
2005-2006	2,684,321	1.559	4,184,856	5,546,164	0.755
2006-2007	1,419,184	1.521	2,158,579	5,635,518	0.383
2007-2008	2,651,368	1.484	3,934,630	5,801,505	0.678
2008-2009	2,653,385	1.448	3,842,101	5,863,583	0.655
2009-2010	1,335,978	1.412	1,886,401	5,568,244	0.339
2010-2011	1,557,549	1.378	2,146,303	4,873,997	0.440
2011-2012	3,510,315	1.344	4,717,863	4,650,324	1.015
2012-2013	3,722,000	1.312	4,883,264	4,565,996	1.069
2013-2014	2,088,304	1.280	2,673,029	4,390,436	0.609
2014-2015	3,799,380	1.249	4,745,426	4,434,603	1.070
2015-2016	3,095,000	1.218	3,769,710	4,506,901	0.836
2016-2017	5,545,000	1.188	6,587,460	4,680,337	1.407
2017-2018	774,401	1.160	898,305	4,797,059	0.187
2018-2019	1,156,000	1.132	1,308,592	4,828,712	0.271
2019-2020	2,311,000	1.104	2,551,344	4,798,147	0.532
2020-2021	7,765,000	1.077	8,362,905	4,735,362	1.766
2021-2022	5,959,000	1.051	6,262,909	4,877,311	1.284
2022-2023	6,202,000	1.025	6,357,050	5,079,532	1.252
Totals	\$66,097,260		\$84,275,380	106,263,406	\$0.793
13/14-18/19	16,458,085		19,982,522	27,638,048	0.723
20/21-22/23	19,926,000		20,982,864	14,692,205	1.428
			(F) Selecte	ed Limited Rate:	\$1.193
				Prior:	\$0.970
Program Year:		2023-2024	2024-2025		
(G) Factor to S	SIR:	1.000	1.000		
(H) Trend Fact	or:	1.000	1.025		
(I) Program Ra	ite:	\$1.193	\$1.223		
(J) Trended Payroll (\$00):		5,168,687	5,323,749		
(K) Projected F	Program Losses:	6,166,000	6,511,000		
(L) Projected L	JLAE:	0	0		
(M) Projected I	Loss and ULAE:	\$6,166,000	\$6,511,000		

Notes appear on the next page.

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

#### Notes:

- (A) From \$100K to \$1M Rate Analysis Not Included, Page 2, Column (F). For purposes of projecting future losses, losses are capped at \$100,000 per occurrence.
- (B) From \$100K to \$1M Rate Analysis Appendix E, Page 1, Column (B).
- (C) (A) x (B).
- (D) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
- (E) (C) / (D).
- (F) Selected based on (E).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) From \$100K to \$1M Rate Analysis Appendix E.
- (I) (F) x (G) x (H).
- (J) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
- (K) (I) x (J).
- (L) Based on an estimated claim closing pattern and the Authority's historical claims administration expenses.
- (M) (K) + (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 Year (A)	Limited Reported Losses as of 12/31/23 (B)	Reported Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Reported Losses of 12/31/23 (E)	Reported Loss Development Factor (F)	Ultimate Program Losses (G)
( )	( )	(-)		( )	( )	(-)
2002-2003	\$4,237,463	1.000	\$4,237,463	\$4,237,463	1.000	\$4,237,463
2003-2004	2,205,881	1.000	2,205,881	2,205,881	1.000	2,205,881
2004-2005	1,424,731	1.000	1,424,731	1,424,731	1.000	1,424,731
2005-2006	2,684,321	1.000	2,684,321	2,684,321	1.000	2,684,321
2006-2007	1,419,184	1.000	1,419,184	1,419,184	1.000	1,419,184
2007-2008	2,651,368	1.000	2,651,368	2,651,368	1.000	2,651,368
2008-2009	2,653,385	1.000	2,653,385	2,653,385	1.000	2,653,385
2009-2010	1,335,978	1.000	1,335,978	1,335,978	1.000	1,335,978
2010-2011	1,557,549	1.001	1,559,107	1,557,549	1.001	1,559,107
2011-2012	3,510,315	1.003	3,520,846	3,510,315	1.003	3,520,846
2012-2013	3,699,416	1.006	3,721,612	3,699,416	1.006	3,721,612
2013-2014	2,088,304	1.010	2,109,187	2,088,304	1.010	2,109,187
2014-2015	3,799,380	1.015	3,856,371	3,799,380	1.015	3,856,371
2015-2016	3,019,948	1.025	3,095,447	3,019,948	1.025	3,095,447
2016-2017	5,331,793	1.040	5,545,065	5,331,793	1.040	5,545,065
2017-2018	774,401	1.047	810,798	774,401	1.047	810,798
2018-2019	995,732	1.056	1,051,493	995,732	1.056	1,051,493
2019-2020	2,034,323	1.082	2,201,137	2,034,323	1.082	2,201,137
2020-2021	6,910,757	1.588	9,798,282	6,910,757	1.588	9,798,282
2021-2022	3,905,384	2.956	11,544,315	3,905,384	2.956	11,544,315
2022-2023	3,072,909	6.873	21,120,104	3,072,909	6.873	21,120,104
Totals	\$59,312,522		\$88,546,075	\$59,312,522		\$88,546,075

# Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority. These losses exclude amounts over \$100,000 per occurrence.
- (C) From \$100K to \$1M Rate Analysis Appendix A, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over \$100,000 per occurrence.
- (E) Losses capped at the Authority's SIR. Amounts are provided by the Authority.
- (F) Derived from factors on \$100K to \$1M Rate Analysis Appendix A, Page 4.
- (G) (E) x (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.

# DRAFT

# PLAN JPA - Liability Program (\$100K to \$1M Analysis) Reported Loss Development

	Reported Loss Development										
			ses Reported								
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	365,543	1,476,042	3,953,355	3,589,550	4,887,581	4,262,606	4,441,309	4,439,396	4,497,701	4,495,632	4,437,327
2003-2004		66,478	363,636	398,884	890,862	986,705	1,227,451	1,518,119	2,427,012		2,205,881
2004-2005		586,598	1,140,449	1,700,075	1,700,074	1,675,074	, ,		, ,		1,675,074
2005-2006	25,000	331,278	1,741,278	2,362,206	2,728,549	2,867,756	2,979,841	3,131,757	3,206,757	3,045,410	3,008,029
2006-2007	200,000	292,450	332,811	374,101	717,777	1,013,370	1,474,688	1,413,760	1,413,623	1,413,623	1,413,623
2007-2008	100,000	633,000	1,573,836	2,796,222		4,360,051		4,203,645	4,203,645	4,203,645	4,203,645
2008-2009		267,405	1,881,941	3,667,001	3,485,698	3,032,463		2,751,812			
2009-2010	588,210	2,839,236	3,579,153	3,176,666	2,837,525		2,079,066		2,036,496	2,036,496	2,036,496
2010-2011		1,983,751	4,432,358	2,267,822	1,756,558	1,759,837				1,709,837	1,709,837
2011-2012		5,467,351	5,436,904	4,482,628	3,623,434	3,455,028	3,603,332	3,672,332	3,672,332	3,672,332	3,672,332
2012-2013	007 000	4,426,268	2,923,860	1,852,321	1,745,668				3,563,734	3,563,734	3,738,734
2013-2014	307,000	1,025,000	1,218,912	2,036,429	2,549,713	2,720,508	2,696,970	2,609,433	2,609,434		2,619,477
2014-2015		2,287,736	2,959,162	3,811,606	4,292,047					4,273,028	
2015-2016	10.000	575,005	2,175,661	2,839,484	3,255,772			3,134,946	3,019,948		
2016-2017	10,002	1,597,500	2,927,832	4,486,306	5,196,650		5,319,453	5,331,793			
2017-2018		145,002	597,690	818,662	773,258	775,051	774,401				
2018-2019			391,223	717,128	1,028,207	995,732					
2019-2020	005 000	0 0 4 0 77 4	66,812	456,550	2,034,323						
2020-2021	905,000	2,019,771	3,272,283	6,910,757							
2021-2022	50,000	569,442	3,905,384								
2022-2023	100.000	3,072,909									
2023-2024	120,000										
				nent Factors		00.70	70.00	00 400	100 111	111 100	400 400
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
0000 0000	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	4.038	2.678	0.908	1.362	0.872	1.042	1.000	1.013	1.000	0.987	1.017
2003-2004		5.470	1.097	2.233	1.108	1.244	1.237	1.599	0.909	1.000	1.000
2004-2005	40.054	1.944	1.491	1.000	0.985	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006	13.251 1.462	5.256	1.357	1.155	1.051	1.039	1.051	1.024	0.950	0.988 1.000	1.000 1.000
2006-2007		1.138	1.124	1.919	1.412	1.455	0.959	1.000	1.000		
2007-2008	6.330	2.486	1.777	1.319	1.182	0.976	0.988	1.000	1.000 1.000	1.000	0.955
2008-2009	4 9 9 7	7.038	1.949 0.888	0.951 0.893	0.870 0.995	0.922 0.736	0.984 0.990	1.000 0.989	1.000	1.000	1.000
2009-2010	4.827	1.261								1.000	1.000
2010-2011 2011-2012		2.234 0.994	0.512 0.824	0.775 0.808	1.002 0.954	0.972 1.043	1.000 1.019	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000
									1.000	1.000	1.000
2012-2013 2013-2014	3.339	0.661 1.189	0.634 1.671	0.942 1.252	1.274 1.067	0.965 0.991	1.060 0.968	1.567 1.000	1.000	1.049	1.000
2013-2014	3.339	1.293	1.288	1.252	0.995	1.000	1.000	1.000	1.004	1.000	
2015-2016		3.784	1.200	1.120	1.000	0.960	1.000	0.963	1.000		
2016-2017	159.718	1.833	1.532	1.147	0.994	1.030	1.003	0.303			
2017-2018	155.710	4.122	1.370	0.945	1.002	0.999	1.002				
2018-2019		4.122	1.833	1.434	0.968	0.333					
2019-2020			6.833	4.456	0.000						
2020-2021	2.232	1.620	2.112	4.400							
2021-2022	11.389	6.858	2.1.12								
2022-2023	11.000	0.000									
2022 2020											
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	22.954	2.881	1.606	1.382	1.043	1.023	1.017	1.083	0.989	1.002	0.997
Dollar-Weighted											
Averages											
3-yr			2.167	1.925	0.991	1.003	1.002	0.989	1.001	1.018	1.000
4-yr			2.057	1.394	0.994	1.002	0.996	1.096	1.001	1.015	1.000
Comparative											
Factors	2.945	1.254	1.006	0.965	0.972	1.000	1.000	1.000	1.000	1.000	1.000
Prior	5.500	2.325	1.615	1.169	1.024	1.009	1.006	1.015	1.010	1.005	1.004
Selected	5.500	2.325	1.861	1.468	1.024	1.009	1.006	1.015	1.010	1.005	1.004
Cumulated	27 000	6 070	0.050	4 500	4 000	4 050	4 0 4 7	1 0 4 0	4 005	4 045	1 0 4 0
Cumulated	37.802	6.873	2.956	1.588	1.082	1.056	1.047	1.040	1.025	1.015	1.010

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1.006

Cumulated

1.003

1.001

1.000

# PLAN JPA - Liability Program (\$100K to \$1M Analysis) Reported Loss Development

Reported Loss Development											
Accident Year 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023 2023-2024	2,036,496 1,709,837	150 Months 4,509,757 2,205,881 1,675,074 3,008,029 1,413,623 4,203,645 2,751,812	162 Months	2,751,812	3,008,029 1,419,184 4,203,645	1,675,074 3,008,029 1,419,184	2,205,881 1,675,074 3,008,029	222 Months 4,478,397 2,205,881 1,675,074 3,008,029	2,205,881		258 Months 4,478,397
2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023	Reported Lo 138-150 Months 0.999 1.000 1.000 1.000 1.047 1.000 1.000 1.000 1.011	ss Developn 150-162 Months 1.000 1.000 1.000 1.000 1.000 1.000 1.000	nent Factors 162-174 Months 1.000 1.000 1.000 0.988 1.000 1.000 1.000	174-186 Months 1.000 1.000 1.000 1.000 1.000 1.000	186-198 Months 0.993 1.000 1.000 1.000 1.000	198-210 Months 1.000 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000	234-246 Months 1.000 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted Averages 3-yr 4-yr	138-150 Months 1.006 1.006 1.004	150-162 Months 1.002 1.000 1.000	162-174 Months 0.999 1.000 0.998	174-186 Months 1.000 1.000 1.000	186-198 Months 0.999 1.000 1.000	198-210 Months 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000	234-246 Months 1.000	246-258 Months 1.000	258-Ult. Months
Comparative Factors Prior	1.004 1.000 1.003	1.000 1.000 1.002	1.000 1.001	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000
Selected	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

1.000

1.000

1.000

1.000

1.000

1.000

1.000

#### Paid Loss Development

	Limited			Program		
	Paid	Paid Loss	Ultimate	Paid	Paid Loss	Ultimate
Accident	Losses as	Development	Limited	Losses	Development	Program
Year	of 12/31/23	Factor	Losses	of 12/31/23	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
2002-2003	\$4,237,463	1.000	\$4,237,463	\$4,237,463	1.000	\$4,237,463
2003-2004	2,205,881	1.000	2,205,881	2,205,881	1.000	2,205,881
2004-2005	1,424,731	1.000	1,424,731	1,424,731	1.000	1,424,731
2005-2006	2,684,321	1.000	2,684,321	2,684,321	1.000	2,684,321
2006-2007	1,419,184	1.000	1,419,184	1,419,184	1.000	1,419,184
2007-2008	2,651,369	1.000	2,651,369	2,651,369	1.000	2,651,369
2008-2009	2,653,385	1.000	2,653,385	2,653,385	1.000	2,653,385
2009-2010	1,335,978	1.000	1,335,978	1,335,978	1.000	1,335,978
2010-2011	1,557,549	1.001	1,559,107	1,557,549	1.001	1,559,107
2011-2012	3,510,315	1.002	3,517,336	3,510,315	1.002	3,517,336
2012-2013	3,304,442	1.007	3,327,573	3,304,442	1.007	3,327,573
2013-2014	2,088,304	1.008	2,105,010	2,088,304	1.008	2,105,010
2014-2015	3,799,381	1.013	3,848,773	3,799,381	1.013	3,848,773
2015-2016	3,005,041	1.019	3,062,137	3,005,041	1.019	3,062,137
2016-2017	5,294,657	1.072	5,675,872	5,294,657	1.072	5,675,872
2017-2018	774,401	1.121	868,104	774,401	1.121	868,104
2018-2019	850,476	1.254	1,066,497	850,476	1.254	1,066,497
2019-2020	515,377	1.435	739,566	515,377	1.435	739,566
2020-2021	4,283,217	2.557	7,838,186	4,283,217	2.557	7,838,186
2021-2022	351,404	6.398	2,248,283	351,404	6.398	2,248,283
2022-2023	0	28.791	0	0	28.791	0
Totals	\$47,946,876		\$54,468,756	\$47,946,876		\$54,468,756

#### Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority. These losses exclude amounts over \$100,000 per occurrence.
- (C) From \$100K to \$1M Rate Analysis Appendix B, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over \$100,000 per occurrence.
- (E) Losses capped at the Authority's SIR. Amounts are provided by the Authority.
- (F) Derived from factors on \$100K to \$1M Rate Analysis Appendix B, Page 4.
- (G) (E) x (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.

# PLAN JPA - Liability Program (\$100K to \$1M Analysis) Paid Loss Development

Paid Loss Development											
Accident Year 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2010-2011 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020	6 Months 75,543 6,182 219,495	Limited Loss 18 Months 903,527 15,692 6,598 208,642 15,240 54,284 19,904 285,835 244,011 183,567 325,184 45,594 1,560,730 56,752	ses Paid as c 30 Months 2,226,102 363,636 310,953 211,412 69,317 602,929 228,676 559,909 492,996 1,126,697 714,607 562,912 1,844,263 155,478 1,417,546 356,919 73,233	255 42 Months 3,446,317 379,734 1,675,075 862,224 308,983 1,401,455 1,724,990 1,786,817 847,767 2,824,229 1,364,385 1,541,662 2,180,858 1,714,285 2,996,157 681,757 515,432 19,385	54 Months 3,946,802 682,512 1,675,075 2,089,131 521,929 2,571,860 2,057,605 1,978,733 1,631,751 3,464,935 1,590,037	66 Months 3,910,106 766,935 1,675,075 2,710,478 942,901 3,424,876 2,253,588 1,997,847 1,709,837 3,421,881 1,843,015 2,372,509 4,271,609	78 Months 4,427,910 1,013,004 1,675,075 2,891,138 1,426,352 4,203,946 2,717,684 2,029,066 1,709,837 3,558,192 2,095,870 2,583,001 4,273,028 2,991,237	4,203,646 2,751,812 2,033,765 1,709,837 3,581,744 2,177,287 2,609,433	3,128,107 2,609,433 4,273,028	2,036,496 1,709,837 3,606,084 3,146,370	126 Months 4,432,327 2,205,881 1,675,075 3,008,028 1,413,623 4,203,646 2,751,812 2,036,496 1,709,837 3,608,407 3,262,762 2,619,477
2020-2021 2021-2022 2022-2023 2023-2024		947,057	1,939,012 351,404		010,077						
		Paid Loss D	ovolonmont	Factore							
2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023	6-18 Months 11.960 2.465 1.302	Paid Loss D 18-30 Months 2.464 23.173 47.128 1.013 4.548 11.107 11.489 1.959 2.020 6.138 2.198 12.346 1.182 6.289 2.047	evelopment 30-42 Months 1.548 1.044 5.387 4.078 4.458 2.324 7.543 3.191 1.720 2.507 1.909 2.739 1.183 11.026 2.114 1.910 7.038 2.209	Factors:           42-54           Months           1.145           1.797           1.000           2.423           1.689           1.835           1.193           1.107           1.925           1.227           1.165           1.516           1.918           1.495           1.355           1.536           26.586	54-66 Months 0.991 1.124 1.000 1.297 1.807 1.332 1.095 1.010 1.048 0.988 1.159 1.015 1.021 1.088 1.313 1.078 1.074	66-78 Months 1.132 1.321 1.000 1.067 1.513 1.227 1.206 1.016 1.000 1.040 1.137 1.089 1.000 1.073 1.050 0.999	78-90 Months 1.003 1.267 1.000 1.021 0.991 1.000 1.013 1.002 1.000 1.007 1.039 1.010 1.000 1.003 1.129	90-102 Months 1.000 1.749 1.000 1.012 1.000 1.000 1.001 1.000 1.003 1.437 1.000 1.000 1.001	102-114 Months 0.998 0.982 1.000 1.001 1.000 1.000 1.000 1.000 1.004 1.006 1.004 1.000	114-126 Months 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.001 1.037 1.000	126-138 Months 1.005 1.000 1.000 1.000 1.000 1.000 1.000 1.002 1.025
Average Dollar-Weighted Averages	6-18 Months 5.242	18-30 Months 9.007	30-42 Months 3.552	42-54 Months 2.875	54-66 Months 1.144	66-78 Months 1.117	78-90 Months 1.032	90-102 Months 1.086	102-114 Months 1.000	114-126 Months 1.004	126-138 Months 0.999
3-yr 4-yr				1.666 1.288	1.240 1.188	1.053 1.035	1.051 1.044	1.000 1.079	1.003 1.003	1.013 1.011	1.010 1.008
4-yr Comparative				1.200	1.100	1.055	1.044	1.079	1.003	1.011	1.000
Factors	4.218	2.117	1.446	1.151	1.057	1.033	1.015	1.010	1.008	1.008	1.006
Prior	9.100	4.500	2.502	1.418	1.144	1.119	1.051	1.040	1.008	1.005	1.002
Selected	9.100	4.500	2.502	1.782	1.144	1.119	1.046	1.052	1.006	1.005	1.001
Cumulated	261.998	28.791	6.398	2.557	1.435	1.254	1.121	1.072	1.019	1.013	1.008

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# PLAN JPA - Liability Program (\$100K to \$1M Analysis) Paid Loss Development

Paid Loss Development Limited Losses Paid as of:											
Accident Year 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023 2023-2024	138 Months 4,455,192 2,205,881 1,675,075 3,008,028 1,413,623 4,015,369 2,751,812 2,036,496	150 Months 4,470,710 2,205,881 1,675,075 3,008,028 1,413,623 4,203,646 2,751,812 2,036,496	162 Months 4,477,671 2,205,881 1,675,075 3,008,028 1,413,623 4,203,646	4,203,646	3,008,028 1,419,184 4,203,646	198 Months 4,478,398 2,205,881 1,675,075 3,008,028 1,419,184 4,203,646	3,008,028	1,675,075	234 Months 4,478,398 2,205,881 1,675,075	246 Months 4,478,398 2,205,881	258 Months 4,478,398
2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023	Paid Loss D 138-150 Months 1.003 1.000 1.000 1.000 1.047 1.000 1.000 1.000 1.027	evelopment 150-162 Months 1.002 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Factors:           162-174           Months           1.000           1.000           1.000           1.000           1.000           1.000           1.000           1.000           1.000           1.000           1.000           1.000           1.000           1.000	174-186 Months 1.000 1.000 1.000 1.000 1.000	186-198 Months 1.000 1.000 1.000 1.000	198-210 Months 1.000 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000	234-246 Months 1.000 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted Averages	138-150 Months 1.008	150-162 Months 1.000	162-174 Months 1.001	174-186 Months 1.000	186-198 Months 1.000	198-210 Months 1.000	210-222 Months 1.000	222-234 Months 1.000	234-246 Months 1.000	246-258 Months 1.000	258-Ult. Months
3-yr 4-yr Comparative	1.013 1.010	1.000 1.000	1.000 1.001	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000			
Factors Prior	1.006 1.004	1.004 1.002	1.004 1.001	1.002 1.000	1.002 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.000 1.000
Selected	1.005	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.007	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

# Exposure and Development Method Based on Reported Losses

Accident Year	Trended Payroll (\$00) (A)	Reported Losses as of 12/31/23 (B)	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)
2002-2003	5,465,603	4,237,463	1.000	0.000	0.775	0	4,237,463
2003-2004	5,571,062	2,205,881	1.000	0.000	0.396	0	2,205,881
2004-2005	5,593,010	1,424,731	1.000	0.000	0.255	0	1,424,731
2005-2006	5,546,164	2,684,321	1.000	0.000	0.484	0	2,684,321
2006-2007	5,635,518	1,419,184	1.000	0.000	0.252	0	1,419,184
2007-2008	5,801,505	2,651,368	1.000	0.000	0.457	0	2,651,368
2008-2009	5,863,583	2,653,385	1.000	0.000	0.453	0	2,653,385
2009-2010	5,568,244	1,335,978	1.000	0.000	0.240	0	1,335,978
2010-2011	4,873,997	1,557,549	1.001	0.001	0.320	1,560	1,559,109
2011-2012	4,650,324	3,510,315	1.003	0.003	0.755	10,533	3,520,848
2012-2013	4,565,996	3,699,416	1.006	0.006	0.815	22,328	3,721,744
2013-2014	4,390,436	2,088,304	1.010	0.010	0.476	20,898	2,109,202
2014-2015	4,434,603	3,799,380	1.015	0.015	0.857	57,007	3,856,387
2015-2016	4,506,901	3,019,948	1.025	0.024	0.687	74,310	3,094,258
2016-2017	4,680,337	5,331,793	1.040	0.038	1.185	210,756	5,542,549
2017-2018	4,797,059	774,401	1.047	0.045	0.161	34,755	809,156
2018-2019	4,828,712	995,732	1.056	0.053	1.034	264,623	1,260,355
2019-2020	4,798,147	2,034,323	1.082	0.076	1.060	386,539	2,420,862
2020-2021	4,735,362	6,910,757	1.588	0.370	1.086	1,902,763	8,813,520
2021-2022	4,877,311	3,905,384	2.956	0.662	1.113	3,593,632	7,499,016
2022-2023	5,079,532	3,072,909	6.873	0.855	1.141	4,955,363	8,028,272
Totals	106,263,406	\$59,312,522				\$11,535,067	\$70,847,589

#### Notes:

- (A) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
- (B) Provided by the Authority. These losses exclude amounts incurred above the Authority's SIR for each year.
- (C) From \$100K to \$1M Rate Analysis Appendix A, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From \$100K to \$1M Rate Analysis Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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 12/31/23 (B)	Loss Development Factor (C)	Percentage of Losses Yet to Be Paid (D)	Program Rate (E)	Incurred but not Paid (F)	Ultimate Program Losses (G)
2002-2003	5,465,603	4,237,463	1.000	0.000	0.775	0	4,237,463
2003-2004	5,571,062	2,205,881	1.000	0.000	0.396	0	2,205,881
2004-2005	5,593,010	1,424,731	1.000	0.000	0.255	0	1,424,731
2005-2006	5,546,164	2,684,321	1.000	0.000	0.484	0	2,684,321
2006-2007	5,635,518	1,419,184	1.000	0.000	0.252	0	1,419,184
2007-2008	5,801,505	2,651,369	1.000	0.000	0.457	0	2,651,369
2008-2009	5,863,583	2,653,385	1.000	0.000	0.453	0	2,653,385
2009-2010	5,568,244	1,335,978	1.000	0.000	0.240	0	1,335,978
2010-2011	4,873,997	1,557,549	1.001	0.001	0.320	1,560	1,559,109
2011-2012	4,650,324	3,510,315	1.002	0.002	0.755	7,022	3,517,337
2012-2013	4,565,996	3,304,442	1.007	0.007	0.815	26,049	3,330,491
2013-2014	4,390,436	2,088,304	1.008	0.008	0.476	16,719	2,105,023
2014-2015	4,434,603	3,799,381	1.013	0.013	0.857	49,406	3,848,787
2015-2016	4,506,901	3,005,041	1.019	0.019	0.687	58,829	3,063,870
2016-2017	4,680,337	5,294,657	1.072	0.067	1.185	371,595	5,666,252
2017-2018	4,797,059	774,401	1.121	0.108	0.161	83,411	857,812
2018-2019	4,828,712	850,476	1.254	0.203	1.034	1,013,556	1,864,032
2019-2020	4,798,147	515,377	1.435	0.303	1.060	1,541,069	2,056,446
2020-2021	4,735,362	4,283,217	2.557	0.609	1.086	3,131,845	7,415,062
2021-2022	4,877,311	351,404	6.398	0.844	1.113	4,581,609	4,933,013
2022-2023	5,079,532		28.791	0.965	1.141	5,592,895	5,592,895
Totals	106,263,406	\$47,946,876				\$16,475,565	\$64,422,441

# Notes:

- (A) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
- (B) Provided by the Authority. These losses exclude amounts paid above the Authority's SIR for each year.
- (C) From \$100K to \$1M Rate Analysis Appendix B, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From \$100K to \$1M Rate Analysis Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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 Year	Trended Payroll (\$00) (A)	Ultimate Limited Losses (B)	Trend Factor (C)	Trended Limited Losses (D)	Trended Limited Loss Rate (E)	Limited Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
2002-2003	5,465,603	4,237,463	1.679	7,114,700	1.302	0.775	1.000	0.775
2003-2004	5,571,062	2,205,881	1.638	3,613,233	0.649	0.396	1.000	0.396
2004-2005	5,593,010	1,424,731	1.598	2,276,720	0.407	0.255	1.000	0.255
2005-2006	5,546,164	2,684,321	1.559	4,184,856	0.755	0.484	1.000	0.484
2006-2007	5,635,518	1,419,184	1.521	2,158,579	0.383	0.252	1.000	0.252
2007-2008	5,801,505	2,651,368	1.484	3,934,630	0.678	0.457	1.000	0.457
2008-2009	5,863,583	2,653,385	1.448	3,842,101	0.655	0.453	1.000	0.453
2009-2010	5,568,244	1,335,978	1.412	1,886,401	0.339	0.240	1.000	0.240
2010-2011	4,873,997	1,557,549	1.378	2,146,303	0.440	0.320	1.000	0.320
2011-2012	4,650,324	3,510,315	1.344	4,717,863	1.015	0.755	1.000	0.755
2012-2013	4,565,996	3,722,000	1.312	4,883,264	1.069	0.815	1.000	0.815
2013-2014	4,390,436	2,088,304	1.280	2,673,029	0.609	0.476	1.000	0.476
2014-2015	4,434,603	3,799,380	1.249	4,745,426	1.070	0.857	1.000	0.857
2015-2016	4,506,901	3,095,000	1.218	3,769,710	0.836	0.687	1.000	0.687
2016-2017	4,680,337	5,545,000	1.188	6,587,460	1.407	1.185	1.000	1.185
2017-2018	4,797,059	774,401	1.160	898,305	0.187	0.161	1.000	0.161
2018-2019	4,828,712	1,051,000	1.132	1,189,732	0.246	1.034	1.000	1.034
2019-2020	4,798,147	2,201,000	1.104	2,429,904	0.506	1.060	1.000	1.060
2020-2021	4,735,362	7,838,000	1.077	8,441,526	1.783	1.086	1.000	1.086
2021-2022	4,877,311	5,967,000	1.051	6,271,317	1.286	1.113	1.000	1.113
2022-2023	5,079,532	6,336,000	1.025	6,494,400	1.279	1.141	1.000	1.141
Total/Avg	106,263,406	\$66,097,260		\$84,259,459	\$0.793			
18/19-21/22	19,239,532	17,057,000		18,332,479	0.953			
21/22-22/23	9,956,843	12,303,000		12,765,717	1.282			
			Selecte	d Limited Rate:	\$1.170			
				Prior:	\$0.875			

# Notes:

- (A) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
- (B) Selected average of results from Appendices \$ and \$.
- (C) From \$100K to \$1M Rate Analysis Appendix E, Page 1, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected Limited Rate / (C). For 2017-2018 and prior (B) / (A).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) (F) x (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 Year	Ultimate Program Severity (A)	Adjusted Ultimate Claims (B)	Ultimate Program Losses (C)
2002-2003	\$211,873	20	\$4,237,460
2003-2004	183,823	12	2,205,876
2004-2005	356,183	4	1,424,732
2005-2006	223,693	12	2,684,316
2006-2007	109,168	13	1,419,184
2007-2008	220,947	12	2,651,364
2008-2009	241,217	11	2,653,387
2009-2010	95,427	14	1,335,978
2010-2011	173,061	9	1,557,549
2011-2012	250,737	14	3,510,318
2012-2013	248,133	15	3,721,995
2013-2014	232,034	9	2,088,306
2014-2015	422,153	9	3,799,377
2015-2016	193,438	16	3,095,008
2016-2017	396,071	14	5,544,994
2017-2018	129,067	6	774,402
2018-2019	193,103	6	1,158,618
2019-2020	198,934	11	2,188,274
2020-2021	204,941	20	4,098,820
2021-2022	211,122	28	5,911,416
2022-2023	217,476	34	7,394,184
Total		289	\$63,455,558

#### Notes:

(A) From \$100K to \$1M Rate Analysis Appendix D, Page 2, Colum

(B) From \$100K to \$1M Rate Analysis Appendix D, Page 2, Colum

(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 Limited Losses (A)	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)
2002-2003	\$4,237,463	20	\$211,873	1.862	\$394,508	\$211,873	1.000	\$211,873
2003-2004	2,205,881	12	183,823	1.808	332,352	183,823	1.000	183,823
2004-2005	1,424,731	4	356,183	1.755	625,101	356,183	1.000	356,183
2005-2006	2,684,321	12	223,693	1.704	381,173	223,693	1.000	223,693
2006-2007	1,419,184	13	109,168	1.654	180,564	109,168	1.000	109,168
2007-2008	2,651,368	12	220,947	1.606	354,841	220,947	1.000	220,947
2008-2009	2,653,385	11	241,217	1.559	376,057	241,217	1.000	241,217
2009-2010	1,335,978	14	95,427	1.513	144,381	95,427	1.000	95,427
2010-2011	1,557,549	9	173,061	1.469	254,227	173,061	1.000	173,061
2011-2012	3,510,315	14	250,737	1.426	357,551	250,737	1.000	250,737
2012-2013	3,722,000	15	248,133	1.385	343,664	248,133	1.000	248,133
2013-2014	2,088,304	9	232,034	1.345	312,086	232,034	1.000	232,034
2014-2015	3,799,380	9	422,153	1.306	551,332	422,153	1.000	422,153
2015-2016	3,095,000	16	193,438	1.267	245,086	193,438	1.000	193,438
2016-2017	5,545,000	14	396,071	1.231	487,563	396,071	1.000	396,071
2017-2018	774,401	6	129,067	1.195	154,235	129,067	1.000	129,067
2018-2019	1,156,000	6	192,667	1.160	223,494	193,103	1.000	193,103
2019-2020	2,311,000	11	210,091	1.126	236,562	198,934	1.000	198,934
2020-2021	7,765,000	20	388,250	1.093	424,357	204,941	1.000	204,941
2021-2022	5,959,000	28	212,821	1.061	225,803	211,122	1.000	211,122
2022-2023	6,202,000	34	182,412	1.030	187,884	217,476	1.000	217,476

Average Limited Severity:	\$323,468
Average 17/18-22/23 Limited Severity:	242,056
Average 21/22-22/23 Limited Severity:	206,844

Selected Limited Severity:	\$224,000		
Prior:	\$345,000		

Notes:

- (A) Selected average of results from Appendices \$, \$, and \$.
- (B) \$100K to \$1M Rate Analysis Appendix D, Page 3, Column (C).

(C) (A) / (B).
(D) From \$100K to \$1M Rate Analysis 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) (F) x (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) (D)	Claim Frequency (E)	Trend Factor (F)	Trended Claim Frequency (G)
2002-2003	20	20	20	546.6	0.037	0.897	0.033
2003-2004	12	12	12	557.1	0.022	0.902	0.020
2004-2005	4	4	4	559.3	0.007	0.906	0.006
2005-2006	12	12	12	554.6	0.022	0.910	0.020
2006-2007	13	13	13	563.6	0.023	0.914	0.021
2007-2008	12	12	12	580.2	0.021	0.919	0.019
2008-2009	11	11	11	586.4	0.019	0.924	0.018
2009-2010	14	14	14	556.8	0.025	0.929	0.023
2010-2011	9	9	9	487.4	0.018	0.934	0.017
2011-2012	14	14	14	465.0	0.030	0.939	0.028
2012-2013	15	14	15	456.6	0.033	0.944	0.031
2013-2014	9	9	9	439.0	0.020	0.949	0.019
2014-2015	9	9	9	443.5	0.020	0.954	0.019
2015-2016	16	15	16	450.7	0.036	0.959	0.035
2016-2017	14	12	14	468.0	0.030	0.964	0.029
2017-2018	6	6	6	479.7	0.013	0.970	0.013
2018-2019	6	4	6	482.9	0.012	0.975	0.012
2019-2020	11	4	11	479.8	0.023	0.980	0.023
2020-2021	20	14	20	473.5	0.042	0.985	0.041
2021-2022	28	0	28	487.7	0.057	0.990	0.056
2022-2023	72	0	34	508.0	0.066	0.995	0.066
Total	327	208	289	10,626.3			0.026
17/18-21/22	71	28	71	2,403.7			0.029
					(H) Select	ed Frequency:	0.050
					. ,	Prior:	0.028
(1)	Program Year:			2023-2024	2024-2025		

(1)	Program Year: Trend Factor:	2023-2024 1.000	2024-2025 0.995
· · /	Selected Frequency:	0.050	0.050
(K)	Est. Payroll (\$000,000):	516.9	532.4
(L)	Ultimate Claims:	26	27

#### Notes:

- (A) From \$100K to \$1M Rate Analysis Appendix D, Page 4, (C).
- (B) From \$100K to \$1M Rate Analysis Appendix D, Page 5, (C).
- (C) Selected from (A) and (B).
- (D) From \$100K to \$1M Rate Analysis Appendix I, Column (C) / 10,000.
- (E) (C) / (D).
- (F) From \$100K to \$1M Rate Analysis Appendix E, Page 1, Column (H).

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

- (G) (E) x (F).
- (H) The selected frequency of 0.050 is based on (G).
- (I) From \$100K to \$1M Rate Analysis Appendix E, Page
- (J) (H) x (I).
- (K) From \$100K to \$1M Rate Analysis Appendix I, Colur
- (L) (J) x (K).

# Frequency and Severity Method Reported Claim Count Development

Accident Year	Claims Reported as of 12/31/2023 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2002-2003	20	1.000	20	0.033
2003-2004	12	1.000	12	0.019
2004-2005	4	1.000	4	0.006
2005-2006	12	1.000	12	0.020
2006-2007	13	1.000	13	0.021
2007-2008	12	1.000	12	0.019
2008-2009	11	1.000	11	0.017
2009-2010	14	1.000	14	0.023
2010-2011	9	1.000	9	0.017
2011-2012	14	1.001	14	0.028
2012-2013	15	1.001	15	0.031
2013-2014	9	1.001	9	0.019
2014-2015	9	1.002	9	0.019
2015-2016	16	1.003	16	0.034
2016-2017	14	1.004	14	0.029
2017-2018	6	1.005	6	0.012
2018-2019	6	1.015	6	0.012
2019-2020	11	1.040	11	0.022
2020-2021	17	1.205	20	0.042
2021-2022	19	1.456	28	0.057
2022-2023	23	3.121	72	0.141
Total	266		327	0.029

# Notes:

(A) Provided by the Authority.

(B) From \$100K to \$1M Rate Analysis Appendix D, Page 6.

(C) (A) x (B).

(D) (C) / [\$100K to \$1M Rate Analysis Appendix D, Page 3, (D)] x [\$100K to \$1M Rate Analysis

This exhibit shows the calculation of estimated ultimate claims for each year based on reported claims as provided by the Authority. 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.

# Frequency and Severity Method Closed Claim Count Development

Accident Year	Claims Closed as of 12/31/2023 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2002-2003	20	1.000	20	0.033
2003-2004	12	1.000	12	0.019
2004-2005	4	1.000	4	0.006
2005-2006	12	1.000	12	0.020
2006-2007	13	1.000	13	0.021
2007-2008	12	1.000	12	0.019
2008-2009	11	1.000	11	0.017
2009-2010	14	1.000	14	0.023
2010-2011	9	1.001	9	0.017
2011-2012	14	1.002	14	0.028
2012-2013	14	1.003	14	0.029
2013-2014	9	1.004	9	0.019
2014-2015	9	1.005	9	0.019
2015-2016	15	1.006	15	0.032
2016-2017	12	1.007	12	0.025
2017-2018	6	1.008	6	0.012
2018-2019	4	1.104	4	0.008
2019-2020	3	1.279	4	0.008
2020-2021	8	1.788	14	0.029
2021-2022	0	5.663	0	
2022-2023	0	17.933	0	
Total	201		208	0.018

# Notes:

(A) Provided by the Authority.

(B) From \$100K to \$1M Rate Analysis Appendix D, Page 7.

(C) (A) x (B).

(D) (C) / [\$100K to \$1M Rate Analysis Appendix D, Page 3, (D)] x [

This exhibit shows the calculation of estimated ultimate claims for each year based on closed claims as provided by the Authority. 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.

# PLAN JPA - Liability Program (\$100K to \$1M Analysis) Reported Claim Count Development

		Claims R	eported as											
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003						7	7	7	7	7	11	21	21	21
2003-2004					9	10	10	10	10	22	12	12	12	12
2004-2005				17	20	20	20	20	12	5	5	5	5	5
2005-2006			4	7	9	10	11	5	15	15	15	15	15	15
2006-2007		3	8	6	6	5	16	13	13	13	13	13	13	13
2007-2008	1	5	9	11	14	11	19	18	18	18	18	17	18	18
2008-2009	2	6	8	8	19	14	13	13	13	13	13	13	13	13
2009-2010	3	5	14	14	16	16	16	16	16	16	16	16	16	16
2010-2011		6	21	14	13	12	11	11	11	11	11	11	11	16
2011-2012	3	11	19	17	17	16	16	16	16	16	17	16	11	
2012-2013	3	22	22	15	15	16	15	15	15	16	16	16		
2013-2014	3	4	8	10	11	11	11	11	11	11	16			
2014-2015	3	8	15	12	12	12	12	12	12	11				
2015-2016		4	10	15	16	16	16	16	12					
2016-2017		4	11	12	16	15	14	16						
2017-2018		2	4	12	6	6	14							
2018-2019			4	5	7	6								
2019-2020			4	7	7									
2020-2021		12	12	7										
2021-2022	1	7	12											
2022-2023		7												
2023-2024														

		Reported	Claim Co	unt Devel	opment Fa	actors:								
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102				138-150		
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003						1.000	1.000	1.000	1.000	1.571	1.909	1.000	1.000	1.000
2003-2004					1.111	1.000	1.000	1.000	2.200	0.545	1.000	1.000	1.000	1.000
2004-2005				1.176	1.000	1.000	1.000	0.600	0.417	1.000	1.000	1.000	1.000	1.000
2005-2006			1.750	1.286	1.111	1.100	0.455	3.000	1.000	1.000	1.000	1.000	1.000	1.000
2006-2007		2.667	0.750	1.000	0.833	3.200	0.813	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007-2008	5.000	1.800	1.222	1.273	0.786	1.727	0.947	1.000	1.000	1.000	0.944	1.059	1.000	1.000
2008-2009	3.000	1.333	1.000	2.375	0.737	0.929	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009-2010	1.667	2.800	1.000	1.143	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	0.813
2010-2011		3.500	0.667	0.929	0.923	0.917	1.000	1.000	1.000	1.000	1.000	1.000	1.455	
2011-2012	3.667	1.727	0.895	1.000	0.941	1.000	1.000	1.000	1.000	1.063	0.941	0.688		
2012-2013	7.333	1.000	0.682	1.000	1.067	0.938	1.000	1.000	1.067	1.000	1.000			
2013-2014	1.333	2.000	1.250	1.100	1.000	1.000	1.000	1.000	1.000	1.455				
2014-2015	2.667	1.875	0.800	1.000	1.000	1.000	1.000	1.000	0.917					
2015-2016		2.500	1.500	1.067	1.000	1.000	1.000	0.750						
2016-2017		2.750	1.091	1.333	0.938	0.933	1.143							
2017-2018		2.000	3.000	0.500	1.000	2.333								
2018-2019			1.250	1.400	0.857									
2019-2020			1.750	1.000										
2020-2021		1.000	0.583											
2021-2022	7.000	1.714												
2022-2023														
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102				138-150		
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	3.958	2.048	1.199	1.161	0.957	1.255	0.957	1.096	1.046	1.053	1.072	0.975	1.051	0.977
Claim-Weighted														
Averages														
3-yr			0.950	0.833	0.931	1.189	1.048	0.897	1.000	1.140	0.977	0.884	1.125	0.936
4-yr			1.292	1.000	0.956	1.143	1.038	0.926	1.000	1.111	0.983	0.911	1.086	0.950
Comparative														
Factors	2.633	1.136	1.018	1.005	1.005	1.004	1.004	1.002	1.002	1.001	1.000	1.000	1.000	1.000
Prior	3.786	2.191	1.213	1.157	1.025	1.010	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000
Selected	3.843	2.143	1.209	1.159	1.025	1.010	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000
Cumulated	11.995	3.121	1.456	1.205	1.040	1.015	1.005	1.004	1.003	1.002	1.001	1.001	1.001	1.000

# DRAFT

# PLAN JPA - Liability Program (\$100K to \$1M Analysis) Closed Claim Development

		Claims C	losed as c	of:										
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003						6	7	7	7	7	10	20	20	20
2003-2004					6	7	8	10	10	20	12	12	12	12
2004-2005				12	17	18	19	20	10	5	5	5	5	5
2005-2006			4	4	5	5	6	5	13	14	15	15	15	15
2006-2007		1	1	5	5	5	13	13	13	13	13	13	13	12
2007-2008			1	6	8	8	18	18	18	18	18	17	18	18
2008-2009		1	2	6	12	10	12	13	13	13	13	13	13	13
2009-2010			1	6	13	14	15	15	16	16	16	16	16	16
2010-2011		1	4	7	10	11	11	11	11	11	11	11	11	16
2011-2012			2	8	10	14	16	15	15	15	16	15	11	
2012-2013		1	5	10	11	15	14	14	14	15	15	15		
2013-2014			3	5	10	9	10	10	11	11	15			
2014-2015		2	5	9	8	12	12	12	12	11				
2015-2016			2	6	10	15	15	15	12					
2016-2017			1	5	10	9	11	15						
2017-2018			1	5	4	6	11							
2018-2019			1	1	4	6								
2019-2020					4									
2020-2021			3											
2021-2022			3											
2022-2023														
2023-2024														

		Closed C	laim Coun	t Develop	ment Fact	ors:								
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003						1.167	1.000	1.000	1.000	1.429	2.000	1.000	1.000	1.000
2003-2004					1.167	1.143	1.250	1.000	2.000	0.600	1.000	1.000	1.000	1.000
2004-2005				1.417	1.059	1.056	1.053	0.500	0.500	1.000	1.000	1.000	1.000	1.000
2005-2006			1.000	1.250	1.000	1.200	0.833	2.600	1.077	1.071	1.000	1.000	1.000	1.000
2006-2007		1.000	5.000	1.000	1.000	2.600	1.000	1.000	1.000	1.000	1.000	1.000	0.923	1.000
2007-2008			6.000	1.333	1.000	2.250	1.000	1.000	1.000	1.000	0.944	1.059	1.000	1.000
2008-2009		2.000	3.000	2.000	0.833	1.200	1.083	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009-2010			6.000	2.167	1.077	1.071	1.000	1.067	1.000	1.000	1.000	1.000	1.000	0.813
2010-2011		4.000	1.750	1.429	1.100	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.455	
2011-2012			4.000	1.250	1.400	1.143	0.938	1.000	1.000	1.067	0.938	0.733		
2012-2013		5.000	2.000	1.100	1.364	0.933	1.000	1.000	1.071	1.000	1.000			
2013-2014		0 500	1.667	2.000	0.900	1.111	1.000	1.100	1.000	1.364				
2014-2015		2.500	1.800	0.889	1.500	1.000	1.000	1.000	0.917					
2015-2016			3.000	1.667	1.500	1.000	1.000	0.800						
2016-2017			5.000	2.000	0.900	1.222	1.364							
2017-2018			5.000	0.800	1.500	1.833								
2018-2019 2019-2020			1.000	4.000	1.500									
2019-2020														
2020-2021														
2022-2023														
2022-2023														
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average		2.900	3.301	1.620	1.175	1.308	1.035	1.076	1.043	1.044	1.080	0.979	1.042	0.977
Claim-Weighted														
Averages														
3-yr					1.167	1.233	1.105	0.946	1.000	1.122	0.976	0.905	1.125	0.936
4-yr					1.286	1.167	1.083	0.961	1.000	1.096	0.983	0.927	1.086	0.949
Comparative														
Factors	3.387	1.495	1.122	1.051	1.033	1.020	1.012	1.010	1.007	1.005	1.005	1.003	1.003	1.001
Prior	4.000	3.300	3.100	1.287	1.113	1.025	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Selected	4.000	3.167	3.167	1.398	1.158	1.095	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Selected	4.000	3.107	3.107	1.590	1.130	1.095	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Cumulated	71.732	17.933	5.663	1.788	1.279	1.104	1.008	1.007	1.006	1.005	1.004	1.003	1.002	1.001
Carrialatoa	7 1.7 OZ	11.000	0.000		0		1.000	1.007	1.000	1.000	1.004	1.000	1.002	1.001

# Loss Trend Factors

Accident Year	Benefit Level Factor (A)	Factor to 2023-2024 Loss Rate Level (B)	Factor to 2024-2025 Loss Rate Level (C)	Factor to 2025-2026 Loss Rate Level (D)	Factor to 2026-2027 Loss Rate Level (E)	Factor to 2023-2024 Frequency Level (F)	Factor to 2024-2025 Frequency Level (G)	Factor to 2025-2026 Frequency Level (H)	Factor to 2026-2027 Frequency Level (I)	Factor to 2023-2024 Severity Level (J)
2002-2003	1.000	1.679	1.720	1.764	1.808	0.897	0.893	0.888	0.884	1.862
2003-2004	1.000	1.638	1.678	1.721	1.764	0.902	0.897	0.892	0.888	1.808
2004-2005	1.000	1.598	1.637	1.679	1.721	0.906	0.901	0.896	0.892	1.755
2005-2006	1.000	1.559	1.598	1.638	1.679	0.910	0.905	0.901	0.896	1.704
2006-2007	1.000	1.521	1.559	1.598	1.638	0.914	0.909	0.905	0.900	1.654
2007-2008	1.000	1.484	1.520	1.559	1.598	0.919	0.914	0.910	0.905	1.606
2008-2009	1.000	1.448	1.483	1.521	1.559	0.924	0.919	0.915	0.910	1.559
2009-2010	1.000	1.412	1.447	1.484	1.521	0.929	0.924	0.920	0.915	1.513
2010-2011	1.000	1.378	1.412	1.448	1.484	0.934	0.929	0.925	0.920	1.469
2011-2012	1.000	1.344	1.378	1.413	1.448	0.939	0.934	0.930	0.925	1.426
2012-2013	1.000	1.312	1.344	1.379	1.413	0.944	0.939	0.935	0.930	1.385
2013-2014	1.000	1.280	1.312	1.345	1.379	0.949	0.944	0.940	0.935	1.345
2014-2015	1.000	1.249	1.280	1.312	1.345	0.954	0.949	0.945	0.940	1.306
2015-2016	1.000	1.218	1.248	1.280	1.312	0.959	0.955	0.950	0.945	1.267
2016-2017	1.000	1.188	1.218	1.249	1.280	0.964	0.960	0.955	0.950	1.231
2017-2018	1.000	1.160	1.188	1.219	1.249	0.970	0.965	0.960	0.955	1.195
2018-2019	1.000	1.132	1.160	1.189	1.219	0.975	0.970	0.965	0.960	1.160
2019-2020	1.000	1.104	1.131	1.160	1.189	0.980	0.975	0.970	0.965	1.126
2020-2021	1.000	1.077	1.104	1.132	1.160	0.985	0.980	0.975	0.970	1.093
2021-2022	1.000	1.051	1.077	1.104	1.132	0.990	0.985	0.980	0.975	1.061
2022-2023	1.000	1.025	1.050	1.077	1.104	0.995	0.990	0.985	0.980	1.030
2023-2024	1.000	1.000	1.025	1.051	1.077	1.000	0.995	0.990	0.985	1.000
2024-2025	1.000		1.000	1.025	1.051		1.000	0.995	0.990	
2025-2026	1.000			1.000	1.025			1.000	0.995	
2026-2027	1.000				1.000				1.000	

Notes:

No benefit level adjustment applied. (A)

(B) - (E)

(A) adjusted for a 2.5% annual loss rate trend.(A) adjusted for a -0.5% annual frequency trend. (F) - (I)

(A) adjusted for a 3.0% annual severity trend. (J)

> 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**

Accident Year	Initial Estimate of Ultimate Limited Losses (A)	Ultimate Reported Claims (B)	BLF (C)	Adjusted Limited Severity (D)	Trended Payroll (\$00) (E)	Ultimate Frequency (F)
2002-2003	\$4,237,463	20	1.000	211,873	5,465,603	0.037
2003-2004	2,205,881	12	1.000	183,823	5,571,062	0.022
2004-2005	1,424,731	4	1.000	356,183	5,593,010	0.007
2005-2006	2,684,321	12	1.000	223,693	5,546,164	0.022
2006-2007	1,419,184	13	1.000	109,168	5,635,518	0.023
2007-2008	2,651,368	12	1.000	220,947	5,801,505	0.021
2008-2009	2,653,385	11	1.000	241,217	5,863,583	0.019
2009-2010	1,335,978	14	1.000	95,427	5,568,244	0.025
2010-2011	1,557,549	9	1.000	173,061	4,873,997	0.018
2011-2012	3,510,315	14	1.000	250,737	4,650,324	0.030
2012-2013	3,722,000	15	1.000	248,133	4,565,996	0.033
2013-2014	2,088,304	9	1.000	232,034	4,390,436	0.020
2014-2015	3,799,380	9	1.000	422,153	4,434,603	0.020
2015-2016	3,095,000	16	1.000	193,438	4,506,901	0.036
2016-2017	5,545,000	14	1.000	396,071	4,680,337	0.030
2017-2018	774,401	6	1.000	129,067	4,797,059	0.013
2018-2019	1,051,000	6	1.000	175,167	4,828,712	0.012
2019-2020	2,201,000	11	1.000	200,091	4,798,147	0.023
2020-2021	7,838,000	20	1.000	391,900	4,735,362	0.042
2021-2022	5,967,000	28	1.000	213,107	4,877,311	0.057
2022-2023	6,336,000	34	1.000	186,353	5,079,532	0.067

Severity Tre	end Factors	Frequency Trend Factors
2009-2010 through 2018-2019	1.034	0.948
2010-2011 through 2019-2020	0.978	0.956
2011-2012 through 2020-2021	0.990	0.978
Prior	1.030	0.995
Default	1.030	0.975
Selected Residual Trend	1.030	0.995

Notes:

(A) Selected average of results from \$100K to \$1M Rate Analysis Appendix A and \$100K to

(B) \$100K to \$1M Rate Analysis Appendix D, Page 3, Column (C).

(C) \$100K to \$1M Rate Analysis Appendix E, Page 1, (A).

(D) (A) x (C) / (B).

(E) From \$100K to \$1M Rate Analysis Appendix I, Column (C).

(F) (B) / (E) x 10,000.

#### Calculation of Discount Factors

Payment Year (A)	Payment Pattern (B)	Return on Investment (C)	Discounted Reserves (D)	Undiscounted Reserves (E)	Discount Factor (F)
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.0%	2.0%	0.000	0.000	1.000
15	0.0%	2.0%	0.000	0.000	1.000
14	0.1%	2.0%	0.001	0.001	0.990
13	0.3%	2.0%	0.004	0.004	0.985
12	0.3%	2.0%	0.007	0.007	0.976
11	0.3%	2.0%	0.010	0.010	0.967
10	0.6%	2.0%	0.015	0.016	0.964
9	2.7%	2.0%	0.042	0.043	0.974
8	4.5%	2.0%	0.085	0.088	0.973
7	6.8%	2.0%	0.151	0.155	0.970
6	9.7%	2.0%	0.244	0.253	0.966
5	20.3%	2.0%	0.440	0.456	0.966
4	27.0%	2.0%	0.700	0.726	0.963
3	17.8%	2.0%	0.862	0.904	0.953
2	7.6%	2.0%	0.921	0.981	0.939
1	1.9%	2.0%	0.922	1.000	0.922
		(G) Discount Factor	for Future Funding:	2023-2024 2024-2025	0.931 0.931

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 \$100K to \$1M Rate Analysis 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, 92.1% = [86.2% / 1.020] + [7.6% / (1.010)].
- (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 0.93, on a discounted basis, \$0.93 must be budgeted for every \$1 that will actually be paid on claims that will be incurred in the next fiscal year.

# Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	1.916	1.524
90%	1.640	1.365
85%	1.475	1.274
80%	1.351	1.207
75%	1.252	1.153
70%	1.168	1.108
65%	1.094	1.068
60%	1.029	1.032
55%	0.968	0.999
50%	0.910	0.967
45%	0.856	0.937
40%	0.804	0.908
35%	0.753	0.878
30%	0.701	0.849
25%	0.649	0.818

To read table:	For the above retention, there is a 90% chance
	that final loss settlements will be less than
	1.640 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.

#### Incurred Losses as of 12/31/23

										Incurred
		Additions	Subtractions			Incurred	Incurred	Incurred	Incurred	Capped at
Accident	Unlimited	to	from	Adjusted	Incurred	Over	Capped at	\$100,000	Capped at	SIR &
Year	Incurred	Losses	Losses	Incurred	Over SIR	\$100,000	to SIR Layer	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
2002-2003	\$12,459,622	\$0	\$0	\$12,459,622	\$3,575,194	\$7,812,657	\$4,646,965	\$4,237,463	\$8,884,428	\$8,884,428
2002-2003	5,715,419	φ0 0		5,715,419	\$3,575,194 0	2,205,881	3,509,537	2,205,881	5,715,419	5,715,419
2003-2004	3,909,704	0	•	3,909,704	40.367	1,465,098	2,444,607	1,424,731	3,869,337	3,869,337
2004-2005	7,274,863	0	-	7,274,863	1,643,182	4,327,503	2,947,359	2,684,321	5,631,680	5,631,680
2005-2000	4,548,052	0	-	4,548,052	1,043,102	1,419,184	3,128,868	1,419,184	4,548,052	4,548,052
2000-2007	5,982,106	0		5,982,106	183.478	2,834,846	3,147,259	2,651,369	5,798,628	5,798,628
2008-2009	5,485,923	0	-	5,485,923	120.835	2,774,220	2.711.703	2,653,385	5,365,088	5,365,088
2008-2009	3,874,500	0	-	3,874,500	120,033	1,335,978	2,538,522	1,335,978	3,874,500	3,874,500
2009-2010	3,571,075	0	-	3,571,075	0	1,557,549	2,013,526	1,557,549	3,571,075	3,571,075
2010-2011	6,357,185	0	-	6,357,185	22.224	3,532,539	2,824,647	3,510,315	6,334,961	6,334,961
2011-2012	7,108,017	0	-	7,108,017	100.000	3,799,416	3,308,601	3,699,416	7,008,017	7,008,017
2012-2013	9,703,564	0	-	9,703,564	5,385,480	7,473,784	2,229,780	2,088,304	4,318,084	4,318,084
2013-2014	7,286,913	0	-	7,286,913	549.140	4,348,520	2,229,780	2,088,304	6,737,773	6,737,773
2014-2015	8,386,266	0	-	8,386,266	2.240.574	4,346,520	2,930,392	3,019,948	6,145,693	6,145,693
2015-2016	38,732,335	0	-	38,732,335	, -,-	35,848,912	2,883,424		8,215,217	8,215,217
	, ,	•	-	, ,	30,517,119		, ,	5,331,793	, ,	, ,
2017-2018	2,623,377	0	-	2,623,377	0	774,401	1,848,977	774,401	2,623,377	2,623,377
2018-2019	2,589,734	0	-	2,589,734	0	995,732	1,594,003	995,732	2,589,734	2,589,734
2019-2020	4,590,988	-	-	4,590,988	0	2,034,323	2,556,665	2,034,323	4,590,988	4,590,988
2020-2021	44,727,172	0	-	44,727,172	34,562,175	41,472,932	3,254,240	6,910,757	10,164,997	10,164,997
2021-2022	17,563,072	0	-	17,563,072	10,236,000	14,141,384	3,421,687	3,905,384	7,327,072	7,327,072
2022-2023	8,599,708	0	-	8,599,708	0	3,072,909	5,526,799	3,072,909	8,599,708	8,599,708
2023-2024	858,344	0	0	858,344	0	120,000	738,344	120,000	858,344	858,344
Total	\$211,947,938	\$0	\$0	\$211,947,938	\$89,175,767	\$148,608,290	\$63,339,648	\$59,432,524	\$122,772,172	\$122,772,172

### Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Authority.

(C)

- (D)
  (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 \$100K to \$1M Rate Analysis Not Included.

#### Paid Losses as of 12/31/23

										Paid
		Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$100,000	Capped at	SIR &
Year	Paid	Losses	Losses	Paid	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)
	<b>*</b> 40, 450, 000	<b>^</b>	<b>*</b> -	<b>*</b> 40, 450, 000	A0 575 404	AT 040 057	<b>*</b> 4 0 40 005	<b>*</b> 4 007 400	<b>*</b> ~ ~~ / / ~~	<b>*</b> ~ ~~ / / ~~
2002-2003	\$12,459,622	\$0		\$12,459,622	\$3,575,194	\$7,812,657	\$4,646,965	\$4,237,463	\$8,884,428	\$8,884,428
2003-2004	5,715,419	0	0	5,715,419	0	2,205,881	3,509,537	2,205,881	5,715,419	5,715,419
2004-2005	3,909,704	0	-	3,909,704	40,367	1,465,098	2,444,607	1,424,731	3,869,337	3,869,337
2005-2006	7,274,863	0	-	7,274,863	1,643,182	4,327,503	2,947,359	2,684,321	5,631,680	5,631,680
2006-2007	4,548,052	0	0	4,548,052	0	1,419,184	3,128,868	1,419,184	4,548,052	4,548,052
2007-2008	5,982,106	0	0	5,982,106	183,478	2,834,846	3,147,259	2,651,369	5,798,628	5,798,628
2008-2009	5,485,923	0	0	5,485,923	120,835	2,774,220	2,711,703	2,653,385	5,365,088	5,365,088
2009-2010	3,874,500	0	0	3,874,500	0	1,335,978	2,538,522	1,335,978	3,874,500	3,874,500
2010-2011	3,571,075	0	0	3,571,075	0	1,557,549	2,013,526	1,557,549	3,571,075	3,571,075
2011-2012	6,357,185	0	0	6,357,185	22,224	3,532,539	2,824,647	3,510,315	6,334,961	6,334,961
2012-2013	6,613,044	0	0	6,613,044	0	3,304,442	3,308,601	3,304,442	6,613,044	6,613,044
2013-2014	9,703,564	0	0	9,703,564	5,385,480	7,473,784	2,229,780	2,088,304	4,318,084	4,318,084
2014-2015	7,286,913	0	0	7,286,913	549,140	4,348,520	2,938,392	3,799,381	6,737,773	6,737,773
2015-2016	8,371,359	0	0	8,371,359	2,240,574	5,245,615	3,125,745	3,005,041	6,130,786	6,130,786
2016-2017	38,537,696	0	0	38,537,696	30,359,615	35,654,272	2,883,424	5,294,657	8,178,080	8,178,080
2017-2018	2,623,375	0	0	2,623,375	0	774,401	1,848,975	774,401	2,623,375	2,623,375
2018-2019	2,422,650	0	0	2,422,650	0	850,476	1,572,174	850,476	2,422,650	2,422,650
2019-2020	2,589,280	0	0	2,589,280	0	515,377	2,073,903	515,377	2,589,280	2,589,280
2020-2021	41,055,551	0	0	41,055,551	34.299.175	38,582,392	2.473.160	4.283.217	6.756.376	6.756.376
2021-2022	1.911.606	0	0	1,911,606	0	351.404	1,560,201	351.404	1,911,606	1,911,606
2022-2023	921,281	0	0	921,281	0	0	921,281	0	921,281	921,281
2023-2024	70.221	0	-	70.221	0	0	70,221	0	70.221	70.221
2020-2024	10,221	0	0	10,221	0	0	10,221	0	10,221	10,221
Total	\$181,284,987	\$0	\$0	\$181,284,987	\$78,419,263	\$126,366,138	\$54,918,849	\$47,946,875	\$102,865,724	\$102,865,724

#### Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Authority.

(C)

- (D)
- (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 \$100K to \$1M Rate Analysis Not Included.

#### Case Reserves as of 12/31/23

		Additions	Subtractions			Reserves	Reserves	Reserves	Reserves	Reserves Capped at
Accident	Unlimited	to	from	Adjusted	Reserves	Over	Capped at	\$100.000	Capped at	SIR &
Year	Reserves	Losses	Losses	Reserves	Over SIR	\$100.000	to SIR Layer	to SIR Laver	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
(/ ()	(D)	(0)	(2)	(⊏)	(1)	(0)	(1)	(1)	(0)	(14)
2002-2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2003-2004	0	0	0	0	0	0	0	0	0	0
2004-2005	0	0	0	0	0	0	0	0	0	0
2005-2006	0	0	0	0	0	0	0	0	0	0
2006-2007	0	0	0	0	0	0	0	0	0	0
2007-2008	0	0	0	0	0	0	0	0	0	0
2008-2009	0	0	0	0	0	0	0	0	0	0
2009-2010	0	0	0	0	0	0	0	0	0	0
2010-2011	0	0	0	0	0	0	0	0	0	0
2011-2012	0	0	0	0	0	0	0	0	0	0
2012-2013	494,974	0	0	494,974	100,000	494,974	0	394,974	394,974	394,974
2013-2014	0	0	0	0	0	0	0	0	0	0
2014-2015	0	0	0	0	0	0	0	0	0	0
2015-2016	14,907	0	0	14,907	0	14,907	0	14,907	14,907	14,907
2016-2017	194,640	0	0	194,640	157,504	194,640	0	37,136	37,136	37,136
2017-2018	2	0	0	2	0	0	2	0	2	2
2018-2019	167,084	0	0	167,084	0	145,256	21,828	145,256	167,084	167,084
2019-2020	2,001,708	0	0	2,001,708	0	1,518,946	482,762	1,518,946	2,001,708	2,001,708
2020-2021	3,671,620	0	0	3,671,620	263,000	2,890,541	781,080	2,627,541	3,408,620	3,408,620
2021-2022	15,651,466	0	0	15,651,466	10,236,000	13,789,980	1,861,486	3,553,980	5,415,466	5,415,466
2022-2023	7,678,427	0	0	7,678,427	0	3,072,909	4,605,518	3,072,909	7,678,427	7,678,427
2023-2024	788,123	0	0	788,123	0	120,000	668,123	120,000	788,123	788,123
Total	\$30,662,951	\$0	\$0	\$30,662,951	\$10,756,504	\$22,242,152	\$8,420,799	\$11,485,649	\$19,906,448	\$19,906,448

#### Notes:

(A) Years are 7/1 to 6/30.

(B) \$100K to \$1M Rate Analysis Appendix H, Page 1, Column (B) - \$100K to \$1M Rate Analysis Appendix H, Page 2, Column (B).

(C) \$100K to \$1M Rate Analysis Appendix H, Page 1, Column (C) - \$100K to \$1M Rate Analysis Appendix H, Page 2, Column (C).

(D) \$100K to \$1M Rate Analysis Appendix H, Page 1, Column (D) - \$100K to \$1M Rate Analysis 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) (G) (F).
- (J) (E) (F).

(K) Minimum of (J) and the aggregate stop loss. See \$100K to \$1M Rate Analysis Not Included.

#### Claim Counts as of 12/31/23 in Excess of \$100K

Accident Year (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 Claims (J)	Adjusted Open Claims (K)
2002-2003	20	0	0	20	20	0	0	20	0	0
2003-2004	12	0	0	12	12	0	0	12	0	0
2004-2005	4	0	0	4	4	0	0	4	0	0
2005-2006	12	0	0	12	12	0	0	12	0	0
2006-2007	13	0	0	13	13	0	0	13	0	0
2007-2008	12	0	0	12	12	0	0	12	0	0
2008-2009	11	0	0	11	11	0	0	11	0	0
2009-2010	14	0	0	14	14	0	0	14	0	0
2010-2011	9	0	0	9	9	0	0	9	0	0
2011-2012	14	0	0	14	14	0	0	14	0	0
2012-2013	15	0	0	15	14	0	0	14	1	1
2013-2014	9	0	0	9	9	0	0	9	0	0
2014-2015	9	0	0	9	9	0	0	9	0	0
2015-2016	16	0	0	16	15	0	0	15	1	1
2016-2017	14	0	0	14	12	0	0	12	2	2
2017-2018	6	0	0	6	6	0	0	6	0	0
2018-2019	6	0	0	6	4	0	0	4	2	2
2019-2020	11	0	0	11	3	0	0	3	8	8
2020-2021	17	0	0	17	8	0	0	8	9	9
2021-2022	19	0	0	19	0	0	0	0	19	19
2022-2023	23	0	0	23	0	0	0	0	23	23
2023-2024	2	0	0	2	0	0	0	0	2	2
Total	268	0	0	268	201	0	0	201	67	67

Notes:

(A) Years are 7/1 to 6/30.(B) Provided by the Authority.

(C) (D)

(E) (B) + (C) - (D).
(F) Provided by the Authority.

(G) (H)

- (I) (F) + (G) (H).(J) (B) (F).(K) (E) (I).

# Exposure Measures

Accident Year	Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
2002-2003	3,255,273	1.679	5,465,603
2003-2004	3,401,137	1.638	5,571,062
2004-2005	3,500,006	1.598	5,593,010
2005-2006	3,557,514	1.559	5,546,164
2006-2007	3,705,140	1.521	5,635,518
2007-2008	3,909,370	1.484	5,801,505
2008-2009	4,049,436	1.448	5,863,583
2009-2010	3,940,725	1.413	5,568,244
2010-2011	3,534,443	1.379	4,873,997
2011-2012 2012-2013 2013-2014 2014-2015	3,457,490 3,480,180 3,430,028 3,550,523	1.345 1.312 1.280 1.249	4,650,324 4,565,996 4,390,436
2014-2015	3,550,523	1.249	4,434,603
2015-2016	3,697,212	1.219	4,506,901
2016-2017	3,936,364	1.189	4,680,337
2017-2018	4,135,396	1.160	4,797,059
2018-2019	4,265,647	1.132	4,798,712
2019-2020	4,346,148	1.104	4,798,147
2020-2021	4.396,808	1.077	4,735,362
2021-2022	4,640,638	1.051	4,877,311
2022-2023	4,955,641	1.025	5,079,532
2023-2024	5,168,687	1.000	5,168,687
2024-2025	5,323,749	1.000	5,323,749

- Notes:
- Provided by the Authority. Based on industry factors.
- (A) (B) (C) (A) x (B).

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# Funding Guidelines for Outstanding Liabilities at June 30, 2024

(A)	Estimated Ultimate Losses Incurred through 6/30/24: (From Reserve Appendix F)			\$141,144,000		
(B)	Estimated Paid Losses through 6/30/24: (From Reserve Appendix F)			115,898,000		
(C)	Estimated Liability for Claims Outstanding at 6/30/24: (From Reserve Appendix F)			\$25,246,000		
(D)	Estimated Liability for Outstanding Claims Administration Fees at 6/30/24: (From Reserve Not Included)			3,156,000		
(E)	Total Outstanding Liability for Claims at 6/30/24: ((C) + (D))			\$28,402,000		
(F)	Reserve Discount Factor (Based on a Discount Rate (Reserve Appendix H, Page 1, (H))	0.956				
(G)	Discounted Outstanding Liability for Claims at 6/30/24: ((E) x (F))			\$27,139,000		
		Marginally Acceptable		Recommended		Conservative
	Confidence Level of Adequacy:	70%	75%	80%	85%	90%
(H)	Confidence Level Factor: (From Reserve Appendix I)	1.109	1.154	1.207	1.275	1.367
(I)	Margin for Adverse Experience: ((G) x [(H) - 1])	2,958,000	4,179,000	5,618,000	7,463,000	9,960,000
(J)	Total Required Assets at 6/30/24: ((G) + (I))	\$30,097,000	\$31,318,000	\$32,757,000	\$34,602,000	\$37,099,000
(K)	Estimated Total Assets at 6/30/24: (From Reserve Appendix K)	49,677,000	49,677,000	49,677,000	49,677,000	49,677,000
(L)	Indicated Funding Redundancy/ (Deficiency): ((K) - (J))	\$19,580,000	\$18,359,000	\$16,920,000	\$15,075,000	\$12,578,000

# IBNR as of 6/30/24 at Expected Claims Level

				Estimated Percent of IBNR		
			Estimated	Reported		Estimated
			IBNR	Between	Estimated	IBNR
Accident	Estimated	Reported	as of	1/1/24 and	IBNR	as of
Year	Ultimate	as of 12/31/23	12/31/23	6/30/24	Reported	6/30/24
	(A)	(B)	(C)	(D)	(E)	(F)
1986-2003	\$43,442,137	\$43,442,137	\$0	100.0%	\$0	\$0
2003-2004	2,574,481	2,574,481	0	100.0%	0	0
2004-2005	1,874,487	1,874,487	0	100.0%	0	0
2005-2006	4,756,022	4,756,022	0	100.0%	0	0
2006-2007	1,662,124	1,662,124	0	100.0%	0	0
2007-2008	6,755,660	6,755,660	0	100.0%	0	0
2008-2009	3,472,680	3,472,680	0	100.0%	0	0
2009-2010	2,352,952	2,352,952	0	100.0%	0	0
2010-2011	2,046,846	2,046,846	0	100.0%	0	0
2011-2012	3,919,990	3,919,990	0	33.3%	0	0
2012-2013	4,088,000	4,063,438	24,562	33.2%	8,000	16,562
2013-2014	7,039,000	6,969,125	69,875	37.8%	26,000	43,875
2014-2015	5,512,000	5,429,951	82,049	19.8%	16,000	66,049
2015-2016	4,964,000	4,842,914	121,086	19.6%	24,000	97,086
2016-2017	9,259,000	9,099,466	159,534	19.4%	31,000	128,534
2017-2018	976,000	869,823	106,177	8.2%	9,000	97,177
2018-2019	1,812,000	1,259,170	552,830	22.8%	126,000	426,830
2019-2020	3,001,000	2,394,322	606,678	14.8%	90,000	516,678
2020-2021	11,393,000	9,339,976	2,053,024	39.8%	817,000	1,236,024
2021-2022	6,475,000	4,147,582	2,327,418	22.0%	512,000	1,815,418
2022-2023	7,178,000	3,868,022	3,309,978	11.3%	374,000	2,935,978
2023-2024	6,590,000	172,310	3,122,690	6.1%	391,000	6,026,690
Totals	\$141,144,379	\$125,313,478	\$12,535,901		\$2,424,000	\$13,406,901

### Notes:

- (A) From Reserve Exhibit 3, Page 1.
- (B) Provided by the Authority. These losses exclude amounts incurred above the Authority's SIR for each year.
- (C) (A) (B).
- (D) Percentage of incurred but not reported (IBNR) expected to be reported between 1/1/24 and 6/30/24. The percentage is based on the development pattern selected in Reserve Appendix A.
- (E) ((A) (B)) x (D). (F) (A) (B) (E).

This exhibit shows the calculation of the amount of incurred but not reported losses we expect as of 6/30/24. This amount is dependent on both the strength of the case reserves and the average frequency and severity of the losses incurred.

### Estimated Ultimate Program Losses

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Frequency- Severity Method (E)	Selected Estimate of Ultimate Losses (F)
1986-2003	\$43,442,137	\$43,442,137			\$33,636,240	\$43,442,137
2003-2004	2,574,481	2,574,481	2,574,481	2,574,481	2,906,940	2,574,481
2004-2005	1,874,487	1,874,487	1,874,487	1,874,487	2,127,555	1,874,487
2005-2006	4,756,022	4,756,022	4,756,022	4,756,022	3,712,992	4,756,022
2006-2007	1,662,124	1,662,124	1,662,124	1,662,124	1,915,802	1,662,124
2007-2008	6,755,660	6,755,660	6,755,660	6,755,660	5,728,512	6,755,660
2008-2009	3,472,680	3,472,680	3,472,680	3,472,680	3,971,506	3,472,680
2009-2010	2,352,952	2,352,952	2,352,952	2,352,952	2,794,940	2,352,952
2010-2011	2,048,893	2,048,893	2,049,299	2,049,299	2,455,362	2,046,846
2011-2012	3,931,750	3,927,830	3,934,306	3,929,534	4,771,380	3,919,990
2012-2013	4,087,819	3,593,443	4,093,559	3,603,605	5,023,872	4,088,000
2013-2014	7,038,816	7,024,878	7,007,370	6,999,721	3,825,780	7,039,000
2014-2015	5,511,400	5,500,540	5,522,999	5,510,593	6,201,684	5,512,000
2015-2016	4,963,987	4,919,739	4,945,996	4,909,613	4,295,460	4,964,000
2016-2017	9,463,445	9,714,818	9,381,185	9,559,045	7,417,440	9,259,000
2017-2018	910,705	975,072	918,825	987,428	1,221,101	976,000
2018-2019	1,329,684	1,396,848	1,717,526	2,869,503	3,153,906	1,812,000
2019-2020	2,590,656	1,077,491	3,041,076	3,329,370	5,380,575	3,001,000
2020-2021	13,882,216	12,506,934	12,590,183	11,888,762	11,392,314	11,393,000
2021-2022	12,260,252	3,293,902	8,842,228	6,500,152	9,391,569	6,475,000
2022-2023	26,584,915	540,090	10,239,203	7,209,624	8,039,612	7,178,000

Totals

\$134,554,379

\$6,590,000

\$6,915,000

Projected Losses for the Year 2023-2024 (G) Projected Losses for the Year 2024-2025 (H)

#### Notes:

- (A) From Reserve Appendix A, Page 1, Column (G).
- (B) From Reserve Appendix B, Page 1, Column (G).
- (C) From Reserve Appendix C, Page 1, Column (G).
   (D) From Reserve Appendix C, Page 2, Column (G).
- (E) From Reserve Appendix D, Page 1, Column (C).
- (F) Selected averages of (A), (B), (C), (D), and (E). (G) From Reserve Not Included, Page 1, Line (K).
- (H) From Reserve Not Included, Page 1, Line (K).

This exhibit summarizes the results of the actuarial methods we have applied to estimate ultimate losses for each year. It is important to apply a number of estimation methods because each one relies on specific assumptions about the claims process that tend to hold generally true, but that may be violated in specific situations. Thus, the more estimation methods that can be applied, the better.

# Estimated Ultimate Limited Losses Capped at \$1,000,000 per Claim

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Frequency- Severity Method (E)	Selected Ultimate Limited Losses (F)
1986-2003	\$31,422,743	\$31,422,743			\$31,422,820	\$31,422,743
2003-2004	2,574,481	2,574,481	2,574,481	2,574,481	2,574,480	2,574,481
2004-2005	1,874,487	1,874,487	1,874,487	1,874,487	1,874,484	1,874,487
2005-2006	3,237,840	3,237,840	3,237,840	3,237,840	3,237,840	3,237,840
2006-2007	1,662,124	1,662,124	1,662,124	1,662,124	1,662,122	1,662,124
2007-2008	4,919,885	4,919,885	4,919,885	4,919,885	4,919,880	4,919,885
2008-2009	3,376,845	3,376,845	3,376,845	3,376,845	3,376,846	3,376,845
2009-2010	2,352,952	2,352,952	2,352,952	2,352,952	2,352,960	2,352,952
2010-2011	2,048,893	2,048,893	2,048,894	2,048,894	2,046,850	2,046,846
2011-2012	3,931,750	3,927,830	3,931,746	3,927,827	3,920,000	3,919,990
2012-2013	4,087,819	3,593,443	4,087,956	3,597,068	4,088,007	4,088,000
2013-2014	3,099,816	3,093,678	3,099,814	3,093,676	3,069,120	3,069,125
2014-2015	4,979,399	4,969,588	4,979,413	4,969,599	4,905,810	4,905,812
2015-2016	3,528,987	3,493,139	3,527,608	3,495,056	3,529,000	3,529,000
2016-2017	6,007,133	6,152,157	6,004,274	6,141,278	6,007,000	6,007,000
2017-2018	910,705	975,072	908,895	963,596	975,002	975,000
2018-2019	1,329,684	1,396,848	1,620,020	2,496,036	2,483,352	1,694,000
2019-2020	2,590,656	1,077,491	2,896,491	2,752,932	4,178,670	2,784,000
2020-2021	10,237,348	8,471,781	10,418,242	9,239,053	8,728,143	9,711,000
2021-2022	12,260,252	3,293,902	8,842,228	6,500,152	9,391,569	6,475,000
2022-2023	26,584,915	540,090	10,239,203	7,209,624	8,039,612	7,178,000

Totals

# \$107,804,130

Projected Losses for the Year 2023-2024 (G)	\$6,590,000
Projected Losses for the Year 2024-2025 (H)	\$6,915,000

# Notes:

- (A) From Reserve Appendix A, Page 1, Column (D).
- (B) From Reserve Appendix B, Page 1, Column (D).
- (C) Based on results in Reserve Appendix C, Page 1.
- (D) Based on results in Reserve Appendix C, Page 2.
- (E) Based on results in Reserve Appendix D, Page 1.
- (F) Selected averages of (A), (B), (C), (D), and (E).
- (G) From Reserve Not Included, Page 1, Line (K) / Line (G1.
- (H) From Reserve Not Included, Page 1, Line (K) / Line (G1.

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.

### Reported Loss Development

Accident Year (A)	Program Reported Losses as of 12/31/23 (B)	Reported Loss Development Factor (C)	Ultimate Program Losses (D)	Program Reported Losses of 12/31/23 (E)	Reported Loss Development Factor (F)	Ultimate Program Losses (G)
1986-2003	\$31,422,743	1.000	\$31,422,743	\$43,442,137	1.000	\$43,442,137
2003-2004	2,574,481	1.000	2,574,481	2,574,481	1.000	2,574,481
2004-2005	1,874,487	1.000	1,874,487	1,874,487	1.000	1,874,487
2005-2006	3,237,840	1.000	3,237,840	4,756,022	1.000	4,756,022
2006-2007	1,662,124	1.000	1,662,124	1,662,124	1.000	1,662,124
2007-2008	4,919,885	1.000	4,919,885	6,755,660	1.000	6,755,660
2008-2009	3,376,845	1.000	3,376,845	3,472,680	1.000	3,472,680
2009-2010	2,352,952	1.000	2,352,952	2,352,952	1.000	2,352,952
2010-2011	2,046,846	1.001	2,048,893	2,046,846	1.001	2,048,893
2011-2012	3,919,990	1.003	3,931,750	3,919,990	1.003	3,931,750
2012-2013	4,063,438	1.006	4,087,819	4,063,438	1.006	4,087,819
2013-2014	3,069,125	1.010	3,099,816	6,969,125	1.010	7,038,816
2014-2015	4,905,812	1.015	4,979,399	5,429,951	1.015	5,511,400
2015-2016	3,442,914	1.025	3,528,987	4,842,914	1.025	4,963,987
2016-2017	5,776,089	1.040	6,007,133	9,099,466	1.040	9,463,445
2017-2018	869,823	1.047	910,705	869,823	1.047	910,705
2018-2019	1,259,170	1.056	1,329,684	1,259,170	1.056	1,329,684
2019-2020	2,394,322	1.082	2,590,656	2,394,322	1.082	2,590,656
2020-2021	7,927,801	1.588	10,237,348	9,339,976	1.588	13,882,216
2021-2022	4,147,582	2.956	12,260,252	4,147,582	2.956	12,260,252
2022-2023	3,868,022	6.873	26,584,915	3,868,022	6.873	26,584,915
Totals	\$99,112,291		\$133,018,714	\$125,141,168		\$161,495,081

### Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority. These losses exclude amounts over the SIR.
- (C) From Reserve Appendix A, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over the SIR.
- (E) Losses capped at the Authority's SIR. Amounts are provided by the Authority.
- (F) From Reserve Appendix A, Page 2.
- (G) (E) x (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.

# PLAN JPA - Liability Reported Loss Development

					Reported	Loss Deve	lopment				
			sses Reporte								
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	567,543	1,906,336	4,062,177	8,370,243	9,217,066	8,542,877	8,721,640	8,719,727	8,808,032		8,792,658
2003-2004	4,001	184,321	558,456	670,955	1,173,162	1,318,511	1,591,251	1,881,919	2,790,812		2,569,681
2004-2005 2005-2006	25 000	671,598	1,275,449	1,852,243	1,904,110			1,876,140 5,096,734	1,876,140	1,876,140	1,876,140
2005-2006 2006-2007	25,000 250,000	422,143 429,839	1,922,276 388,247	2,886,625 544,541	3,514,764 885,717	4,881,587 1,181,310	4,993,818 1,717,627	5,096,734 1,656,699	5,171,734 1,656,563	4,812,387 1,656,563	4,775,006
2000-2007	228,140	429,839 748,802	1,944,679	3,425,750	4,743,123		6,805,660	6,755,660	6,755,660	6,755,660	1,656,563 6,755,660
2008-2009	40,000	593,853		4,424,148	5,587,036	5,819,751	3,573,895	3,528,864	3,528,864	3,528,864	3,528,864
2009-2010	588,210	-	3,852,129	3,616,630	3,528,002						, ,
2010-2011	000,210		13,599,043	6,660,508	1,961,674	2,096,846	2,046,846	2,046,846		2,076,846	2,076,846
2011-2012	25,000		10,300,736	3,657,810	3,711,615	3,660,880	3,809,185			3,878,185	3,878,185
2012-2013	25,000		2,820,517	2,142,134	2,006,231	2,383,230		2,449,510	3,788,438	3,788,438	4,063,438
2013-2014	357,000	1,085,300	1,453,782	6,394,575	6,948,858		7,046,618		6,959,081		3,069,125
2014-2015		2,581,639	3,391,765	4,496,980	5,649,691	5,428,532	5,429,951		4,905,812		, ,
2015-2016		816,550	4,031,962	4,652,451	5,078,739	5,077,844		3,557,912			
2016-2017	10,002	1,838,105	4,617,897	6,101,188	7,084,535		5,763,749	5,776,089			
2017-2018		213,377	680,850	921,662	868,680	870,473	869,823				
2018-2019		5,000	568,156	1,002,487	1,291,645	1,259,170					
2019-2020		63,500	367,323	701,961	2,394,322						
2020-2021	2,330,000	4,118,968	4,234,245	7,927,801							
2021-2022	60,000	514,442	4,147,582								
2022-2023		3,868,022									
2023-2024	172,310										
			ss Developn		-	~~ ~~					
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	3.359	2.131	2.061	1.101	0.927	1.021	1.000	1.010	1.005	0.993	1.008
2003-2004	46.069	3.030	1.201	1.748	1.124	1.207 1.004	1.183 0.996	1.483	0.920 1.000	1.000 1.000	1.000 1.000
2004-2005 2005-2006	16.886	1.899 4.554	1.452 1.502	1.028 1.218	0.985 1.389	1.004	1.021	1.000 1.015	0.931	0.992	1.000
2005-2008	1.719	0.903	1.403	1.627	1.334	1.454	0.965	1.015	1.000	1.000	1.000
2007-2008	3.282	2.597	1.762	1.385	1.482	0.968	0.993	1.000	1.000	1.000	0.965
2008-2009	14.846	3.827	1.947	1.263	1.042	0.614	0.987	1.000	1.000	1.000	1.000
2009-2010	5.322	1.230	0.939	0.975	1.000	0.704	0.992	0.991	1.000	1.000	1.000
2010-2011	0.022	4.203	0.490	0.295	1.069	0.976	1.000	1.015	1.000	1.000	1.000
2011-2012	245.457	1.679	0.355	1.015	0.986	1.041	1.018	1.000	1.000	1.000	1.000
2012-2013	188.851	0.597	0.759	0.937	1.188	0.974	1.056	1.547	1.000	1.073	1.000
2013-2014	3.040	1.340	4.399	1.087	1.017	0.997	0.988	1.000	0.441	1.000	
2014-2015		1.314	1.326	1.256	0.961	1.000	1.000	0.903	1.000		
2015-2016		4.938	1.154	1.092	1.000	0.974	0.719	0.968			
2016-2017	183.774	2.512	1.321	1.161	1.107	0.735	1.002				
2017-2018		3.191	1.354	0.943	1.002	0.999					
2018-2019		113.631	1.764	1.288	0.975						
2019-2020		5.785	1.911	3.411							
2020-2021	1.768	1.028	1.872								
2021-2022	8.574	8.062									
2022-2023											
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	30-42 Months	42-54 Months	Months	Months	Nonths	90-102 Months	Months	Months	Months
Average	55.611	8.423	1.525	1.268	1.093	0.981	0.995	1.067	0.946	1.005	0.998
Dollar-Weighted	55.011	0.423	1.525	1.200	1.095	0.901	0.995	1.007	0.940	1.005	0.990
Averages											
3-yr		1.863	1.863	1.734	1.079	0.840	0.915	0.960	0.751	1.026	1.000
4-yr		1.982	1.804	1.334	1.051	0.885	0.937	1.038	0.801	1.020	1.000
Comparative						2.000	2.001		5.001		
Factors	2.945	1.254	1.006	0.965	0.972	1.000	1.000	1.000	1.000	1.000	1.000
Prior	5.500	2.325	1.615	1.169	1.024	1.009	1.006	1.015	1.010	1.005	1.004
Selected	5.500	2.325	1.861	1.468	1.024	1.009	1.006	1.015	1.010	1.005	1.004
Cumulated	37.802	6.873	2.956	1.588	1.082	1.056	1.047	1.040	1.025	1.015	1.010
Junulated	07.002	0.075	2.000	1.000	1.002	1.000	1.047	1.040	1.020	1.013	1.010

# DRAFT

# PLAN JPA - Liability Reported Loss Development

Reported Loss Development											
Accident Year 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023 2023-2024		150 Months 8,864,201 2,569,681 1,876,140 4,775,006 1,656,563 6,755,660 3,528,864 2,441,417	162 Months 8,864,200 2,569,681 1,876,140 4,775,006 1,679,200 6,755,660 3,527,823 2,441,417	4,775,006 1,662,124 6,755,660 3,433,029	4,775,006 1,662,124 4,919,885	1,876,140 4,775,006 1,662,124	2,569,681 1,876,140 3,256,823	222 Months 8,832,841 2,569,681 1,876,140 3,256,823		246 Months 5,457,648 2,569,681	258 Months 5,457,648
2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023	Reported Lo 138-150 Months 1.000 1.000 1.000 1.000 1.037 1.000 1.000 0.986 1.011	ss Developm 150-162 Months 1.000 1.000 1.000 1.014 1.000 1.000 1.000 1.000	nent Factors: 162-174 Months 1.000 1.000 1.000 0.990 1.000 0.973 1.000	174-186 Months 1.000 1.000 1.000 1.000 0.728 1.000	186-198 Months 0.996 1.000 1.000 1.000 1.000	198-210 Months 1.000 1.000 0.682 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000	234-246 Months 0.618 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted Averages 3-yr	138-150 Months 1.003 1.001	150-162 Months 1.002 1.000	162-174 Months 0.995 0.993	174-186 Months 0.961 0.845	186-198 Months 0.999 1.000	198-210 Months 0.936 0.817	210-222 Months 1.000	222-234 Months 1.000	234-246 Months 0.809	246-258 Months 1.000	258-Ult. Months
4-yr	1.001	1.000	0.992	0.890	1.000	0.860	1.000	1.000			
Comparative Factors	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior Selected	1.003 1.003	1.002 1.002	1.001 1.001	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000
Cumulated	1.006	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

### Paid Loss Development

	Program			Program		
	Paid	Paid Loss	Ultimate	Paid	Paid Loss	Ultimate
Accident	Losses as	Development	Program	Losses	Development	Program
Year	of 12/31/23	Factor	Losses	of 12/31/23	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
4000 0000	<b>*</b>	4 000		<b>*</b> 40, 440, 407	1 000	<b>*</b> 40 440 40 <del>7</del>
1986-2003	\$31,422,743	1.000	\$31,422,743	\$43,442,137	1.000	\$43,442,137
2003-2004	2,574,481	1.000	2,574,481	2,574,481	1.000	2,574,481
2004-2005	1,874,487	1.000	1,874,487	1,874,487	1.000	1,874,487
2005-2006	3,237,840	1.000	3,237,840	4,756,022	1.000	4,756,022
2006-2007	1,662,124	1.000	1,662,124	1,662,124	1.000	1,662,124
2007-2008	4,919,885	1.000	4,919,885	6,755,660	1.000	6,755,660
2008-2009	3,376,845	1.000	3,376,845	3,472,680	1.000	3,472,680
2009-2010	2,352,952	1.000	2,352,952	2,352,952	1.000	2,352,952
2010-2011	2,046,846	1.001	2,048,893	2,046,846	1.001	2,048,893
2011-2012	3,919,990	1.002	3,927,830	3,919,990	1.002	3,927,830
2012-2013	3,568,464	1.007	3,593,443	3,568,464	1.007	3,593,443
2013-2014	3,069,125	1.008	3,093,678	6,969,125	1.008	7,024,878
2014-2015	4,905,812	1.013	4,969,588	5,429,951	1.013	5,500,540
2015-2016	3,428,007	1.019	3,493,139	4,828,007	1.019	4,919,739
2016-2017	5,738,952	1.072	6,152,157	9,062,330	1.072	9,714,818
2017-2018	869,823	1.121	975,072	869,823	1.121	975,072
2018-2019	1,113,914	1.254	1,396,848	1,113,914	1.254	1,396,848
2019-2020	750,865	1.435	1,077,491	750,865	1.435	1,077,491
2020-2021	5.139.922	2.557	8.471.781	6,539,097	2.557	12,506,934
2021-2022	514,833	6.398	3,293,902	514,833	6.398	3,293,902
2022-2023	18,759	28.791	540,090	18,759	28.791	540,090
Totals	\$86,506,669		\$94,455,269	\$112,522,547		\$123,411,021

### Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority. These losses exclude amounts over the SIR.
- (C) From Reserve Appendix B, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over the SIR.
- (E) Losses capped at the Authority's SIR. Amounts are provided by the Authority.
- (F) From Reserve Appendix B, Page 2.
- (G) (E) x (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.

# PLAN JPA - Liability Paid Loss Development

		Program Log	sses Paid as	of <sup>.</sup>	Paid L	oss Develop	ment				
Accident	6	18	<u>30</u> 30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	150,543	1,228,821	1,665,669	6,933,745	8,246,287	8,190,377		8,719,727	8,719,727	8,742,645	8,772,745
2003-2004	4,000	77,051	495,103	608,305	921,312		1,376,804	1,647,154		2,568,802	
2004-2005	.,	81,598	417,717	1,814,469	1,878,960		1,876,140		1,876,140		1,876,140
2005-2006		247,187	294,551	1,141,504		3,122,718		4,734,927	, ,	, ,	4,775,006
2006-2007	6,182	16,629	124,634	476,923	689,869		1,669,292		1,656,563		1,656,563
2007-2008	0,102	73,131	687,414		3,126,455			6,755,660			6,755,660
2008-2009	20,033	75,913	,	2,267,616	2,681,095			3,528,864	3,528,864	3,528,864	3,528,864
2009-2009	219,495	304,644		2,093,891			2,421,490				
2010-2011	219,495	249,199	684,682	1,176,359	1,846,866			2,046,846			
2011-2012	14,083	197,650	1,183,434	2,859,227	3,523,538			3,787,597			
2012-2012	14,000	550,184	901,080	1,725,493			2,270,574			, ,	, ,
2012-2013		128,965	746,799	5,850,808	6,724,237		6,932,649				3,069,125
2014-2015		1,676,100		2,667,604			5,429,951		4,905,812		0,000,120
2015-2016		16,532	226,123	3,422,237			4,814,203			4,000,012	
2016-2017		900	1,406,078				5,034,962		0,420,007		
2017-2018		56.752	356,919	777,179	814,717	870,473	869,823	0,700,002			
2018-2019		50,752	167,664	707,921	1,055,231		003,023				
2019-2020			56,239	108,746	750,865	1,113,914					
2019-2020		2,431,166	2,522,774		750,805						
		2,431,100		5,139,922							
2021-2022 2022-2023		10 750	514,833								
2022-2023		18,759									
2023-2024											
		Paid Loss D	evelopment	Factors							
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003	8.163	1.356	4.163	1.189	0.993	1.063	1.001	1.000	1.003	1.003	1.004
2002-2003	19.263	6.426	1.229	1.515	1.181	1.266	1.196	1.584	0.985	1.003	1.004
2003-2004	19.203	5.119	4.344	1.036	0.998	1.200	1.000	1.000	1.000	1.000	1.000
2004-2005		1.192	3.875	2.203	1.242	1.511	1.000	1.000	1.000	1.000	1.000
2005-2000	2.690	7.495	3.875	1.446	1.242	1.503	0.992	1.004	1.001	1.004	1.000
	2.090										
2007-2008	2 7 9 0	9.400	2.667	1.705	1.853	1.166	1.000	1.000	1.000	1.000	0.965
2008-2009	3.789	7.000	4.267	1.182	1.130	1.153	1.010	1.000	1.000	1.000	1.000
2009-2010	1.388	2.378 2.748	2.891	1.124	1.008	1.021	1.007	1.001	1.000	1.000	1.000
2010-2011 2011-2012	14.035	5.988	1.718 2.416	1.570 1.232	1.108 1.027	1.000 1.040	1.000 1.006	1.015 1.003	1.000 1.004	1.000 1.001	1.000 1.002
	14.055										
2012-2013		1.638	1.915	1.055	1.109	1.125	1.036	1.426	1.005	1.035	1.023
2013-2014 2014-2015		5.791 1.303	7.835 1.221	1.149 2.001	1.000 1.017	1.031 1.000	1.004 1.000	1.000 0.903	0.441 1.000	1.000	
2014-2015		13.678	15.134	1.267	1.063	1.000	0.711	1.001	1.000		
2016-2017		1,562.309	3.226	1.207	1.344	0.754	1.140	1.001			
2017-2018		6.289	2.177	1.098	1.068	0.754	1.140				
2017-2018		0.209	4.222	1.491	1.008	0.999					
2019-2019			4.222	6.905	1.050						
2019-2020		1.038	2.037	0.905							
2020-2021		1.030	2.037								
2022-2023											
2022-2023											
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	8.221	96.538	3.742	1.679	1.165	1.105	1.007	1.067	0.957	1.004	0.999
Dollar-Weighted	0.221	30.330	5.742	1.073	1.105	1.105	1.007	1.007	0.357	1.004	0.335
-											
Averages 3-yr			2.169	1.644	1.267	0.882	0.955	0.967	0.746	1.012	1.010
3-yr 4-yr			2.169	1.044	1.207	0.882	0.955	1.026	0.746	1.012	1.010
4-yi Comparative			2.170	1.230	1.100	0.910	0.970	1.020	0.191	1.010	1.000
Factors	4.218	2.117	1.446	1.151	1.057	1.033	1.015	1.010	1.008	1.008	1.006
Prior	4.210 9.100	4.500	2.502	1.418	1.057	1.033	1.015	1.010	1.008	1.008	1.008
	3.100	4.500	2.002	1.410	1.144	1.119	1.001	1.040	1.000	1.003	1.002
Selected	9.100	4.500	2.502	1.782	1.144	1.119	1.046	1.052	1.006	1.005	1.001
Cumulated	261.998	28.791	6.398	2.557	1.435	1.254	1.121	1.072	1.019	1.013	1.008

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# PLAN JPA - Liability Paid Loss Development

				Paid L	oss Develop	oment					
Accident Year 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023 2023-2024	Program Los 138 Months 8,809,636 2,569,681 1,876,140 4,775,006 1,656,563 6,517,383 3,528,864 2,441,417 2,076,846 3,823,023 3,568,464	sses Paid as 150 Months 8,825,154 2,569,681 1,876,140 4,775,006 1,656,563 6,755,660 3,528,864 2,441,417 2,046,846 3,919,990	162 Months 8,832,114 2,569,681 1,876,140 4,775,006 1,656,563 6,755,660 3,527,823	174 Months 8,832,841 2,569,681 1,876,140 4,775,006 1,662,124 6,755,660 3,433,029 2,441,417	186 Months 8,832,841 2,569,681 1,876,140 4,775,006 1,662,124 4,919,885 3,433,029	198 Months 8,832,841 2,569,681 1,876,140 4,775,006 1,662,124 4,919,885	210 Months 8,832,841 2,569,681 1,876,140 3,256,823 1,662,124	, ,	234 Months 8,832,841 2,569,681 1,876,140	246 Months 5,457,648 2,569,681	258 Months 5,457,648
2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023	Paid Loss D 138-150 Months 1.002 1.000 1.000 1.000 1.000 1.000 1.000 0.986 1.025	evelopment 150-162 Months 1.001 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Factors: 162-174 Months 1.000 1.000 1.000 1.003 1.000 0.973 1.000	174-186 Months 1.000 1.000 1.000 0.728 1.000	186-198 Months 1.000 1.000 1.000 1.000 1.000	198-210 Months 1.000 1.000 0.682 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000	234-246 Months 0.618 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted Averages		150-162 Months 1.000	162-174 Months 0.997	174-186 Months 0.961	186-198 Months 1.000	198-210 Months 0.936	210-222 Months 1.000	222-234 Months 1.000	234-246 Months 0.809	246-258 Months 1.000	258-Ult. Months
3-yr 4-yr Comparative	1.008 1.006	1.000 1.000	0.993 0.994	0.845 0.890	1.000 1.000	0.817 0.860	1.000 1.000	1.000			
Factors Prior	1.006 1.004	1.004 1.002	1.004 1.001	1.002 1.000	1.002 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.000 1.000
Selected	1.005	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.007	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

# Exposure and Development Method Based on Reported Losses

Accident Year	Trended Payroll (\$00) (A)	Reported Losses as of 12/31/23 (B)	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)
1986-2003	0		1.000	0.000	1.288	0	
2003-2004	5,890,921	2,574,481	1.000	0.000	0.493	0	2,574,481
2004-2005	6,726,086	1,874,487	1.000	0.000	0.317	0	1,874,487
2005-2006	6,701,609	4,756,022	1.000	0.000	0.554	0	4,756,022
2006-2007	6,850,981	1,662,124	1.000	0.000	0.280	0	1,662,124
2007-2008	7,078,282	6,755,660	1.000	0.000	0.809	0	6,755,660
2008-2009	7,137,215	3,472,680	1.000	0.000	0.556	0	3,472,680
2009-2010	6,726,322	2,352,952	1.000	0.000	0.416	0	2,352,952
2010-2011	6,057,964	2,046,846	1.001	0.001	0.405	2,453	2,049,299
2011-2012	5,049,644	3,919,990	1.003	0.003	0.945	14,316	3,934,306
2012-2013	4,813,124	4,063,438	1.006	0.006	1.043	30,121	4,093,559
2013-2014	4,664,018	6,969,125	1.010	0.010	0.820	38,245	7,007,370
2014-2015	4,731,659	5,429,951	1.015	0.015	1.311	93,048	5,522,999
2015-2016	4,506,901	4,842,914	1.025	0.024	0.953	103,082	4,945,996
2016-2017	4,680,337	9,099,466	1.040	0.038	1.584	281,719	9,381,185
2017-2018	4,797,059	869,823	1.047	0.045	0.227	49,002	918,825
2018-2019	4,828,712	1,259,170	1.056	0.053	1.791	458,356	1,717,526
2019-2020	4,640,086	2,394,322	1.082	0.076	1.834	646,754	3,041,076
2020-2021	4,677,499	9,339,976	1.588	0.370	1.878	3,250,207	12,590,183
2021-2022	4,877,311	4,147,582	2.956	0.662	1.454	4,694,646	8,842,228
2022-2023	5,079,532	3,868,022	6.873	0.855	1.467	6,371,181	10,239,203
Totals	110,515,262	\$81,699,031				\$16,033,130	\$97,732,161

### Notes:

- (A) From Reserve Appendix M, Column (C).
- (B) Provided by the Authority. These losses exclude amounts incurred above the Authority's SIR for each year.
- (C) From Reserve Appendix A, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From Reserve Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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 12/31/23 (B)	Loss Development Factor (C)	Percentage of Losses Yet to Be Paid (D)	Program Rate (E)	Incurred but not Paid (F)	Ultimate Program Losses (G)
1986-2003	0		1.000	0.000	1.288	0	
2003-2004	5,890,921	2,574,481	1.000	0.000	0.493	0	2,574,481
2004-2005	6,726,086	1,874,487	1.000	0.000	0.317	0	1,874,487
2005-2006	6,701,609	4,756,022	1.000	0.000	0.554	0	4,756,022
2006-2007	6,850,981	1,662,124	1.000	0.000	0.280	0	1,662,124
2007-2008	7,078,282	6,755,660	1.000	0.000	0.809	0	6,755,660
2008-2009	7,137,215	3,472,680	1.000	0.000	0.556	0	3,472,680
2009-2010	6,726,322	2,352,952	1.000	0.000	0.416	0	2,352,952
2010-2011	6,057,964	2,046,846	1.001	0.001	0.405	2,453	2,049,299
2011-2012	5,049,644	3,919,990	1.002	0.002	0.945	9,544	3,929,534
2012-2013	4,813,124	3,568,464	1.007	0.007	1.043	35,141	3,603,605
2013-2014	4,664,018	6,969,125	1.008	0.008	0.820	30,596	6,999,721
2014-2015	4,731,659	5,429,951	1.013	0.013	1.311	80,642	5,510,593
2015-2016	4,506,901	4,828,007	1.019	0.019	0.953	81,606	4,909,613
2016-2017	4,680,337	9,062,330	1.072	0.067	1.584	496,715	9,559,045
2017-2018	4,797,059	869,823	1.121	0.108	0.227	117,605	987,428
2018-2019	4,828,712	1,113,914	1.254	0.203	1.791	1,755,589	2,869,503
2019-2020	4,640,086	750,865	1.435	0.303	1.834	2,578,505	3,329,370
2020-2021	4,677,499	6,539,097	2.557	0.609	1.878	5,349,665	11,888,762
2021-2022	4,877,311	514,833	6.398	0.844	1.454	5,985,319	6,500,152
2022-2023	5,079,532	18,759	28.791	0.965	1.467	7,190,865	7,209,624
Totals	110,515,262	\$69,080,410				\$23,714,245	\$92,794,655

### Notes:

- (A) From Reserve Appendix M, Column (C).
- (B) Provided by the Authority. These losses exclude amounts paid above the Authority's SIR for each year.
- (C) From Reserve Appendix B, Page 1, Column (F).
- (D) 1 1/(C).
- (E) From Reserve Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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 Year	Trended Payroll (\$00) (A)	Ultimate Program Losses (B)	Trend Factor (C)	Trended Program Losses (D)	Trended Program Loss Rate (E)	Program Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
1986-2003	0		1.232			1.203	1.070	1.288
2003-2004	5,890,921	2,574,481	1.219	3,138,292	0.533	0.437	1.129	0.493
2004-2005	6,726,086	1,874,487	1.208	2,264,380	0.337	0.279	1.135	0.317
2005-2006	6,701,609	3,237,840	1.196	3,872,457	0.578	0.483	1.147	0.554
2006-2007	6,850,981	1,662,124	1.184	1,967,955	0.287	0.243	1.153	0.280
2007-2008	7,078,282	4,919,885	1.173	5,771,025	0.815	0.695	1.164	0.809
2008-2009	7,137,215	3,376,845	1.161	3,920,517	0.549	0.473	1.176	0.556
2009-2010	6,726,322	2,352,952	1.150	2,705,895	0.402	0.350	1.188	0.416
2010-2011	6,057,964	2,046,846	1.138	2,329,311	0.385	0.338	1.200	0.405
2011-2012	5,049,644	3,919,990	1.126	4,413,909	0.874	0.776	1.217	0.945
2012-2013	4,813,124	4,088,000	1.116	4,562,208	0.948	0.849	1.229	1.043
2013-2014	4,664,018	3,069,125	1.105	3,391,383	0.727	0.658	1.247	0.820
2014-2015	4,731,659	4,905,812	1.094	5,366,958	1.134	1.037	1.264	1.311
2015-2016	4,506,901	3,529,000	1.083	3,821,907	0.848	0.783	1.217	0.953
2016-2017	4,680,337	6,007,000	1.073	6,445,511	1.377	1.283	1.235	1.584
2017-2018	4,797,059	869,823	1.062	923,752	0.193	0.181	1.252	0.227
2018-2019	4,828,712	1,330,000	1.051	1,397,830	0.289	1.410	1.270	1.791
2019-2020	4,640,086	2,591,000	1.041	2,697,231	0.581	1.424	1.288	1.834
2020-2021	4,677,499	9,708,000	1.030	9,999,240	2.138	1.439	1.305	1.878
2021-2022	4,877,311	7,777,000	1.019	7,924,763	1.625	1.454	1.000	1.454
2022-2023	5,079,532	7,051,000	1.010	7,121,510	1.402	1.467	1.000	1.467
Total/Avg	110,515,262	\$76,891,210		\$84,036,034	\$0.760			
19/20-21/22	14,194,896	20,076,000		20,621,234	1.453			
21/22-22/23	9,956,843	14,828,000		15,046,273	1.511			
			Selected	Program Rate:	\$1.482			
				Prior:	\$1.450			

Notes:

- (A) From Reserve Appendix M, Column (C).
- (B) Selected average of results from Appendices p and p.
- (C) From Reserve Appendix E, Page 1, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected Program Rate / (C). For 2017-2018 and prior (B) / (A).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) (F) x (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 Year	Ultimate Program Severity (A)	Adjusted Ultimate Claims (B)	Ultimate Program Losses (C)
1986-2003	\$152,892	220	\$33,636,240
2003-2004	145,347	20	2,906,940
2004-2005	236,395	9	2,127,555
2005-2006	232,062	16	3,712,992
2006-2007	136,843	14	1,915,802
2007-2008	238,688	24	5,728,512
2008-2009	233,618	17	3,971,506
2009-2010	139,747	20	2,794,940
2010-2011	188,874	13	2,455,362
2011-2012	238,569	20	4,771,380
2012-2013	239,232	21	5,023,872
2013-2014	255,052	15	3,825,780
2014-2015	344,538	18	6,201,684
2015-2016	214,773	20	4,295,460
2016-2017	370,872	20	7,417,440
2017-2018	174,443	7	1,221,101
2018-2019	350,434	9	3,153,906
2019-2020	358,705	15	5,380,575
2020-2021	367,494	31	11,392,314
2021-2022	284,593	33	9,391,569
2022-2023	287,129	28	8,039,612
Total		590	\$129,364,542

#### Notes:

- (A) From Reserve Appendix D, Page 2, Column (H).
- (B) From Reserve 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 Program Losses (A)	Adjusted Ultimate Claims (B)	Ultimate Program Severity (C)	Trend Factor (D)	Trended Program Severity (E)	Program Severity (F)	Factor to SIR (G)	Program Severity (H)
			. ,					
1986-2003	\$31,422,743	220	\$142,831	1.232	\$175,968	\$142,831	1.070	\$152,892
2003-2004	2,574,481	20	128,724	1.219	156,915	128,724	1.129	145,347
2004-2005	1,874,487	9	208,276	1.208	251,597	208,276	1.135	236,395
2005-2006	3,237,840	16	202,365	1.196	242,029	202,365	1.147	232,062
2006-2007	1,662,124	14	118,723	1.184	140,568	118,723	1.153	136,843
2007-2008	4,919,885	24	204,995	1.173	240,459	204,995	1.164	238,688
2008-2009	3,376,845	17	198,638	1.161	230,619	198,638	1.176	233,618
2009-2010	2,352,952	20	117,648	1.150	135,295	117,648	1.188	139,747
2010-2011	2,046,846	13	157,450	1.138	179,178	157,450	1.200	188,874
2011-2012	3,919,990	20	196,000	1.126	220,696	196,000	1.217	238,569
2012-2013	4,088,000	21	194,667	1.116	217,248	194,667	1.229	239,232
2013-2014	3,069,125	15	204,608	1.105	226,092	204,608	1.247	255,052
2014-2015	4,905,812	18	272,545	1.094	298,164	272,545	1.264	344,538
2015-2016	3,529,000	20	176,450	1.083	191,095	176,450	1.217	214,773
2016-2017	6,007,000	20	300,350	1.073	322,276	300,350	1.235	370,872
2017-2018	975,000	7	139,286	1.062	147,922	139,286	1.252	174,443
2018-2019	2,277,000	9	253,000	1.051	265,903	275,928	1.270	350,434
2019-2020	2,744,000	15	182,933	1.041	190,433	278,578	1.288	358,705
2020-2021	9,711,000	31	313,258	1.030	322,656	281,553	1.305	367,494
2021-2022	7,905,000	33	239,545	1.019	244,096	284,593	1.000	284,593
2022-2023	8,421,000	28	300,750	1.010	303,758	287,129	1.000	287,129

Average Program Severity:	\$223,951
Average 20/21-22/23 Program Severity:	290,170

Selected Program Severity:	\$290,000
Prior:	\$245,000

# Notes:

- (A) Selected average of results from Appendices  $p,\,p,\,and\,p.$
- (B) Reserve Appendix D, Page 3, Column (C).
- (C) (A) / (B).
  (D) From Reserve 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) (F) x (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) (D)	Claim Frequency (E)	Trend Factor (F)	Trended Claim Frequency (G)
1986-2003	220	220	220	0.0		1.000	
2003-2004	20	20	20	589.1	0.034	1.000	0.034
2004-2005	9	9	9	672.6	0.013	1.000	0.013
2005-2006	16	16	16	670.2	0.024	1.000	0.024
2006-2007	14	14	14	685.1	0.020	1.000	0.020
2007-2008	24	24	24	707.8	0.034	1.000	0.034
2008-2009	17	17	17	713.7	0.024	1.000	0.024
2009-2010	20	20	20	672.6	0.030	1.000	0.030
2010-2011	13	13	13	605.8	0.021	1.000	0.021
2011-2012	20	20	20	505.0	0.040	1.000	0.040
2012-2013	21	20	21	481.3	0.044	1.000	0.044
2013-2014	15	15	15	466.4	0.032	1.000	0.032
2014-2015	18	18	18	473.2	0.038	1.000	0.038
2015-2016	20	19	20	450.7	0.044	1.000	0.044
2016-2017	20	18	20	468.0	0.043	1.000	0.043
2017-2018	7	7	7	479.7	0.015	1.000	0.015
2018-2019	9	8	9	482.9	0.019	1.000	0.019
2019-2020	15	6	15	464.0	0.032	1.000	0.032
2020-2021	31	23	31	467.7	0.066	1.000	0.066
2021-2022	33	6	33	487.7	0.068	1.000	0.068
2022-2023	100	0	28	508.0	0.055	1.000	0.055
Total	662	513	590	11,051.5			0.033
17/18-21/22	95	50	95	2,382.1			0.040
					(H) Selec	ted Frequency: Prior:	0.055 0.045
(I) (J) (K) (L)	Program Year Trend Factor: Selected Freq Est. Payroll (\$ Ultimate Claim	uency: 000,000):		2023-2024 1.000 0.055 516.9 28	2024-2025 1.000 0.055 532.4 29		

### Notes:

(A) From Reserve Appendix D, Page 4, (C).

(B) From Reserve Appendix D, Page 5, (C).

- (C) Selected from (A) and (B).
- (D) From Reserve Appendix M, Column (C) / 10,000.
- (E) (C) / (D).
- (F) From Reserve Appendix E, Page 1, Column (H).

- (G) (E) x (F).
- (H) The selected frequency of 0.055 is based on (G).
- (I) From Reserve Appendix E, Page 1, Column (H).
- (J) (H) x (I).

(L) (J) x (K).

(K) From Reserve Appendix M, Column (C) / 10,000.

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

# Frequency and Severity Method Reported Claim Count Development

Accident Year	Claims Reported as of 12/31/2023 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
1986-2003	220	1.000	220	
2003-2004	20	1.000	20	0.034
2004-2005	9	1.000	9	0.013
2005-2006	16	1.000	16	0.024
2006-2007	14	1.000	14	0.020
2007-2008	24	1.000	24	0.034
2008-2009	17	1.000	17	0.024
2009-2010	20	1.000	20	0.030
2010-2011	13	1.000	13	0.021
2011-2012	20	1.001	20	0.040
2012-2013	21	1.001	21	0.044
2013-2014	15	1.001	15	0.032
2014-2015	18	1.002	18	0.038
2015-2016	20	1.003	20	0.044
2016-2017	20	1.004	20	0.043
2017-2018	7	1.005	7	0.015
2018-2019	9	1.015	9	0.019
2019-2020	14	1.040	15	0.032
2020-2021	26	1.205	31	0.066
2021-2022	23	1.456	33	0.068
2022-2023	32	3.121	100	0.197
Total	578		662	0.040

Notes:

(A) Provided by the Authority.

(B) From Reserve Appendix D, Page 6.

(C) (A) x (B).

(D) (C) / [Reserve Appendix D, Page 3, (D)] x [Reserve 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 Authority. 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.

# Frequency and Severity Method Closed Claim Count Development

Accident Year	Claims Closed as of 12/31/2023 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
1986-2003	220	1.000	220	
2003-2004	20	1.000	20	0.034
2004-2005	9	1.000	9	0.013
2005-2006	16	1.000	16	0.024
2006-2007	14	1.000	14	0.020
2007-2008	24	1.000	24	0.034
2008-2009	17	1.000	17	0.024
2009-2010	20	1.000	20	0.030
2010-2011	13	1.001	13	0.021
2011-2012	20	1.002	20	0.040
2012-2013	20	1.003	20	0.042
2013-2014	15	1.004	15	0.032
2014-2015	18	1.005	18	0.038
2015-2016	19	1.006	19	0.042
2016-2017	18	1.007	18	0.038
2017-2018	7	1.008	7	0.015
2018-2019	7	1.104	8	0.017
2019-2020	5	1.279	6	0.013
2020-2021	13	1.788	23	0.049
2021-2022	1	5.663	6	0.012
2022-2023	0	17.933	0	
Total	496		513	0.027

Notes:

(A) Provided by the Authority.

(B) From Reserve Appendix D, Page 7.

(C) (A) x (B).

(D) (C) / [Reserve Appendix D, Page 3, (D)] x [Reserve 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 Authority. 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.

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# PLAN JPA - Liability Reported Claim Count Development

Claims Reported as of:														
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003				26	25	27	27	27	29	29	28	28	28	28
2003-2004			11	12	18	19	19	19	20	20	20	20	20	20
2004-2005		4	5	9	10	9	10	9	9	9	9	9	9	9
2005-2006	1	4	13	13	14	16	16	16	16	16	16	16	16	16
2006-2007	1	9	11	10	11	12	14	14	14	14	14	14	14	14
2007-2008	3	7	16	23	25	25	25	24	24	24	24	23	24	24
2008-2009	1	12	16	17	17	17	17	17	17	17	17	17	17	17
2009-2010	3	18	25	20	20	20	20	20	20	20	20	20	20	20
2010-2011		15	18	16	14	14	13	13	13	13	13	13	13	13
2011-2012	1	19	19	20	20	20	20	20	20	20	20	20	20	
2012-2013	1	23	23	22	22	21	20	20	21	21	21	21		
2013-2014	3	7	14	15	16	15	15	15	15	15	15			
2014-2015		11	21	21	18	18	18	18	18	18				
2015-2016		10	18	20	20	20	20	20	20					
2016-2017	1	6	19	19	21	21	20	20						
2017-2018		4	8	7	7	7	7							
2018-2019		1	5	8	10	9								
2019-2020		2	9	12	14									
2020-2021	2	21	20	26										
2021-2022	2	11	23											
2022-2023		32												
2023-2024	3													
	Reported Claim Count Development Factors:													

											100 10-	100 15-		100 171
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102						
0000 0000	Months	Months	Months	Months										
2002-2003			1 001	0.962	1.080	1.000	1.000	1.074	1.000	0.966	1.000	1.000	1.000	1.000
2003-2004		4 050	1.091	1.500	1.056	1.000	1.000	1.053	1.000	1.000	1.000	1.000	1.000	1.000
2004-2005	4 000	1.250	1.800	1.111	0.900	1.111	0.900	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006	4.000	3.250	1.000	1.077	1.143	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2006-2007	9.000	1.222	0.909	1.100	1.091	1.167	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2007-2008	2.333	2.286	1.438	1.087	1.000	1.000	0.960	1.000	1.000	1.000	0.958	1.043	1.000	1.000
2008-2009	12.000	1.333	1.063	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009-2010	6.000	1.389	0.800	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2010-2011	40.000	1.200	0.889	0.875	1.000	0.929	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2011-2012	19.000	1.000	1.053	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2012-2013	23.000	1.000	0.957	1.000	0.955	0.952	1.000	1.050	1.000	1.000	1.000			
2013-2014	2.333	2.000	1.071	1.067	0.938	1.000	1.000	1.000	1.000	1.000				
2014-2015		1.909	1.000	0.857	1.000	1.000	1.000	1.000	1.000					
2015-2016		1.800	1.111	1.000	1.000	1.000	1.000	1.000						
2016-2017	6.000	3.167	1.000	1.105	1.000	0.952	1.000							
2017-2018		2.000	0.875	1.000	1.000	1.000								
2018-2019		5.000	1.600	1.250	0.900									
2019-2020		4.500	1.333	1.167										
2020-2021	10.500	0.952	1.300											
2021-2022	5.500	2.091												
2022-2023														
						~~ ~~								
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102				138-150		
	Months	Months	Months	Months										
Average	9.061	2.075	1.127	1.064	1.004	1.007	0.991	1.013	1.000	0.997	0.996	1.004	1.000	1.000
Claim-Weighted														
Averages														
3-yr		1.529	1.353	1.148	0.974	0.979	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
4-yr		1.629	1.262	1.130	0.983	0.985	1.000	1.014	1.000	1.000	1.000	1.000	1.000	1.000
Comparative														
Factors	2.633	1.136	1.018	1.005	1.005	1.004	1.004	1.002	1.002	1.001	1.000	1.000	1.000	1.000
Prior	3.786	2.191	1.213	1.157	1.025	1.010	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000
Selected	3.843	2.143	1.209	1.159	1.025	1.010	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000
Cumulated	11.995	3.121	1.456	1.205	1.040	1.015	1.005	1.004	1.003	1.002	1.001	1.001	1.001	1.000
Cumulatou	11.000	0.121	1.100	1.200	1.0 70	1.010	1.000	1.004	1.000	1.002	1.001	1.001	1.001	1.000

# PLAN JPA - Liability Closed Claim Development

					010000		Jopinoni							
		<u>Claims C</u>	losed as c	of:										
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003				15	23	25	26	27	27	27	27	27	27	27
2003-2004			9	11	13	13	14	15	18	20	20	20	20	20
2004-2005		1	1	7	7	9	9	9	9	9	9	9	9	9
2005-2006		2	3	9	11	12	14	14	14	15	16	16	16	16
2006-2007		1	3	7	8	9	12	14	14	14	14	14	14	13
2007-2008			2	11	17	22	24	24	24	24	24	23	24	24
2008-2009		1	5	9	11	13	16	17	17	17	17	17	17	17
2009-2010		2	6	13	18	18	19	19	20	20	20	20	20	20
2010-2011			4	9	11	13	13	13	13	13	13	13	13	13
2011-2012		1	3	11	13	18	19	20	19	19	19	19	20	
2012-2013		1	5	15	17	17	20	19	20	20	20	20		
2013-2014		1	6	9	12	15	14	15	15	15	15			
2014-2015		3	7	8	18	18	18	18	18	18				
2015-2016		1	3	20	14	17	19	19	19					
2016-2017		1	19	10	11	15	17	18						
2017-2018		4	1	2	5	7	7							
2018-2019			1	3	7	7								
2019-2020				2	5									
2020-2021			7	13										
2021-2022			1											
2022-2023														
2023-2024														

		Closed C	laim Coun	t Develop	ment Fact	ors:								
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2002-2003				1.533	1.087	1.040	1.038	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2003-2004			1.222	1.182	1.000	1.077	1.071	1.200	1.111	1.000	1.000	1.000	1.000	1.000
2004-2005		1.000	7.000	1.000	1.286	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006		1.500	3.000	1.222	1.091	1.167	1.000	1.000	1.071	1.067	1.000	1.000	1.000	1.000
2006-2007		3.000	2.333	1.143	1.125	1.333	1.167	1.000	1.000	1.000	1.000	1.000	0.929	1.077
2007-2008			5.500	1.545	1.294	1.091	1.000	1.000	1.000	1.000	0.958	1.043	1.000	1.000
2008-2009		5.000	1.800	1.222	1.182	1.231	1.063	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2009-2010		3.000	2.167	1.385	1.000	1.056	1.000	1.053	1.000	1.000	1.000	1.000	1.000	1.000
2010-2011			2.250	1.222	1.182	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
2011-2012		3.000	3.667	1.182	1.385	1.056	1.053	0.950	1.000	1.000	1.000	1.053		
2012-2013		5.000	3.000	1.133	1.000	1.176	0.950	1.053	1.000	1.000	1.000			
2013-2014		6.000	1.500	1.333	1.250	0.933	1.071	1.000	1.000	1.000				
2014-2015		2.333	1.143	2.250	1.000	1.000	1.000	1.000	1.000					
2015-2016		3.000	6.667	0.700	1.214	1.118	1.000	1.000						
2016-2017		19.000	0.526	1.100	1.364	1.133	1.059							
2017-2018		0.250	2.000	2.500	1.400	1.000								
2018-2019			3.000	2.333	1.000									
2019-2020				2.500										
2020-2021			1.857											
2021-2022														
2022-2023														
	0.40	40.00	20.40	40.54	F4 00	00 70	70.00	00 400	100 111	111 100	100 100	400 450	450 400	100 171
	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	Months	Months	Months	138-150 Months	150-162 Months	162-174 Months
Average	wonths	4.340	2.861	1.471	1.168	1.088	1.031	1.018	1.014	1.006	0.996	1.010	0.992	1.010
Average		4.340	2.801	1.471	1.108	1.088	1.031	1.018	1.014	1.006	0.996	1.010	0.992	1.010
Claim-Weighted														
Averages				2.429	1.261	1.103	1.019	1.000	1.000	1.000	1 000	1.019	1.000	1.000
3-yr				2.429	1.201	1.103	1.019	1.000	1.000	1.000	1.000 1.000	1.019	1.000	1.000
4-yr				1.047	1.243	1.070	1.029	1.014	1.000	1.000	1.000	1.014	1.000	1.014
Comparative Factors	3.387	1.495	1.122	1.051	1.033	1.020	1.012	1 0 1 0	1.007	1.005	1.005	1.003	1.003	1.001
Prior	4.000	3.300	3.100	1.051	1.033	1.020	1.012	1.010 1.001	1.007	1.005	1.005	1.003	1.003	1.001
PHOI	4.000	3.300	5.100	1.207	1.113	1.025	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Selected	4.000	3.167	3.167	1.398	1.158	1.095	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Cumulated	71.732	17.933	5.663	1.788	1.279	1.104	1.008	1.007	1.006	1.005	1.004	1.003	1.002	1.001

# Loss Trend Factors

Accident Year	Benefit Level Factor (A)	Factor to 2023-2024 Loss Rate Level (B)	Factor to 2024-2025 Loss Rate Level (C)	Factor to 2025-2026 Loss Rate Level (D)	Factor to 2026-2027 Loss Rate Level (E)	Factor to 2023-2024 Frequency Level (F)	Factor to 2024-2025 Frequency Level (G)	Factor to 2025-2026 Frequency Level (H)	Factor to 2026-2027 Frequency Level (I)	Factor to 2023-2024 Severity Level (J)
1986-2003	1.000	1.232	1.244	1.256	1.269	1.000	1.000	1.000	1.000	1.232
2003-2004	1.000	1.219	1.231	1.244	1.256	1.000	1.000	1.000	1.000	1.219
2004-2005	1.000	1.208	1.220	1.232	1.244	1.000	1.000	1.000	1.000	1.208
2005-2006	1.000	1.196	1.208	1.220	1.232	1.000	1.000	1.000	1.000	1.196
2006-2007	1.000	1.184	1.196	1.208	1.220	1.000	1.000	1.000	1.000	1.184
2007-2008	1.000	1.173	1.184	1.196	1.208	1.000	1.000	1.000	1.000	1.173
2008-2009	1.000	1.161	1.173	1.184	1.196	1.000	1.000	1.000	1.000	1.161
2009-2010	1.000	1.150	1.161	1.172	1.184	1.000	1.000	1.000	1.000	1.150
2010-2011	1.000	1.138	1.149	1.160	1.172	1.000	1.000	1.000	1.000	1.138
2011-2012	1.000	1.126	1.137	1.149	1.160	1.000	1.000	1.000	1.000	1.126
2012-2013	1.000	1.116	1.126	1.138	1.149	1.000	1.000	1.000	1.000	1.116
2013-2014	1.000	1.105	1.116	1.127	1.138	1.000	1.000	1.000	1.000	1.105
2014-2015	1.000	1.094	1.105	1.116	1.127	1.000	1.000	1.000	1.000	1.094
2015-2016	1.000	1.083	1.094	1.105	1.116	1.000	1.000	1.000	1.000	1.083
2016-2017	1.000	1.073	1.083	1.094	1.105	1.000	1.000	1.000	1.000	1.073
2017-2018	1.000	1.062	1.073	1.083	1.094	1.000	1.000	1.000	1.000	1.062
2018-2019	1.000	1.051	1.062	1.072	1.083	1.000	1.000	1.000	1.000	1.051
2019-2020	1.000	1.041	1.051	1.061	1.072	1.000	1.000	1.000	1.000	1.041
2020-2021	1.000	1.030	1.040	1.050	1.061	1.000	1.000	1.000	1.000	1.030
2021-2022	1.000	1.019	1.029	1.040	1.050	1.000	1.000	1.000	1.000	1.019
2022-2023	1.000	1.010	1.020	1.030	1.040	1.000	1.000	1.000	1.000	1.010
2023-2024	1.000	1.000	1.010	1.020	1.030	1.000	1.000	1.000	1.000	1.000
2024-2025	1.000		1.000	1.010	1.020		1.000	1.000	1.000	
2025-2026	1.000			1.000	1.010			1.000	1.000	
2026-2027	1.000				1.000				1.000	

Notes:

(A) No benefit level adjustment applied.

(B) - (E) (A) adjusted for a 1.0% annual loss rate trend.

(F) - (I) (A) adjusted for a 0.0% annual frequency trend.

(J) (A) adjusted for a 1.0% 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					
	Estimate of					
	Ultimate	Ultimate		Adjusted	Trended	
Accident	Limited	Reported		Limited	Payroll	Ultimate
Year	Losses	Claims	BLF	Severity	(\$00)	Frequency
	(A)	(B)	(C)	(D)	(E)	(F)
1986-2003	\$31,422,743	220	1.000	142,831		
2003-2004	2,574,481	220	1.000	128.724	5,890,921	0.034
2003-2004	1,874,487	9	1.000	208,276	6,726,086	0.013
2004-2005	3.237.840	16	1.000	202,365	6.701.609	0.024
2005-2000	1,662,124	10	1.000	118,723	6,850,981	0.024
2000-2007	4,919,885	24	1.000	204.995	7,078,282	0.020
2008-2009	3,376,845	17	1.000	198.638	7,137,215	0.024
2009-2009	2,352,952	20	1.000	117.648	6,726,322	0.024
2010-2011	2.046.846	13	1.000	157.450	6.057.964	0.021
2010-2011	3,919,990	20	1.000	196,000	5,049,644	0.021
2012-2012	4,088,000	20	1.000	190,000	4,813,124	0.044
2012-2013	3.069.125	15	1.000	204.608	4.664.018	0.032
2014-2015	4,905,812	18	1.000	272.545	4,731,659	0.038
2015-2016	3.529.000	20	1.000	176.450	4.506.901	0.044
2016-2017	6.007.000	20	1.000	300.350	4.680.337	0.043
2017-2018	869,823		1.000	124,260	4,797,059	0.015
2018-2019	1,330,000	9	1.000	147,778	4,828,712	0.019
2019-2020	2,591,000	15	1.000	172.733	4,640,086	0.032
2020-2021	9.708.000	31	1.000	313,161	4.677.499	0.066
2021-2022	7.777.000	33	1.000	235.667	4,877,311	0.068
2022-2023	7,051,000	28	1.000	251,821	5,079,532	0.055
	-					

Severity Tre	end Factors	Frequency Trend Factors
2009-2010 through 2018-2019	1.015	0.963
2010-2011 through 2019-2020	0.984	0.964
2011-2012 through 2020-2021	1.000	0.981
Prior	0.990	1.055
Default	1.030	0.975
Selected Residual Trend	1.010	1.000

Notes:

(A) Selected average of results from Reserve Appendix A and Reserve Appendix B.

(B) Reserve Appendix D, Page 3, Column (C).

(C) Reserve Appendix E, Page 1, (A).

(D) (A) x (C) / (B).

(E) From Reserve Appendix M, Column (C).

(F) (B) / (E) x 10,000.

# Payment and Reserve Forecast

		<u>Calendar</u>	<u>Period</u>
Accident Year	As of <u>12/31/2023</u>	1/1/2024 to <u>6/30/2024</u>	7/1/2024 to <u>6/30/2025</u>
Prior Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$54,309,251 - 54,309,251	\$54,309,251 54,309,251	\$54,309,251 54,309,251
2007-2008 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$6,755,660 - 6,755,660	\$6,755,660 6,755,660	\$6,755,660 6,755,660
2008-2009 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$3,472,680 - 3,472,680	\$3,472,680 3,472,680	\$3,472,680 3,472,680
2009-2010 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$2,352,952 - 2,352,952	\$2,352,952 2,352,952	\$2,352,952 2,352,952
2010-2011 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$2,046,846 - 2,046,846	\$2,046,846 2,046,846	\$2,046,846 2,046,846
2011-2012 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$3,919,990 - 3,919,990	\$3,919,990 3,919,990	\$3,919,990 3,919,990
2012-2013 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$4,088,000 - 3,568,464 519,536	\$4,088,000 221,842 3,790,306 297,694	\$4,088,000 222,973 4,013,279 74,721
2013-2014 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$7,039,000 - 6,969,125 69,875	\$7,039,000 8,665 6,977,790 61,210	\$7,039,000 26,137 7,003,927 35,073

### Payment and Reserve Forecast

		Calendar Period			
Accident Year	As of <u>12/31/2023</u>	1/1/2024 to <u>6/30/2024</u>	7/1/2024 to <u>6/30/2025</u>		
2014-2015 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$5,512,000 - 5,429,951 82,049	\$5,512,000 11,446 5,441,397 70,603	\$5,512,000 21,040 5,462,437 49,563		
2015-2016 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$4,964,000 - 4,828,007 135,993	\$4,964,000 21,079 4,849,086 114,914	\$4,964,000 42,633 4,891,719 72,281		
2016-2017 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$9,259,000 - 9,062,330 196,670	\$9,259,000 29,501 9,091,831 167,169	\$9,259,000 105,985 9,197,816 61,184		
2017-2018 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$976,000 - 869,823 106,177	\$976,000 10,618 880,441 95,559	\$976,000 48,544 928,985 47,015		
2018-2019 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$1,812,000 - 1,113,914 698,086	\$1,812,000 93,194 1,207,108 604,892	\$1,812,000 263,733 1,470,841 341,159		
2019-2020 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$3,001,000 - 750,865 2,250,135	\$3,001,000 375,773 1,126,638 1,874,362	\$3,001,000 721,629 1,848,267 1,152,733		
2020-2021 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$11,393,000 - 6,539,097 4,853,903	\$11,393,000 1,218,330 7,757,427 3,635,573	\$11,393,000 1,621,466 9,378,893 2,014,107		
2021-2022 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$6,475,000 - 514,833 5,960,167	\$6,475,000 828,463 1,343,296 5,131,704	\$6,475,000 1,908,994 3,252,290 3,222,710		

### Payment and Reserve Forecast

		<u>Calenda</u>	<u>r Period</u>
Accident Year	As of <u>12/31/2023</u>	1/1/2024 to <u>6/30/2024</u>	7/1/2024 to <u>6/30/2025</u>
2022-2023 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$7,178,000 - 18,759 7,159,241	\$7,178,000 451,032 469,791 6,708,209	\$7,178,000 1,321,517 1,791,308 5,386,692
2023-2024 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	\$3,295,000 - - 3,295,000	\$6,590,000 105,440 105,440 6,484,560	\$6,590,000 505,796 611,236 5,978,764
2024-2025 Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability	- - -	- - -	\$6,915,000 131,385 131,385 6,783,615
Totals Ultimate Loss Paid in Calendar Period Paid to Date Outstanding Liability Total Outstanding ULAE Outstanding Liability plus ULAE	\$137,849,379 112,522,547 25,326,832 3,165,854 28,492,686	\$141,144,379 3,375,383 115,897,930 25,246,449 3,155,806 28,402,255	\$148,059,379 6,941,832 122,839,762 25,219,617 3,152,452 28,372,069

Notes appear on the next page.

#### Payment and Reserve Forecast

Notes to previous page:

- Accident Year is associated with date of loss. Calendar Period is associated with date of transaction. For example, for the losses which occurred during 2021-2022, \$828,463 is expected to be paid between 1/1/24 and 6/30/24, \$1,343,296 will have been paid by 6/30/24, and the reserve for remaining payments on these claims should be \$5,131,704.
- · Ultimate Losses for each accident year are from Reserve Exhibit 3, Page 1.
- Paid in Calendar Period is a proportion of the Outstanding Liability from the previous calendar period. These proportions are derived from the paid loss development pattern selected in Appendix B. For example, \$1,908,994 = \$5,131,704 x 37.2%.
- Paid to Date is Paid in Calendar Period plus Paid to Date from previous calendar period. For example, \$3,252,290 = \$1,908,994 + \$1,343,296.
- Outstanding Liability is Ultimate Loss minus Paid to Date. For example, \$5,131,704 = \$6,475,000 \$1,343,296.

This exhibit shows the calculation of the liability for outstanding claims as of the date of evaluation, the end of the current fiscal year, and the end of the coming fiscal year. It also shows the expected claims payout during the remainder of the current fiscal year and the coming fiscal year. Refer to the Totals at the end of the exhibit for the balance sheet information. The top parts of the exhibit show information for each program year.

### Short- and Long-Term Liabilities

Liabiliti	es as of 12/31/23:			Expected		Discounted	
	Current (Short Term)	Loss and ALAE:		\$6,601,438		\$6,536,397	
		ULAE:		0		0	
	Sho	ort-Term Loss and LAE:		\$6,601,438		\$6,536,397	
	Non-Current (Long Term	n) Loss and ALAE:		\$18,725,395		\$17,628,626	
	······································	ULAE:		3,165,854		3,020,628	
	Lor	ng-Term Loss and LAE:		\$21,891,249		\$20,649,254	
	Total Liphility	Loss and ALAE:		¢05 006 000		¢04 465 000	
	Total Liability	ULAE:		\$25,326,832 3,165,854		\$24,165,023 3,020,628	
		Total Loss and LAE:		\$28,492,686		\$27,185,651	
		TOTAL LOSS AND LAE.		\$20,492,000		φ27,100,001	
Liabiliti	es as of 6/30/24:						
	Current (Short Term)	Loss and ALAE:		\$6,810,447		\$6,743,347	
		ULAE:		0		0	
	Sho	ort-Term Loss and LAE:		\$6,810,447		\$6,743,347	
	Non-Current (Long Term	1) Loss and ALAE:		\$18,436,002		\$17,380,164	
		ULAE:		3,155,806		3,015,439	
	Lor	ng-Term Loss and LAE:		\$21,591,808		\$20,395,603	
	<u>Total Liability</u>	Loss and ALAE:		\$25,246,449		\$24,123,511	
		ULAE:		3,155,806		3,015,439	
		Total Loss and LAE:		\$28,402,255		\$27,138,950	
				Discounted	with a Margin for Co	ontingencies	
			70%	75%	80%	85%	90%
			Confidence	Confidence	Confidence	Confidence	Confidence
Liabiliti	es as of 12/31/23:		001111001100	00111001100	0000000	0000000	
	Current (Short Term)	Loss and ALAE:	\$7,248,864	\$7,543,002	\$7,889,431	\$8,333,906	\$8,935,255
	<u></u>	ULAE:	0	0	0	0	0
	Sho	ort-Term Loss and LAE:	\$7,248,864	\$7,543,002	\$7,889,431	\$8,333,906	\$8,935,255
	Non-Current (Long Term		\$19,550,147	\$20,343,435	\$21,277,752	\$22,476,498	\$24,098,331
		ULAE:	3,349,876	3,485,804	3,645,898	3,851,301	4,129,199
	Lor	ng-Term Loss and LAE:	\$22,900,023	\$23,829,239	\$24,923,650	\$26,327,799	\$28,227,530
	Total Liability	Loss and ALAE:	\$26,799,011	\$27,886,437	\$29,167,183	\$30,810,404	\$33,033,586
	Total Elability	ULAE:	3,349,876	3,485,804	3,645,898	3,851,301	4,129,199
		Total Loss and LAE:	, ,	\$31.372.241	\$32.813.081	\$34.661.705	\$37.162.785
			+;;	+;;;;;;;;;;-	+, ,	<i>+-</i> , <i></i> , <i></i>	····
	6 0 10 0 10 1						
Liabiliti	es as of 6/30/24:		AZ 4Z0 0Z0	<b>#7 704 000</b>	<b>ACC 000</b>	<b>#0 507 707</b>	#0.040.4FF
	Current (Short Term)	Loss and ALAE:	\$7,478,372	\$7,781,822	\$8,139,220	\$8,597,767	\$9,218,155
		ULAE:	0	0	0	0	0
	Sho	ort-Term Loss and LAE:	\$7,478,372	\$7,781,822	\$8,139,220	\$8,597,767	\$9,218,155
	Non-Current (Long Term	1) Loss and ALAE:	\$19,274,602	\$20,056,710	\$20,977,858	\$22,159,710	\$23,758,685
			3 344 122	3 /70 816	3 630 635	3 844 684	1 122 105

Non-Current (Long Terr	ULAE:	3,344,122	\$20,056,710 3,479,816	\$20,977,858 3,639,635 \$24,617,493	\$22,159,710 3,844,684 \$26,004,394	\$23,758,685 4,122,105
Total Liability	ng-Term Loss and LAE: Loss and ALAE:	\$26,752,974	\$23,536,526 \$27,838,532	\$29,117,078	\$30,757,477	\$27,880,790 \$32,976,840
	ULAE: : Total Loss and LAE	3,344,122 \$30,097,096	3,479,816 \$31,318,348	3,639,635 \$32,756,713	3,844,684 \$34,602,161	4,122,105 \$37,098,945

Note: Current (short term) liabilities are the portion of the total estimated liability shown on Reserve Appendix F that is expected to be paid out within the coming year. Totals may vary from Reserve Exhibit 1, due to rounding.

0.954

0.956

#### PLAN JPA - Liability

#### Discount Factors to be Applied to Overall Reserves

Accident Year	Full Value of Reserve at 12/31/23 (A)	Discount Factor (B)	Discounted Reserve at 12/31/23 (C)	Full Value of Reserve at 6/30/24 (D)	Discount Factor (E)	Discounted Reserve at 6/30/24 (F)
1986-2003	\$0	1.000	\$0	\$0	1.000	\$0
2003-2004	0	1.000	0	0	1.000	0
2004-2005	0	1.000	0	0	1.000	0
2005-2006	0	1.000	0	0	1.000	0
2006-2007	0	1.000	0	0	1.000	0
2007-2008	0	1.000	0	0	1.000	0
2008-2009	0	1.000	0	0	1.000	0
2009-2010	0	1.000	0	0	1.000	0
2010-2011	0	0.995	0	0	1.000	0
2011-2012	0	0.988	0	0	0.990	0
2012-2013	519,536	0.981	509,552	297,694	0.985	293,312
2013-2014	69,875	0.972	67,893	61,210	0.976	59,758
2014-2015	82,049	0.965	79,203	70,603	0.967	68,271
2015-2016	135,993	0.969	131,723	114,914	0.964	110,738
2016-2017	196,670	0.973	191,375	167,169	0.974	162,747
2017-2018	106,177	0.971	103,104	95,559	0.973	92,941
2018-2019	698,086	0.968	675,491	604,892	0.970	586,449
2019-2020	2,250,135	0.966	2,173,516	1,874,362	0.966	1,810,178
2020-2021	4,853,903	0.965	4,682,387	3,635,573	0.966	3,512,478
2021-2022	5,960,167	0.958	5,711,384	5,131,704	0.963	4,942,791
2022-2023	7,159,241	0.946	6,773,663	6,708,209	0.953	6,395,145
2023-2024	3,295,000	0.930	3,065,732	6,484,560	0.939	6,088,703
Totals	\$25,326,832		\$24,165,023	\$25,246,449		\$24,123,511

(G) Discount Factor at 12/31/23 for Overall Reserve:

(H) Discount Factor at 6/30/24 for Overall Reserve:

#### Notes:

- (A) From Reserve Appendix F, Outstanding Liability at 12/31/23.
- (B) Based on Reserve Appendix H, Page 2, Column (E).

(C) (A) x (B).

- (D) From Reserve Appendix F, Outstanding Liability at 6/30/24.
- (E) Based on Reserve Appendix H, Page 2, Column (E).
- (F) (D) x (E).
- (G) Total of (C) / Total of (A).
- (H) Total of (F) / Total of (D).

This exhibit shows the expected impact of anticipated investment income on the liability for outstanding claims at the date of evaluation and the end of the current fiscal year. For example, if the discount factor in item (G) is 0.954, the discounted liability for outstanding claims is 95.4% of the full value.

### Confidence Level Table

Probability	Projected Losses	Outstanding Losses
98%		1.851
95%	1.846	1.533
90%	1.594	1.367
85%	1.443	1.275
80%	1.329	1.207
75%	1.239	1.154
70%	1.162	1.109
65%	1.094	1.070
60%	1.032	1.034
55%	0.977	1.001
50%	0.923	0.970
45%	0.873	0.940
40%	0.823	0.911
35%	0.775	0.882
30%	0.726	0.853
25%	0.675	0.823

To read table:	For the above retention, there is a 90% chance
	that final loss settlements will be less than
	1.594 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.

### Program History

Policy	Policy		Self-Insured	Retention
Year	Year	Policy	Per	
Start Date	End Date	Year	Occurrence	Aggregate
7/1/1986	6/30/2003	1986-2003	\$5,000,000	(none)
7/1/2003	6/30/2004	2003-2004	5,000,000	(none)
7/1/2004	6/30/2005	2004-2005	5,000,000	(none)
7/1/2005	6/30/2006	2005-2006	5,000,000	(none)
7/1/2006	6/30/2007	2006-2007	5,000,000	(none)
7/1/2007	6/30/2008	2007-2008	5,000,000	(none)
7/1/2008	6/30/2009	2008-2009	5,000,000	(none)
7/1/2009	6/30/2010	2009-2010	5,000,000	(none)
7/1/2010	6/30/2011	2010-2011	5,000,000	(none)
7/1/2011	6/30/2012	2011-2012	5,000,000	(none)
7/1/2012	6/30/2013	2012-2013	5,000,000	(none)
7/1/2013	6/30/2014	2013-2014	5,000,000	(none)
7/1/2014	6/30/2015	2014-2015	5,000,000	(none)
7/1/2015	6/30/2016	2015-2016	2,500,000	(none)
7/1/2016	6/30/2017	2016-2017	2,500,000	(none)
7/1/2017	6/30/2018	2017-2018	2,500,000	(none)
7/1/2018	6/30/2019	2018-2019	2,500,000	(none)
7/1/2019	6/30/2020	2019-2020	2,500,000	(none)
7/1/2020	6/30/2021	2020-2021	2,500,000	(none)
7/1/2021	6/30/2022	2021-2022	1,000,000	(none)
7/1/2022	6/30/2023	2022-2023	1,000,000	(none)
7/1/2023	6/30/2024	2023-2024	1,000,000	(none)
7/1/2024	6/30/2025	2024-2025	1,000,000	(none)

Third Party		
Claims	Begin	End
Administrator	Date	Date
Sedgwick		Current

This exhibit summarizes some of the key facts about the history of the program.

#### Estimated Total Assets as of 6/30/24

(A)	Estimated Total Assets as of 7/1/23:	\$49,133,875
(B)	<u>Total Income to Fund during 2023-2024</u> Premiums: Interest: Total Income:	\$23,156,868 0 \$23,156,868
(C)	Total Payments from Fund during 2023-2024 Loss Payments: Excess Insurance: Other: Total Payments:	\$5,578,793 14,598,687 2,435,780 \$22,613,260
(D)	Estimated Total Assets as of 6/30/24:	\$49,677,483

#### Notes:

- (A) Provided by the Authority.(B) Provided by the Authority.
- (C) Provided by the Authority.

(D) (A) + (B) - (C).

#### Incurred Losses as of 12/31/23

			<b>.</b>							Incurred
A	Lin Bartha d	Additions	Subtractions	Additional	1	Incurred	Incurred	Incurred	Incurred	Capped at
Accident	Unlimited	to	from	Adjusted	Incurred	Over	Capped at	\$1,000,000	Capped at	SIR &
Year	Incurred	Losses	Losses	Incurred	Over SIR	\$1,000,000	\$1,000,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1986-2003	\$43,315,770	\$126,366	\$0	\$43,442,137	\$0	\$12,019,394	\$31,422,743	\$12,019,394	\$43,442,137	\$43,442,137
2003-2004	2,569,681	4,800	0	2,574,481	0	0	2,574,481	0	2,574,481	2,574,481
2004-2005	1,876,140	(1,653)	0	1,874,487	0	0	1,874,487	0	1,874,487	1,874,487
2005-2006	4,775,006	(18,984)	0	4,756,022	0	1,518,182	3,237,840	1,518,182	4,756,022	4,756,022
2006-2007	1,662,124	0	0	1,662,124	0	0	1,662,124	0	1,662,124	1,662,124
2007-2008	6,755,660	0	0	6,755,660	0	1,835,775	4,919,885	1,835,775	6,755,660	6,755,660
2008-2009	3,528,864	(56,184)	0	3,472,680	0	95,835	3,376,845	95,835	3,472,680	3,472,680
2009-2010	2,441,417	(88,465)	0	2,352,952	0	0	2,352,952	0	2,352,952	2,352,952
2010-2011	2,046,846	0	0	2,046,846	0	0	2,046,846	0	2,046,846	2,046,846
2011-2012	3,919,990	0	0	3,919,990	0	0	3,919,990	0	3,919,990	3,919,990
2012-2013	4,063,438	0	0	4,063,438	0	0	4,063,438	0	4,063,438	4,063,438
2013-2014	6,969,125	0	0	6,969,125	0	3,900,000	3,069,125	3,900,000	6,969,125	6,969,125
2014-2015	5,429,951	0	0	5,429,951	0	524,140	4,905,812	524,140	5,429,951	5,429,951
2015-2016	4,842,914	0	0	4,842,914	0	1,400,000	3,442,914	1,400,000	4,842,914	4,842,914
2016-2017	9,099,466	0	0	9,099,466	0	3,323,377	5,776,089	3,323,377	9,099,466	9,099,466
2017-2018	869,823	0	0	869,823	0	0	869,823	0	869,823	869,823
2018-2019	1,259,170	0	0	1,259,170	0	0	1,259,170	0	1,259,170	1,259,170
2019-2020	2,394,322	0	0	2,394,322	0	0	2,394,322	0	2,394,322	2,394,322
2020-2021	9,339,976	0	0	9,339,976	0	1,412,175	7,927,801	1,412,175	9,339,976	9,339,976
2021-2022	4,147,582	0	0	4,147,582	0	0	4,147,582	0	4,147,582	4,147,582
2022-2023	3,868,022	0	0	3,868,022	0	0	3,868,022	0	3,868,022	3,868,022
2023-2024	172,310	0	0	172,310	0	0	172,310	0	172,310	172,310
Total	\$125,347,597	-\$34,120	\$0	\$125,313,477	\$0	\$26,028,878	\$99,284,599	\$26,028,878	\$125,313,477	\$125,313,477

#### Notes:

(A) Years are 7/1 to 6/30.(B) Provided by the Authority.

(C) Adjustments to Accounting

(D)
(E) (B) + (C) - (D).
(F) Sum of incurred losses in excess of SIR.

(G) Sum of incurred losses in excess of \$1,000,000.

- (H) (E) (G).
  (I) (G) (F).
  (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See Reserve Appendix J.

#### Paid Losses as of 12/31/23

										Paid
		Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$1,000,000	Capped at	SIR &
Year	Paid	Losses	Losses	Paid	Over SIR	\$1,000,000	\$1,000,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1986-2003	\$43,315,770	\$126.366	\$0	\$43,442,137	\$0	\$12,019,394	\$31,422,743	\$12,019,394	\$43,442,137	\$43,442,137
2003-2004	2,569,681	4,800	0	2,574,481	0	0	2,574,481	0	2,574,481	2,574,481
2004-2005	1,876,140	(1,653)	0	1,874,487	0	0	1,874,487	0	1,874,487	1,874,487
2005-2006	4,775,006	(18,984)	0	4,756,022	0	1,518,182	3,237,840	1,518,182	4,756,022	4,756,022
2006-2007	1,662,124	0	0	1,662,124	0	0	1,662,124	0	1,662,124	1,662,124
2007-2008	6,755,660	0	0	6,755,660	0	1,835,775	4,919,885	1,835,775	6,755,660	6,755,660
2008-2009	3,528,864	(56,184)	0	3,472,680	0	95,835	3,376,845	95,835	3,472,680	3,472,680
2009-2010	2,441,417	(88,465)	0	2,352,952	0	0	2,352,952	0	2,352,952	2,352,952
2010-2011	2,046,846	0	0	2,046,846	0	0	2,046,846	0	2,046,846	2,046,846
2011-2012	3,919,990	0	0	3,919,990	0	0	3,919,990	0	3,919,990	3,919,990
2012-2013	3,568,464	0	0	3,568,464	0	0	3,568,464	0	3,568,464	3,568,464
2013-2014	6,969,125	0	0	6,969,125	0	3,900,000	3,069,125	3,900,000	6,969,125	6,969,125
2014-2015	5,429,951	0	0	5,429,951	0	524,140	4,905,812	524,140	5,429,951	5,429,951
2015-2016	4,828,007	0	0	4,828,007	0	1,400,000	3,428,007	1,400,000	4,828,007	4,828,007
2016-2017	9,062,330	0	0	9,062,330	0	3,323,377	5,738,952	3,323,377	9,062,330	9,062,330
2017-2018	869,823	0	0	869,823	0	0	869,823	0	869,823	869,823
2018-2019	1,113,914	0	0	1,113,914	0	0	1,113,914	0	1,113,914	1,113,914
2019-2020	750,865	0	0	750,865	0	0	750,865	0	750,865	750,865
2020-2021	6,539,097	0	0	6,539,097	0	1,399,175	5,139,922	1,399,175	6,539,097	6,539,097
2021-2022	514,833	0	0	514,833	0	0	514,833	0	514,833	514,833
2022-2023	18,759	0	0	18,759	0	0	18,759	0	18,759	18,759
2023-2024	0	0	0	0	0	0	0	0	0	0
Total	\$112,556,667	-\$34,120	\$0	\$112,522,547	\$0	\$26,015,878	\$86,506,669	\$26,015,878	\$112,522,547	\$112,522,547

#### Notes:

(A) Years are 7/1 to 6/30.(B) Provided by the Authority.

(C) Adjustments to Accounting

(D)
(E) (B) + (C) - (D).
(F) Sum of paid losses in excess of SIR.

(G) Sum of paid losses in excess of \$1,000,000.

- (G) Sum of particular (G) (G) (G) (G).
  (H) (G) (F).
  (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See Reserve Appendix J.

#### Case Reserves as of 12/31/23

										Reserves
		Additions	Subtractions			Reserves	Reserves	Reserves	Reserves	Capped at
Accident	Unlimited	to	from	Adjusted	Reserves	Over	Capped at	\$1,000,000	Capped at	SIR &
Year	Reserves	Losses	Losses	Reserves	Over SIR	\$1,000,000	\$1,000,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
1986-2003	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2003-2004	0	0	0	0	0	0	0	0	0	0
2004-2005	0	0	0	0	0	0	0	0	0	0
2005-2006	0	0	0	0	0	0	0	0	0	0
2006-2007	0	0	0	0	0	0	0	0	0	0
2007-2008	0	0	0	0	0	0	0	0	0	0
2008-2009	0	0	0	0	0	0	0	0	0	0
2009-2010	0	0	0	0	0	0	0	0	0	0
2010-2011	0	0	0	0	0	0	0	0	0	0
2011-2012	0	0	0	0	0	0	0	0	0	0
2012-2013	494,974	0	0	494,974	0	0	494,974	0	494,974	494,974
2013-2014	0	0	0	0	0	0	0	0	0	0
2014-2015	0	0	0	0	0	0	0	0	0	0
2015-2016	14,907	0	0	14,907	0	0	14,907	0	14,907	14,907
2016-2017	37,136	0	0	37,136	0	0	37,136	0	37,136	37,136
2017-2018	0	0	0	0	0	0	0	0	0	0
2018-2019	145,256	0	0	145,256	0	0	145,256	0	145,256	145,256
2019-2020	1,643,457	0	0	1,643,457	0	0	1,643,457	0	1,643,457	1,643,457
2020-2021	2,800,879	0	0	2,800,879	0	13,000	2,787,879	13,000	2,800,879	2,800,879
2021-2022	3,632,749	0	0	3,632,749	0	0	3,632,749	0	3,632,749	3,632,749
2022-2023	3,849,263	0	0	3,849,263	0	0	3,849,263	0	3,849,263	3,849,263
2023-2024	172,310	0	0	172,310	0	0	172,310	0	172,310	172,310
Total	\$12,790,931	\$0	\$0	\$12,790,931	\$0	\$13,000	\$12,777,931	\$13,000	\$12,790,931	\$12,790,931

#### Notes:

(A) Years are 7/1 to 6/30.

(B) Reserve Appendix L, Page 1, Column (B) - Reserve Appendix L, Page 2, Column (B).

(C) Reserve Appendix L, Page 1, Column (C) - Reserve Appendix L, Page 2, Column (C).

(D) Reserve Appendix L, Page 1, Column (D) - Reserve Appendix L, 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 \$1,000,000.
- (H) (E) (G).
- (I) (G) (F).
- (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See Reserve Appendix J.

#### Claim Counts as of 12/31/23

Accident Year (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 Claims (J)	Adjusted Open Claims (K)
1986-2003	220	0	0	220	220	0	0	220	0	0
2003-2004	20	0	0	20	20	0	0	20	0	0
2004-2005	9	0	0	9	9	0	0	9	0	0
2005-2006	16	0	0	16	16	0	0	16	0	0
2006-2007	14	0	0	14	14	0	0	14	0	0
2007-2008	24	0	0	24	24	0	0	24	0	0
2008-2009	17	0	0	17	17	0	0	17	0	0
2009-2010	20	0	0	20	20	0	0	20	0	0
2010-2011	13	0	0	13	13	0	0	13	0	0
2011-2012	20	0	0	20	20	0	0	20	0	0
2012-2013	21	0	0	21	20	0	0	20	1	1
2013-2014	15	0	0	15	15	0	0	15	0	0
2014-2015	18	0	0	18	18	0	0	18	0	0
2015-2016	20	0	0	20	19	0	0	19	1	1
2016-2017	20	0	0	20	18	0	0	18	2	2
2017-2018	7	0	0	7	7	0	0	7	0	0
2018-2019	9	0	0	9	7	0	0	7	2	2
2019-2020	14	0	0	14	5	0	0	5	9	9
2020-2021	26	0	0	26	13	0	0	13	13	13
2021-2022	23	0	0	23	1	0	0	1	22	22
2022-2023	32	0	0	32	0	0	0	0	32	32
2023-2024	3	0	0	3	0	0	0	0	3	3
Total	581	0	0	581	496	0	0	496	85	85

#### Notes:

(A) Years are 7/1 to 6/30.
(B) Provided by the Authority.
(C)
(D)
(E) (B) + (C) - (D).
(F) Provided by the Authority.
(G)
(H)
(I) (E) + (G) - (H)

(I) (F) + (G) - (H).(J) (B) - (F).(K) (E) - (I).

### Exposure Measures

Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
3,596,411	1.638	5,890,921
4,209,065	1.598	6,726,086
4,298,659	1.559	6,701,609
4,504,261	1.521	6,850,981
4,769,732	1.484	7,078,282
4,929,016	1.448	7,137,215
4,760,313	1.413	6,726,322
4,393,012	1.379	6,057,964
3,754,382	1.345	5,049,644
3,668,540	1.312	4,813,124
3,643,764	1.280	4,664,018
3,788,358	1.249	4,731,659
3,697,212	1.219	4,506,901
3,936,364	1.189	4,680,337
4,135,396	1.160	4,797,059
4,265,647	1.132	4,828,712
4,202,976	1.104	4,640,086
4,343,082	1.077	4,677,499
4,640,638	1.051	4,877,311
4,955,641	1.025	5,079,532
5,168,687	1.000	5,168,687
5,323,749	1.000	5,323,749
	Payroll (\$00) (A) 3,596,411 4,209,065 4,298,659 4,504,261 4,769,732 4,929,016 4,760,313 4,393,012 3,754,382 3,668,540 3,643,764 3,788,358 3,697,212 3,936,364 4,135,396 4,265,647 4,202,976 4,343,082 4,640,638 4,955,641 5,168,687	PayrollTrend ( $\$00$ )Factor (A)3,596,4111.6384,209,0651.5984,298,6591.5594,504,2611.5214,769,7321.4844,929,0161.4484,760,3131.4134,393,0121.3793,754,3821.3453,668,5401.3123,643,7641.2803,788,3581.2493,697,2121.2193,936,3641.1894,135,3961.1604,265,6471.1324,202,9761.1044,343,0821.0774,640,6381.0514,955,6411.0255,168,6871.000

- Notes:
- (A)
- Provided by the Authority. Based on industry factors.
- (B) (C) (A) x (B).



# Actuarial Review of the Self-Insured Property Program

Forecast for Program Year 2024-25

Presented to **PLAN JPA** 

March 11, 2024 - DRAFT

DRAFT



March 11, 2024

Pooled Liability Assurance Network Joint Powers Authority Attn: Eric Dahlen 1750 Creekside Oaks Drive, Suite 200 Sacramento, CA 95833

Re: Actuarial Review of the Self-Insured Property Program

Dear Mr. Dahlen:

As you requested, we have completed our review of the Authority's self-insured property program (the PLAN JPA). Assuming a pool retention of \$500,000 and a member deductible of \$5,000, we estimate the ultimate cost of claims and expenses for claims incurred during the 2024-25 program year to be \$1,650,000 including allocated loss adjustment expenses (ALAE) and a discount for anticipated investment income. ALAE is basically the direct cost associated with the defense of individual claims. The discount for investment income is calculated based on the likely payout pattern of your claims, assuming a 2.0% return on investments per year. For budgeting purposes, the expected cost of 2024-25 claims translates to a rate of \$0.044 per \$100 TIV.

The table below shows funding recommendations for the 2024-25 fiscal year.

# PLAN JPA Self-Insured Property Program Loss and ALAE Funding Guidelines for 2024-25 Pool Retention of \$500,000, Member Deductible of \$5,000

		Marginally	Rec			
	Expected	Acceptable 70% CL	Low 75% CL	Target 80% CL	High 85% CL	Conservative 90% CL
Loss and ALAE	\$1,694,000					
Investment Income Offset	(44,000)					
Discounted Loss and ALAE	\$1,650,000	\$1,955,000	\$2,105,000	\$2,282,000	\$2,505,000	\$2,802,000
Excess Insurance	10,856,000	10,856,000	10,856,000	10,856,000	10,856,000	10,856,000
Total Funding	\$12,506,000	\$12,811,000	\$12,961,000	\$13,138,000	\$13,361,000	\$13,658,000
Rate per \$100 of 2024-25 TIV	\$0.330	\$0.338	\$0.342	\$0.347	\$0.352	\$0.360

# DRAFT

We generally recommend that risk pools fund for <u>future costs</u> between the <u>75% and 85%</u> <u>confidence levels</u>.

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 PLAN JPA's internal use. It is not intended for general circulation.

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

Sincerely,

**Bickmore Actuarial** 

# DRAFT

Becky Richard, ACAS, MAAA Partner

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# I. BACKGROUND

PLAN JPA began its self-insured property and liability program in 1986.

For many years the property program had very low pool retentions with most property exposure being insured by external insurance carriers.

Effective July 1, 2017, the property pool retention became \$225K per occurrence, subject to a \$1M annual aggregate. Once the annual aggregate was met, the pool retention decreased to a \$10K maintenance deductible per occurrence.

Effective July 1, 2021, the property pool retention increased to \$500K per occurrence, with no annual aggregate.

PLAN JPA purchases excess insurance up to \$1 billion per occurrence.

PLAN Members have a \$5,000 deductible per occurrence.

The purpose of this review is to provide a guide to PLAN JPA to determine reasonable funding levels for its self-insurance program according to the funding policy PLAN JPA has adopted to comply with Governmental Accounting Standards Board Statements #10. The specific objectives of the study are to estimate PLAN JPA's ultimate loss cost for 2024-25 and provide funding guidelines to meet these future costs.

# **II. CONCLUSIONS AND RECOMMENDATIONS**

# A. COSTS OF 2024-25 CLAIMS

The following chart shows our funding recommendations for the PLAN JPA property program for the 2024-25 fiscal year assuming a \$500K pool retention and member deductibles of \$5,000.

# PLAN JPA Self-Insured Property Program Loss and ALAE Funding Guidelines for 2024-25 Pool Retention of \$500,000, Member Deductible of \$5,000

		Marginally	Reco			
	Expected	Acceptable 70% CL	Low 75% CL	Target 80% CL	High 85% CL	Conservative 90% CL
Loss and ALAE	\$1,694,000					
Investment Income Offset	(44,000)					
Discounted Loss and ALAE	\$1,650,000	\$1,955,000	\$2,105,000	\$2,282,000	\$2,505,000	\$2,802,000
Excess Insurance	10,856,000	10,856,000	10,856,000	10,856,000	10,856,000	10,856,000
Total Funding	\$12,506,000	\$12,811,000	\$12,961,000	\$13,138,000	\$13,361,000	\$13,658,000
Rate per \$100 of 2024-25 TIV	\$0.330	\$0.338	\$0.342	\$0.347	\$0.352	\$0.360

The funding recommendations above are for losses and allocated loss adjustment expense only. They do not include any provision for claims administration, excess insurance, loss control, overhead, 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 Statement #10.

GASB #10 does not address funding requirements. It does, however, allow a range of funded amounts to be recognized for accounting purposes, specifically GASB #10 allows recognition of a funding margin for unexpectedly adverse loss experience.

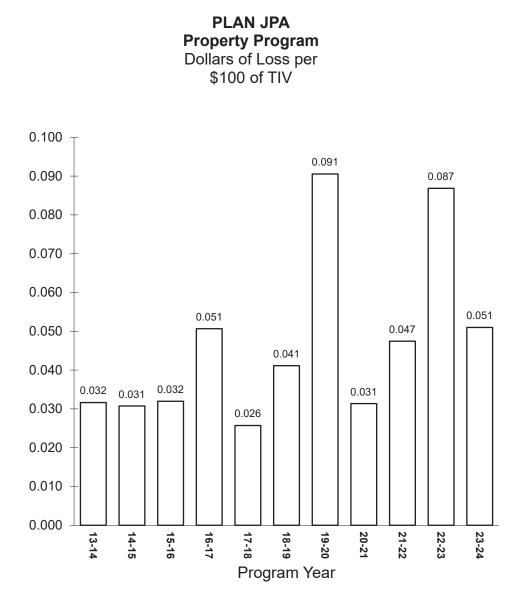
The amount of such a margin should be a question of long-term funding policy. We recommend that the margin be determined by thinking in terms of the probability that a given level of funding will prove to be adequate. If you elect to fund at a low confidence level, the chances are much greater that future events will prove that additional contributions should have been made for current claims.

We generally recommend that risk pools <u>maintain assets for historical liabilities</u> at no less than the <u>90% confidence level</u>, after recognition of investment income. The resulting risk margin is reasonably high that resulting funding should be sufficient to meet claim liabilities, yet the risk margin is not so large that they will cause most self-insured entities to experience undue financial hardship.

We generally recommend that risk pools fund for <u>future costs</u> between the <u>75%</u> <u>and 85% confidence levels</u>. The confidence level to which any future year is funded should be evaluated in light of the relative certainty of the assumptions underlying the actuarial analysis, PLAN JPA'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.

# C. HISTORICAL TRENDS

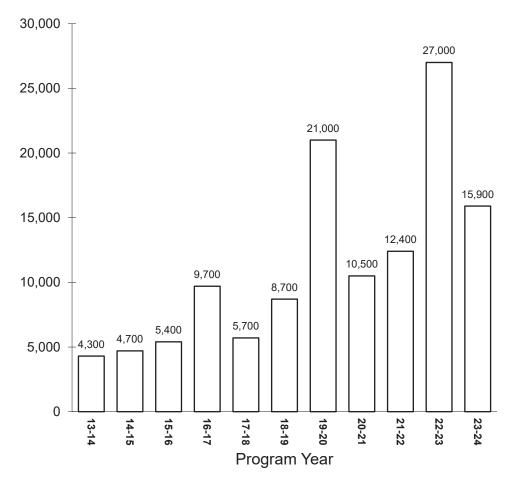
PLAN JPA's \$500K loss rate (dollars of loss per \$100 of TIV) has remained relatively stable over the past eight years, with the exceptions of 2019-20 and 2022-23. The projected 2023-24 loss rate of \$0.051 is based on the most recent eight years.



Loss Rate

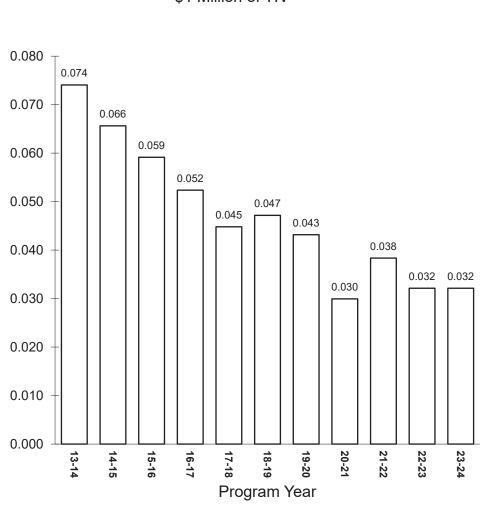
The program's cost per claim (limited to \$500,000) has generally increased since 2013-14. The projected 2023-24 severity of \$15,900 is based on this increasing trend.





Severity

PLAN JPA's claims frequency per \$1 million of TIV has generally decreased over the past ten years. The projected 2023-24 frequency of 0.032 is based on the decreasing trend.



PLAN JPA Property Program Number of Claims per \$1 Million of TIV

Frequency

# D. COMPARISON WITH OUR PREVIOUS RESULTS

The prior report for the Authority was dated March 13, 2023. In the table below we display actual versus expected development of incurred losses and ALAE by accident year between the December 31, 2022 evaluation date of the prior report and the December 31, 2023 evaluation date of the current report.

Accident Year	Expected Incurred Development	Actual Incurred Development	Actual Minus Expected
Prior	\$0	\$0	\$0
2016-17	3,000	(5,000)	(8,000)
2017-18	0	0	0
2018-19	5,000	0	(5,000)
2019-20	27,000	(23,000)	(50,000)
2020-21	15,000	(20,000)	(35,000)
2021-22	99,000	(241,000)	(340,000)
2022-23	971,000	2,397,000	1,426,000
Total	\$1,120,000	\$2,108,000	\$988,000

# Actual Versus Expected Incurred Loss and ALAE Development

As shown, actual incurred development was more than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that incurred losses through accident year 2022-23 would increase by \$1,120,000 between the two evaluation dates. However, actual development was approximately \$2,108,000; or about \$988,000 more than expected.

In the table below we display actual versus expected development of paid losses and ALAE by accident year between the December 31, 2022 evaluation date of the prior report and the December 31, 2023 evaluation date of the current report.

Accident Year	Expected Paid Development	Actual Paid Development	Actual Minus Expected
Prior	\$13,000	\$43,000	\$30,000
2016-17	174,000	495,000	321,000
2017-18	0	0	0
2018-19	4,000	0	(4,000)
2019-20	61,000	58,000	(3,000)
2020-21	79,000	169,000	90,000
2021-22	629,000	753,000	124,000
2022-23	805,000	767,000	(38,000)
Total	\$1,765,000	\$2,285,000	\$520,000

## Actual Versus Expected Paid Loss and ALAE Development

As shown, actual paid development was more than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that paid losses through accident year 2021-22 would increase by \$1,765,000 between the two evaluation dates. However, actual development was approximately \$2,285,000; or about \$520,000 more than expected.

In the table below we display the change in our estimates of the program's ultimate losses and ALAE by accident year since our prior report.

Accident			
Year	Prior Report	Current Report	Change
Prior	\$0	\$0	\$0
2012-13	1,212,000	1,212,000	\$0
2013-14	769,000	769,000	0
2014-15	768,000	768,000	0
2015-16	730,000	730,000	0
2016-17	1,188,000	1,180,000	(8,000)
2017-18	620,000	620,000	0
2018-19	1,039,000	1,029,000	(10,000)
2019-20	2,450,000	2,412,000	(38,000)
2020-21	884,000	859,000	(25,000)
2021-22	1,654,000	1,348,000	(306,000)
2022-23	1,503,000	2,838,000	1,335,000
Total	\$12,817,000	\$13,765,000	\$948,000

# Change in Loss and ALAE Ultimate Losses

As shown, overall we have increased our estimated ultimate losses by \$948,000 since our prior report. The changes in our estimates of ultimate losses take into account both the incurred and paid development listed on the previous two pages.

At the time of the prior report, our funding estimate for the 2023-24 year was \$1,373,000 at the discounted, expected level. That amount included allocated loss adjustment expenses (ALAE), and a discount for anticipated investment income, but <u>excluded</u> unallocated loss adjustment expenses (ULAE). Our current estimate for the 2024-25 year is \$1,650,000 at the discounted, expected level, an increase in the program's expected loss costs, as shown in the table below:

# Comparison of Funding for Loss and ALAE

	Prior Report 2023-24 Deductible = \$500,000	Current Report 2024-25 Deductible = \$500,000	Change
(A) Ultimate Loss and ALAE:	\$1,399,000	\$1,694,000	\$295,000
(B) Offset for Investment Income:	(26,000)	(44,000)	(18,000)
(C) Total Recommended Funding:	1,373,000	\$1,650,000	\$277,000
(D) Funding per \$100 of TIV:	\$0.0388	\$0.0440	\$0.0052

As you can see, our funding recommendations at the discounted, expected level have increased between 2023-24 and 2024-25, as shown in our prior and current reports respectively.

Our estimates of ultimate loss and ALAE have increased by \$295,000 primarily due to an increase in our projected rate and increased exposures in TIV. Investment income is expected to be higher. The net change due to the above factors is an overall increase of \$277,000 in our annual funding estimate for loss and ALAE.

We provide the following comparison of property premiums, which include ultimate loss and ALAE, discounted at 2.0%, at the 75% confidence level (prior report) and 80% confidence level (current report), excess insurance costs, and administration costs.

Member	2023-24 \$500K Actual Funding	2024-25 \$500K Proposed Funding	Dollar Change	Percent Change
American Canyon	\$271,292	\$324,825	\$53,534	19.7%
Atherton	180,256	245,775	65,519	36.3%
Benicia	770,239	1,017,340	247,101	32.1%
Burlingame	639,486	848,064	208,578	32.6%
Campbell	322,025	422,426	100,401	31.2%
Colma	92,265	107,752	15,486	16.8%
Cupertino	394,946	492,873	97,928	24.8%
Dublin	840,207	1,137,915	297,708	35.4%
East Palo Alto	100,328	117,633	17,304	17.2%
Foster City	511,493	662,081	150,588	29.4%
Half Moon Bay	103,777	134,342	30,565	29.5%
Hillsborough	265,511	338,202	72,690	27.4%
Los Altos Hills	59,468	68,850	9,382	15.8%
Los Gatos	231,605	283,783	52,178	22.5%
Millbrae	430,449	574,014	143,565	33.4%
Milpitas	768,670	966,568	197,898	25.7%
Morgan Hill	514,591	654,600	140,009	27.2%
Newark	527,570	689,207	161,636	30.6%
Pacifica	755,632	990,241	234,609	31.0%
Portola Valley	52,556	61,216	8,660	16.5%
Ross, Town of	26,721	23,863	-2,858	-10.7%
San Bruno	340,512	415,426	74,913	22.0%
San Carlos	233,434	332,350	98,916	42.4%
Saratoga	159,533	197,782	38,248	24.0%
South SF	1,305,752	1,738,311	432,559	33.1%
Suisun City	152,311	192,596	40,285	26.4%
Tiburon	53,350	58,551	5,201	9.7%
Woodside	38,440	41,903	3,463	9.0%
Total	\$10,142,419	\$13,138,488	\$2,996,070	29.5%

# E. DATA ISSUES

Overall, the data utilized in preparing this report appears to be accurate as of the date of the current evaluation. We received loss data evaluated as of December 31, 2023.

# **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 PLAN JPA. We have accepted all of this information without audit.
- We have also made use of loss statistics that have been developed from the information gathered and compiled from other California public entities with self-insured excess property program.
- We were not able to obtain sufficient historical data to produce PLAN JPA property specific loss development factors. As a result, we have had to rely, in part, on statistics and historic loss development patterns derived from the loss history of the other California public entities with self-insured excess property program. This increases the uncertainty associated with the conclusions of this report, in that any individual entities' experience can be significantly different from that of other California public entities with self-insured excess property programs.
- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial reviews of other California public entities.
- 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 cost of property 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 costs associated with property claims are increasing at 1.7% per year. We have assumed that the average claim size increases at 7.0% per year and that the average number of claims per \$1 million decreases at 5.0% per year.
- We have assumed that TIV increases 5% annually due to inflation.
- We have assumed that assets held for investment will generate an annual return of 2%.
- Our funding recommendations do not include provision for catastrophic events not in the PLAN JPA'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 PLAN JPA'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.)

**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 TIV.

**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 TIV.

**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 deductible 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.

**Deductible** - The level at which an excess insurance policy is triggered to begin payments on a claim.

**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.)

### PLAN JPA - Property

### Funding Options for Program Year 2024-2025 (Pool Layer: \$5,000 - \$500,000) One-Year Funding Plan

				Dollar Amount	TIV Rate	
(A)	Estimated Ultimate Losses Incurred in Accident Year 2024-2025: (From Not Included)			\$1,694,000	\$0.045	
(B)	Estimated Claims Administration Fees Incurred in Accident Year 2024-2025: (From Exhibit 3, Page 1, item (L))			0	0.000	
(C)	Total Claims Costs Incurred in Accident Year 2024-2025: ((A) + (B))			\$1,694,000	\$0.045	
(D)	Loss Discount Factor (Based on a Discount Rate of (Appendix F, , (G))	2.0%.):		0.974		
(E)	Discounted Total Claims Costs Incurred in Accident Year 2024-2025: ((C) x (D))			\$1,650,000	\$0.044	
		Marginally Acceptable		Recommended		Conservative
		70%	75%	80%	85%	90%
(F)	Confidence Level Factor: (From Appendix G)	1.185	1.276	1.383	1.518	1.698
(G)	Margin for Adverse Experience: ((E) x [(F) - 1])	305,000	455,000	632,000	855,000	1,152,000
(H)	Recommended Funding in 2024-2025 for Claims Costs: ((E) + (G))	\$1,955,000	\$2,105,000	\$2,282,000	\$2,505,000	\$2,802,000
(I)	Budgeted Program Costs: (Provided by the Pool)	10,856,000	10,856,000	10,856,000	10,856,000	10,856,000
(J)	Recommended Funding in 2024-2025 for Claims Costs, Other Expenses, and Non Claims Related Expenses: ((H) + (I))	\$12,811,000	\$12,961,000	\$13,138,000	\$13,361,000	\$13,658,000
(I)	Rate per \$100 of TIV: ((H) / \$37,906,257)	\$0.338	\$0.342	\$0.347	\$0.352	\$0.360

TIV rates are per hundred dollars of 2024-2025 TIV of \$3,790,625,700.

\$1,971,000

#### PLAN JPA - Property

#### Estimated Ultimate Program Losses

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Frequency- Severity Method (E)	Selected Estimate of Ultimate Losses (F)
2012-2013	1,211,570	1,216,416	1,211,570	1,216,942	1,359,306	1,211,570
2013-2014	768,874	772,718	768,874	773,230	866,700	768,874
2014-2015	768,041	773,417	768,041	774,159	869,364	768,041
2015-2016	729,738	737,765	729,738	738,309	789,615	729,738
2016-2017	1,181,560	1,199,266	1,181,433	1,197,224	1,040,538	1,180,380
2017-2018	621,123	634,140	621,281	635,262	711,720	619,883
2018-2019	1,035,311	1,064,127	1,037,123	1,073,064	1,407,032	1,029,136
2019-2020	2,411,864	2,478,019	2,400,557	2,424,553	1,474,185	2,412,000
2020-2021	859,056	907,450	875,490	955,634	1,130,780	859,000
2021-2022	1,342,696	1,244,235	1,354,212	1,285,538	1,615,053	1,348,000
2022-2023	3,320,071	1,665,311	3,004,048	1,701,414	1,673,280	2,838,000
Totals						\$13,764,622
		\$1,825,000				

Projected Losses for the Year 2023-2024 (G) Projected Losses for the Year 2024-2025 (H)

### Notes:

- (A) From Appendix A, Column (G).
- (B) From Appendix B, Column (G).
- (C) From Appendix C, Page 1, Column (G).
- (D) From Appendix C, Page 2, Column (G).
- (E) From Appendix D, Page 1, Column (C).
- (F) Selected averages of (A), (B), (C), (D), and (E).
- (G) From Exhibit 3, Page 1, Line (K).
- (H) From Exhibit 3, Page 1, Line (K).

This exhibit summarizes the results of the actuarial methods we have applied to estimate ultimate losses for each year. It is important to apply a number of estimation methods because each one relies on specific assumptions about the claims process that tend to hold generally true, but that may be violated in specific situations. Thus, the more estimation methods that can be applied, the better.

#### PLAN JPA - Property

#### Estimated Ultimate Limited Losses Capped at \$225,000 per Claim

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Frequency- Severity Method (E)	Selected Ultimate Limited Losses (F)
2012-2013	1,211,570	1,211,570	1,211,570	1,211,570	1,211,569	1,211,570
2013-2014	768,874	768,874	768,874	768,874	768,960	768,874
2014-2015	768,041	768,041	768,041	768,041	768,012	768,041
2015-2016	694,401	694,401	694,401	694,401	694,440	694,401
2016-2017	910,380	910,380	910,380	910,380	910,364	910,380
2017-2018	619,883	619,883	619,883	619,883	619,920	619,883
2018-2019	1,029,136	1,029,136	1,029,136	1,029,136	1,220,356	1,029,136
2019-2020	1,738,265	1,741,270	1,738,265	1,739,767	1,271,900	1,739,000
2020-2021	769,413	773,925	769,413	780,486	970,634	770,000
2021-2022	1,271,236	1,114,716	1,272,081	1,124,711	1,380,376	1,272,000
2022-2023	2,274,465	1,451,652	2,179,326	1,459,966	1,422,855	2,227,000
Totals						\$12,010,285

Projected Losses for the Year 2023-2024 (G) Projected Losses for the Year 2024-2025 (H)

# \$1,544,000

\$1,659	,000
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#### Notes:

- (A) From Appendix A, Column (D).
- (B) From Appendix B, 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

Accident Year	Ultimate Limited Losses (A)	Trend Factor (B)	Trended Limited Losses (C)	Trended TIV (\$00) (D)	Trended Limited Loss Rate (E)
2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022 2022-2023	$\begin{array}{c} 1,211,570\\768,874\\768,041\\694,401\\910,380\\619,883\\1,029,136\\1,739,000\\770,000\\1,272,000\\2,227,000\end{array}$	1.202 1.183 1.163 1.144 1.125 1.106 1.087 1.069 1.051 1.034 1.017	$1,456,307 \\909,578 \\893,232 \\794,395 \\1,024,178 \\685,591 \\1,118,671 \\1,858,991 \\809,270 \\1,315,248 \\2,264,859$	28,573,544 31,110,824 31,214,826 27,829,114 27,704,047 27,962,174 28,322,338 29,408,079 29,504,920 29,865,854 33,497,325	0.051 0.029 0.029 0.037 0.025 0.039 0.063 0.027 0.044 0.068
Totals 17/18-21/22 18/19-22/23	\$12,010,285 5,430,019 7,037,136		· · ·	324,993,045 145,063,365 150,598,516 ed Limited Rate: ior \$250K Rate:	\$0.040 0.040 0.049 \$0.043 \$0.039
Program Year: (G) Factor to SIR: (H) Trend Factor: (I) Program Rate: (J) Trended TIV (\$00): (K) Projected Program Losses: (L) Projected ULAE: (M) Projected Loss and ULAE:		2023-2024 1.182 1.000 \$0.051 35,785,144 1,825,000 0 \$1,825,000	2024-2025 1.188 1.017 \$0.052 37,906,257 1,971,000 0 \$1,971,000		
Member Ded 0 5,000 10,000 15,000 25,000	Ded Fact 1.00 0.86 0.75 0.68 0.57	2023-2024 Funding 1,825,000 1,568,000 1,377,000 1,238,000 1,043,000	2024-2025 Funding 1,971,000 1,694,000 1,487,000 1,337,000 1,127,000		

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

#### Notes:

- (A) From Exhibit 2, page 2, Column (F).
   For purposes of projecting future losses, losses are capped at \$225,000 per occurrence.
- (B) From Appendix E, Column (B).
- (C) (A) x (B).
- (D) From Appendix I, Column (C).
- (E) (C) / (D).
- (F) Selected based on (E).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) From Appendix E.
- (I) (F) x (G) x (H).
- (J) From Appendix I, Column (C).
- (K) (I) x (J).
- (L) Based on an estimated claim closing pattern and the Pool's historical claims administration expenses.
- (M) (K) + (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.

Accident Year (A)	Limited Reported Losses as of 12/31/23 (B)	Reported Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Reported Losses of 12/31/23 (E)	Reported Loss Development Factor (F)	Ultimate Program Losses (G)
2012-2013	1,211,570	1.000	1,211,570	1,211,570	1.000	1,211,570
2013-2014	768,874	1.000	768,874	768,874	1.000	768,874
2014-2015	768,041	1.000	768,041	768,041	1.000	768,041
2015-2016	694,401	1.000	694,401	729,738	1.000	729,738
2016-2017	910,380	1.000	910,380	1,180,380	1.001	1,181,560
2017-2018	619,883	1.000	619,883	619,883	1.002	621,123
2018-2019	1,029,136	1.000	1,029,136	1,029,136	1.006	1,035,311
2019-2020	1,738,265	1.000	1,738,265	2,383,265	1.012	2,411,864
2020-2021	769,413	1.000	769,413	835,658	1.028	859,056
2021-2022	1,253,684	1.014	1,271,236	1,253,684	1.071	1,342,696
2022-2023	2,003,934	1.135	2,274,465	2,653,934	1.251	3,320,071
Totals	\$11,767,581		\$12,055,664	\$13,434,163		\$14,249,904

#### Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Pool. These losses exclude amounts over \$225,000 per occurrence.
- (C) From Appendix A, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over \$225,000 per occurrence.
- (E) Losses capped at the Pool's SIR. Amounts are provided by the Pool.
- (F) Derived from factors on Appendix A, Page 3.
- (G) (E) x (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 Loss Development

	Limited			Program		
	Paid	Paid Loss	Ultimate	Paid	Paid Loss	Ultimate
Accident	Losses as	Development	Limited	Losses	Development	Program
Year	of 12/31/23	Factor	Losses	of 12/31/23	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(G)
2012-2013	1,211,570	1.000	1,211,570	1,211,570	1.004	1,216,416
2013-2014	768,874	1.000	768,874	768,874	1.005	772,718
2014-2015	768,041	1.000	768,041	768,041	1.007	773,417
2015-2016	694,401	1.000	694,401	729,738	1.011	737,765
2016-2017	910,380	1.000	910,380	1,180,380	1.016	1,199,266
2017-2018	619,883	1.000	619,883	619,883	1.023	634,140
2018-2019	1,029,136	1.000	1,029,136	1,029,136	1.034	1,064,127
2019-2020	1,736,062	1.003	1,741,270	2,351,062	1.054	2,478,019
2020-2021	763,993	1.013	773,925	830,238	1.093	907,450
2021-2022	1,061,634	1.050	1,114,716	1,061,634	1.172	1,244,235
2022-2023	879,256	1.651	1,451,652	879,256	1.894	1,665,311
Totals	\$10,443,230		\$11,083,848	\$11,429,812		\$12,692,864

#### Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Pool. These losses exclude amounts over \$225,000 per occurrence.
- (C) From Appendix B, Page 2.
- (D) (B) x (C). These estimated losses exclude amounts over \$225,000 per occurrence.
- (E) Losses capped at the Pool's SIR. Amounts are provided by the Pool.
- (F) Derived from factors on Appendix B, Page 3.
- (G) (E) x (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 TIV (\$00) (A)	Reported Losses as of 12/31/23 (B)	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	28,573,544	1,211,570	1.000	0.000	0.047	0	1,211,570
2013-2014	31,110,824	768,874	1.000	0.000	0.028	0	768,874
2014-2015	31,214,826	768,041	1.000	0.000	0.028	0	768,041
2015-2016	27,829,114	729,738	1.000	0.000	0.028	0	729,738
2016-2017	27,704,047	1,180,380	1.001	0.001	0.038	1,053	1,181,433
2017-2018	27,962,174	619,883	1.002	0.002	0.025	1,398	621,281
2018-2019	28,322,338	1,029,136	1.006	0.006	0.047	7,987	1,037,123
2019-2020	29,408,079	2,383,265	1.012	0.012	0.049	17,292	2,400,557
2020-2021	29,504,920	835,658	1.028	0.027	0.050	39,832	875,490
2021-2022	29,865,854	1,253,684	1.071	0.066	0.051	100,528	1,354,212
2022-2023	33,497,325	2,653,934	1.251	0.201	0.052	350,114	3,004,048
Totals	324,993,045	\$13,434,163				\$518,204	\$13,952,367

#### Notes:

- (A) From Appendix I, Column (C).
- (B) Provided by the Pool. These losses exclude amounts incurred above the Pool's SIR for each year.
   (C) From Amoundum A Column (C)
- (C) From Appendix A, Column (F).
- (D) 1 1/(C).
- (E) From Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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

				Percentage			
	Trended	Paid	Loss	of Losses		Incurred	Ultimate
Accident	TIV	Losses as	Development	Yet to Be	Program	but not	Program
Year	(\$00)	of 12/31/23	Factor	Paid	Rate	Paid	Losses
	(A)	(B)	(C)	(D)	(E)	(F)	(G)
2012-2013	28,573,544	1,211,570	1.004	0.004	0.047	5,372	1,216,942
2013-2014	31,110,824	768,874	1.005	0.005	0.028	4,356	773,230
2014-2015	31,214,826	768,041	1.007	0.007	0.028	6,118	774,159
2015-2016	27,829,114	729,738	1.011	0.011	0.028	8,571	738,309
2016-2017	27,704,047	1,180,380	1.016	0.016	0.038	16,844	1,197,224
2017-2018	27,962,174	619,883	1.023	0.022	0.025	15,379	635,262
2018-2019	28,322,338	1,029,136	1.034	0.033	0.047	43,928	1,073,064
2019-2020	29,408,079	2,351,062	1.054	0.051	0.049	73,491	2,424,553
2020-2021	29,504,920	830,238	1.093	0.085	0.050	125,396	955,634
2021-2022	29,865,854	1,061,634	1.172	0.147	0.051	223,904	1,285,538
2022-2023	33,497,325	879,256	1.894	0.472	0.052	822,158	1,701,414
Totals	324,993,045	\$11,429,812				\$1,345,517	\$12,775,329

#### Notes:

- (A) From Appendix I, Column (C).
- (B) Provided by the Pool. These losses exclude amounts paid above the Pool's SIR for each year.

(C) From Appendix B, Column (F).

- (D) 1 1/(C).
- (E) From Appendix C, Page 3, Column (H).
- (F) (A) x (D) x (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 Year	Trended TIV (\$00) (A)	Ultimate Limited Losses (B)	Trend Factor (C)	Trended Limited Losses (D)	Trended Limited Loss Rate (E)	Limited Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
2012-2013	28,573,544	1,211,570	1.202	1,456,307	0.051	0.042	1.122	0.047
2013-2014	31,110,824	768,874	1.183	909,578	0.029	0.025	1.127	0.028
2014-2015	31,214,826	768,041	1.163	893,232	0.029	0.025	1.132	0.028
2015-2016	27,829,114	694,401	1.144	794,395	0.029	0.025	1.137	0.028
2016-2017	27,704,047	910,380	1.125	1,024,178	0.037	0.033	1.143	0.038
2017-2018	27,962,174	619,883	1.106	685,591	0.025	0.022	1.148	0.025
2018-2019	28,322,338	1,029,136	1.087	1,118,671	0.039	0.041	1.153	0.047
2019-2020	29,408,079	1,739,000	1.069	1,858,991	0.063	0.042	1.159	0.049
2020-2021	29,504,920	770,000	1.051	809,270	0.027	0.043	1.165	0.050
2021-2022	29,865,854	1,271,000	1.034	1,314,214	0.044	0.044	1.170	0.051
2022-2023	33,497,325	2,274,000	1.017	2,312,658	0.069	0.044	1.176	0.052
Total/Avg	324,993,045	\$12,056,285		\$13,177,085	\$0.041			
17/18-21/22	145,063,365	5,429,019		5,786,737	0.040			
18/19-22/23	150,598,516	7,083,136		7,413,804	0.049			
			Selecte	ed Limited Rate:	\$0.045			
				Prior:	\$0.040			

#### Notes:

- (A) From Appendix I, Column (C).
- (B) Selected average of results from Appendices A and B.
- (C) From Appendix E, Column (B).
- (D) (B) x (C).
- (E) (D) / (A).
- (F) Selected Limited Rate / (C). For 2017-2018 and prior (B) / (A).
- (G) Based on a Burr distribution, a mathematical model
- of claim sizes.
- (H) (F) x (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 Year	Ultimate Program Severity (A)	Adjusted Ultimate Claims (B)	Ultimate Program Losses (C)
2012-2013	8,658	157	1,359,306
2013-2014	4,815	180	866,700
2014-2015	5,301	164	869,364
2015-2016	5,849	135	789,615
2016-2017	8,529	122	1,040,538
2017-2018	6,590	108	711,720
2018-2019	11,924	118	1,407,032
2019-2020	12,819	115	1,474,185
2020-2021	13,790	82	1,130,780
2021-2022	14,817	109	1,615,053
2022-2023	15,936	105	1,673,280
Total		1,395	\$12,937,573

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 Limited Losses (A)	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)
2012-2013	1,211,570	157	7,717	2.105	16,244	7,717	1.122	8,658
2013-2014	768,874	180	4,272	1.967	8,403	4,272	1.127	4,815
2014-2015	768,041	164	4,683	1.838	8,607	4,683	1.132	5,301
2015-2016	694,401	135	5,144	1.718	8,837	5,144	1.137	5,849
2016-2017	910,380	122	7,462	1.606	11,984	7,462	1.143	8,529
2017-2018	619,883	108	5,740	1.500	8,610	5,740	1.148	6,590
2018-2019	1,029,136	118	8,721	1.402	12,227	10,342	1.153	11,924
2019-2020	1,739,000	115	15,122	1.311	19,825	11,060	1.159	12,819
2020-2021	770,000	82	9,390	1.225	11,503	11,837	1.165	13,790
2021-2022	1,272,000	109	11,670	1.145	13,362	12,664	1.170	14,817
2022-2023	2,227,000	105	21,210	1.070	22,695	13,551	1.176	15,936

Average Limited Severity:	\$12,936
Average 17/18-21/22 Limited Severity:	13,105
Average 18/19-22/23 Limited Severity:	15,922
Selected Limited Severity:	\$14,500

Prior: \$12,400

Notes:

- (A) Selected average of results from Appendices A, B, and C.
- (B) Appendix D, Page 3, Column (C).
- (C) (A) / (B).
- (D) From Appendix E, Column (J).
- (E) (C) x (D).
- (F) Selected Limited Severity / (D).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) (F) x (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 TIV (\$000,000) (D)	Claim Frequency (E)	Trend Factor (F)	Trended Claim Frequency (G)
2012-2013	157	159	157	2,857.4	0.055	0.569	0.031
2013-2014	180	182	180	3,111.1	0.058	0.599	0.035
2014-2015	164	166	164	3,121.5	0.053	0.631	0.033
2015-2016	135	137	135	2,782.9	0.049	0.663	0.032
2016-2017	122	124	122	2,770.4	0.044	0.698	0.031
2017-2018	108	110	108	2,796.2	0.039	0.734	0.029
2018-2019	118	122	118	2,832.2	0.042	0.773	0.032
2019-2020	115	117	115	2,940.8	0.039	0.814	0.032
2020-2021	82	88	82	2,950.5	0.028	0.857	0.024
2021-2022	109	122	109	2,986.6	0.036	0.902	0.032
2022-2023	105	121	105	3,349.7	0.031	0.950	0.029
Total	1,395	1,448	1,395	32,499.3			0.031
17/18-21/22	532	559	532	14,506.3			0.030
					(H) Selec	ted Frequency: Prior:	0.032 0.035

	Program Year:	2023-2024	2024-2025
(I)	Trend Factor:	1.000	0.950
(J)	Selected Frequency:	0.032	0.030
(K)	Est. TIV (\$000,000):	3,578.5	3,790.6
(L)	Ultimate Claims:	115	114

#### Notes:

(A)	From	Apper	ndix	D,	Page	4,	(C).

- (B) From Appendix D, Page 5, (C).
- (C) Selected from (A) and (B).
- (D) From Appendix I, Column (C) / 10,000.

(E) (C) / (D).

(F) From Appendix E, Column (H).

(G) (E) x (F).

- (H) The selected frequency of .032 is based on (G).
- (I) From Appendix E, Column (H).

(J) (H) x (I).

(K) From Appendix I, Column (C) / 10,000.

(L) (J) x (K).

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

#### Frequency and Severity Method Reported Claim Count Development

Accident Year	Claims Reported as of 12/31/2023 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2012-2013	157	1.000	157	0.031
2013-2014	180	1.000	180	0.035
2014-2015	164	1.000	164	0.033
2015-2016	135	1.000	135	0.032
2016-2017	122	1.000	122	0.031
2017-2018	108	1.000	108	0.028
2018-2019	118	1.000	118	0.032
2019-2020	115	1.000	115	0.032
2020-2021	82	1.000	82	0.024
2021-2022	108	1.008	109	0.033
2022-2023	97	1.082	105	0.030
Total	1,386		1,395	0.031

#### Notes:

(A) Provided by the Pool.

(B) From Appendix D, Page 6.

(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 reported claims as provided by the Pool. 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.

#### Frequency and Severity Method Closed Claim Count Development

Accident Year	Claims Closed as of 12/31/2023 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2012-2013	157	1.010	159	0.032
2013-2014	180	1.011	182	0.035
2014-2015	164	1.012	166	0.034
2015-2016	135	1.013	137	0.033
2016-2017	122	1.016	124	0.031
2017-2018	108	1.022	110	0.029
2018-2019	118	1.031	122	0.033
2019-2020	112	1.044	117	0.032
2020-2021	80	1.098	88	0.026
2021-2022	96	1.269	122	0.037
2022-2023	63	1.923	121	0.034
Total	1,335		1,448	0.032

#### Notes:

(A) Provided by the Pool.

(B) From Appendix D, Page 7.

(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 Pool. 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

Accident Year	Benefit Level Factor (A)	Factor to 2023-2024 Loss Rate Level (B)	Factor to 2024-2025 Loss Rate Level (C)	Factor to 2025-2026 Loss Rate Level (D)	Factor to 2026-2027 Loss Rate Level (E)	Factor to 2023-2024 Frequency Level (F)	Factor to 2024-2025 Frequency Level (G)	Factor to 2025-2026 Frequency Level (H)	Factor to 2026-2027 Frequency Level (I)	Factor to 2023-2024 Severity Level (J)
2002-2003	1.000	1.424	1.449	1.473	1.498	0.341	0.324	0.308	0.293	4.142
2003-2004	1.000	1.400	1.425	1.448	1.473	0.359	0.341	0.324	0.308	3.871
2004-2005	1.000	1.376	1.400	1.424	1.448	0.378	0.359	0.341	0.324	3.618
2005-2006	1.000	1.354	1.377	1.400	1.424	0.397	0.378	0.359	0.341	3.381
2006-2007	1.000	1.331	1.354	1.377	1.400	0.418	0.398	0.378	0.359	3.160
2007-2008	1.000	1.309	1.332	1.354	1.377	0.441	0.419	0.398	0.378	2.953
2008-2009	1.000	1.287	1.309	1.331	1.354	0.464	0.441	0.419	0.398	2.760
2009-2010	1.000	1.265	1.287	1.309	1.331	0.488	0.464	0.441	0.419	2.580
2010-2011	1.000	1.244	1.266	1.287	1.309	0.514	0.488	0.464	0.441	2.411
2011-2012	1.000	1.223	1.245	1.265	1.287	0.541	0.514	0.488	0.464	2.253
2012-2013	1.000	1.202	1.223	1.244	1.265	0.569	0.540	0.514	0.488	2.105
2013-2014	1.000	1.183	1.203	1.223	1.244	0.599	0.569	0.541	0.514	1.967
2014-2015	1.000	1.163	1.183	1.203	1.223	0.631	0.599	0.569	0.541	1.838
2015-2016	1.000	1.144	1.163	1.183	1.203	0.663	0.630	0.599	0.569	1.718
2016-2017	1.000	1.125	1.144	1.163	1.183	0.698	0.663	0.631	0.599	1.606
2017-2018	1.000	1.106	1.125	1.144	1.163	0.734	0.698	0.663	0.630	1.500
2018-2019	1.000	1.087	1.106	1.125	1.144	0.773	0.734	0.698	0.663	1.402
2019-2020	1.000	1.069	1.088	1.106	1.125	0.814	0.773	0.735	0.698	1.311
2020-2021	1.000	1.051	1.070	1.088	1.106	0.857	0.814	0.774	0.735	1.225
2021-2022	1.000	1.034	1.052	1.070	1.088	0.902	0.857	0.815	0.774	1.145
2022-2023	1.000	1.017	1.035	1.052	1.070	0.950	0.903	0.858	0.815	1.070
2023-2024	1.000	1.000	1.017	1.034	1.052	1.000	0.950	0.903	0.858	1.000
2024-2025	1.000		1.000	1.017	1.034		1.000	0.951	0.903	
2025-2026	1.000			1.000	1.017			1.000	0.950	
2026-2027	1.000				1.000				1.000	

Notes:

No benefit level adjustment applied. (A)

(A) adjusted for a 1.7% annual loss rate trend.(A) adjusted for a -5.0% annual frequency trend. (B) - (E)

(F) - (I)

(A) adjusted for a 7.0% annual severity trend. (J)

> 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.

Calculation of Discount Factors

Payment	Payment	Return on	Discounted	Undiscounted	Discount
Year	Pattern	Investment	Reserves	Reserves	Factor
(A)	(B)	(C)	(D)	(E)	(F)
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
20 19	0.0%				
		2.0%	0.000	0.000	1.000
18	0.1%	2.0%	0.001	0.001	0.990
17	0.0%	2.0%	0.001	0.001	0.971
16	0.1%	2.0%	0.002	0.002	0.971
15	0.1%	2.0%	0.003	0.003	0.965
14	0.1%	2.0%	0.004	0.004	0.957
13	0.1%	2.0%	0.005	0.005	0.948
12	0.1%	2.0%	0.006	0.006	0.940
11	0.2%	2.0%	0.007	0.008	0.938
10	0.4%	2.0%	0.011	0.012	0.943
9	0.5%	2.0%	0.016	0.017	0.944
8	0.7%	2.0%	0.022	0.023	0.944
7	0.9%	2.0%	0.031	0.033	0.944
6	1.6%	2.0%	0.046	0.049	0.946
5	2.7%	2.0%	0.072	0.076	0.950
4	4.9%	2.0%	0.119	0.125	0.955
3	19.1%	2.0%	0.307	0.316	0.969
2	35.9%	2.0%	0.657	0.676	0.971
1	32.4%	2.0%	0.964	1.000	0.964
	02.770	2.070	0.004	1.000	0.004
		(G) Discount Factor	for Future Funding:	2023-2024	0.974
		. ,	0	2024-2025	0.974

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, 65.7% = [30.7% / 1.020] + [35.9% / (1.010)].
- (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 0.97, on a discounted basis, 0.97 must be budgeted for every 1 that will actually be paid on claims that will be incurred in the next fiscal year.

#### Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	1.999	1.647
90%	1.698	1.458
85%	1.518	1.344
80%	1.383	1.258
75%	1.276	1.189
70%	1.185	1.131
65%	1.104	1.079
60%	1.033	1.032
55%	0.967	0.989
50%	0.905	0.947
45%	0.845	0.908
40%	0.789	0.870
35%	0.732	0.831
30%	0.676	0.793
25%	0.619	0.752

To read table:	For the above retention, there is a 90% chance
	that final loss settlements will be less than
	1.698 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.

#### Incurred Losses as of 12/31/23

Accident Year (A)	Unlimited Incurred (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Incurred (E)	Incurred Over SIR (F)	Incurred Over \$225,000 (G)	Incurred Capped at \$225,000 (H)	Incurred \$225,000 to SIR Layer (I)	Incurred Capped at SIR (J)	Incurred Capped at SIR & Aggregate (K)
2012-2013	1,211,570	0	0	1,211,570	0	0	1,211,570	0	1,211,570	1,211,570
2013-2014	768,874	0	0	768,874	0	0	768,874	0	768,874	768,874
2014-2015	768,041	0	0	768,041	0	0	768,041	0	768,041	768,041
2015-2016	729,738	0	0	729,738	0	35,337	694,401	35,337	729,738	729,738
2016-2017	1,180,380	0	0	1,180,380	0	270,000	910,380	270,000	1,180,380	1,180,380
2017-2018	619,883	0	0	619,883	0	0	619,883	0	619,883	619,883
2018-2019	1,029,136	0	0	1,029,136	0	0	1,029,136	0	1,029,136	1,029,136
2019-2020	3,903,265	0	0	3,903,265	1,520,000	2,165,000	1,738,265	645,000	2,383,265	2,383,265
2020-2021	835,658	0	0	835,658	0	66,245	769,413	66,245	835,658	835,658
2021-2022	1,253,684	0	0	1,253,684	0	0	1,253,684	0	1,253,684	1,253,684
2022-2023	2,653,934	0	0	2,653,934	0	650,000	2,003,934	650,000	2,653,934	2,653,934
2023-2024	336,392	0	0	336,392	0	0	336,392	0	336,392	336,392
Total	\$15,290,555	\$0	\$0	\$15,290,555	\$1,520,000	\$3,186,582	\$12,103,973	\$1,666,582	\$13,770,555	\$13,770,555

#### Notes:

### (A) Years are 7/1 to 6/30.

(B) Provided by the Pool.

(C)

(D)

- (E) (B) + (C) (D).
  (F) Sum of incurred losses in excess of SIR.
- (G) Sum of incurred losses in excess of \$225,000.
- (H) (E) (G).
- (I) (G) (F). (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See Not Included.

#### Paid Losses as of 12/31/23

										Paid
		Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$225,000	Capped at	SIR &
Year	Paid	Losses	Losses	Paid	Over SIR	\$225,000	\$225,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
2012-2013	1,211,570	0	0	1,211,570	0	0	1,211,570	0	1,211,570	1,211,570
2013-2014	768,874	0	0	768,874	0	0	768,874	0	768,874	768,874
2014-2015	768,041	0	0	768,041	0	0	768,041	0	768,041	768,041
2015-2016	729,738	0	0	729,738	0	35,337	694,401	35,337	729,738	729,738
2016-2017	1,180,380	0	0	1,180,380	0	270,000	910,380	270,000	1,180,380	1,180,380
2017-2018	619,883	0	0	619,883	0	0	619,883	0	619,883	619,883
2018-2019	1,029,136	0	0	1,029,136	0	0	1,029,136	0	1,029,136	1,029,136
2019-2020	2,646,062	0	0	2,646,062	295,000	910,000	1,736,062	615,000	2,351,062	2,351,062
2020-2021	830,238	0	0	830,238	0	66,245	763,993	66,245	830,238	830,238
2021-2022	1,061,634	0	0	1,061,634	0	0	1,061,634	0	1,061,634	1,061,634
2022-2023	879,256	0	0	879,256	0	0	879,256	0	879,256	879,256
2023-2024	136,867	0	0	136,867	0	0	136,867	0	136,867	136,867
Total	\$11,861,680	\$0	\$0	\$11,861,680	\$295,000	\$1,281,582	\$10,580,098	\$986,582	\$11,566,680	\$11,566,680

#### Notes:

### (A) Years are 7/1 to 6/30.

(B) Provided by the Pool.

(C)

(D)

- (E) (B) + (C) (D).
  (F) Sum of paid losses in excess of SIR.
- (G) Sum of paid losses in excess of \$225,000.
- (H) (E) (G).
- (I) (G) (F). (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See Not Included.

#### Case Reserves as of 12/31/23

Accident Year (A)	Unlimited Reserves (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Reserves (E)	Reserves Over SIR (F)	Reserves Over \$225,000 (G)	Reserves Capped at \$225,000 (H)	Reserves \$225,000 to SIR Layer (I)	Reserves Capped at SIR (J)	Reserves Capped at SIR & Aggregate (K)
2012-2013	0	0	0	0	0	0	0	0	0	0
2013-2014	0	0	0	0	0	0	0	0	0	0
2014-2015	0	0	0	0	0	0	0	0	0	0
2015-2016	0	0	0	0	0	0	0	0	0	0
2016-2017	0	0	0	0	0	0	0	0	0	0
2017-2018	0	0	0	0	0	0	0	0	0	0
2018-2019	0	0	0	0	0	0	0	0	0	0
2019-2020	1,257,203	0	0	1,257,203	1,225,000	1,255,000	2,203	30,000	32,203	32,203
2020-2021	5,420	0	0	5,420	0	0	5,420	0	5,420	5,420
2021-2022	192,050	0	0	192,050	0	0	192,050	0	192,050	192,050
2022-2023	1,774,678	0	0	1,774,678	0	650,000	1,124,678	650,000	1,774,678	1,774,678
2023-2024	199,525	0	0	199,525	0	0	199,525	0	199,525	199,525
Total	\$3,428,876	\$0	\$0	\$3,428,876	\$1,225,000	\$1,905,000	\$1,523,876	\$680,000	\$2,203,876	\$2,203,876

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 \$225,000.
- (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 12/31/23

Accident Year (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 Claims (J)	Adjusted Open Claims (K)
2012-2013	157	0	0	157	157	0	0	157	0	0
2013-2014	180	0	0	180	180	0	0	180	0	0
2014-2015	164	0	0	164	164	0	0	164	0	0
2015-2016	135	0	0	135	135	0	0	135	0	0
2016-2017	122	0	0	122	122	0	0	122	0	0
2017-2018	108	0	0	108	108	0	0	108	0	0
2018-2019	118	0	0	118	118	0	0	118	0	0
2019-2020	115	0	0	115	112	0	0	112	3	3
2020-2021	82	0	0	82	80	0	0	80	2	2
2021-2022	108	0	0	108	96	0	0	96	12	12
2022-2023	97	0	0	97	63	0	0	63	34	34
2023-2024	35	0	0	35	14	0	0	14	21	21
Total	1,421	0	0	1,421	1,349	0	0	1,349	72	72

#### Notes:

(A) Years are 7/1 to 6/30.

(B) Provided by the Pool.

(C)

(D)

(E) (B) + (C) - (D). (F) Provided by the Pool. (G)

(H)

(I) (F) + (G) - (H). (J) (B) - (F). (K) (E) - (I).

### Exposure Measures

Accident Year	Total TIV (\$00) (A)	Inflation Trend Factor (B)	Trended TIV (\$00) (C)
2011-2012	20,353,847	1.345	27,375,924
2012-2013	21,778,616	1.312	28,573,544
2013-2014	24,305,331	1.280	31,110,824
2014-2015	24,991,854	1.249	31,214,826
2015-2016	22,829,462	1.219	27,829,114
2016-2017	23,300,292	1.189	27,704,047
2017-2018	24,105,322	1.160	27,962,174
2018-2019	25,019,733	1.132	28,322,338
2019-2020	26,637,753	1.104	29,408,079
2020-2021	27,395,469	1.077	29,504,920
2021-2022	28,416,607	1.051	29,865,854
2022-2023	32,680,317	1.025	33,497,325
2023-2024	35,785,144	1.000	35,785,144
2024-2025	37,906,257	1.000	37,906,257

Notes:

Provided by the Pool. Based on 2.5%.

(A)

(B) (C) (A) x (B).

# PLAN JPA SPECIAL BOARD OF DIRECTORS MEETING

March 28, 2024

Agenda Item 12.A.

# FINANCIAL MATTERS

## SUBJECT: Review of the PLAN JPA 2024/25 Preliminary Operating Budget

# **BACKGROUND AND HISTORY:**

Min Su, PLAN JPA Finance Manager, will present the Draft Preliminary Operating Budget (Budget) for PLAN JPA for the 2024/25 Fiscal Year. The funding model is similar to what the Board of Directors has approved in the past. Pages two and three detail the Budget as follows:

- For the Liability Program, member contributions are presented at the 60% confidence level (CL) with a 2% discount. PLAN JPA's Self-Insured Retention (SIR) covers up to \$1M above each member's SIR, with current options of \$25k, \$50k, \$100k, and \$250k. PLAN JPA joined California Affiliated Risk Management Authorities (CARMA) JPA in 2021/22 at the \$9M excess of \$1M layer. Above CARMA's pooled layer, PLAN JPA purchases Reinsurance and Excess above \$10M; these *coverage layers are conservatively estimated at 23%* over 2023/24 actuals.
- At the recent March 21, 2024, Finance Committee meeting, staff was asked to bring forward a discussion regarding the confidence level funding for the Liability Program. Confidence level funding is a measurement of the estimated probability that, given the level of dollars collected for the pooled layer will be adequate to pay for actual claims costs. For example, the 60% confidence level refers to an estimate for which there is a 60% chance the amount collected will be sufficient to pay for the losses. Since PLAN's inception in 2018, confidence level funding has remained at the current 60% through each year's budget cycle.
  - Staff has prepared a draft preliminary budget with the Liability Program projected at the 70% confidence level. The funding difference between the 60% and 70% was \$895,000. This equated to an overall ending result of a 27% increase over prior year actuals; compared to 23% if funded at 60%.
- For the Property Program, member contributions are presented at the *increased 80%* <u>confidence level funding</u> with a 2% discount factor. The proposed coverage includes losses pooled from each member's SIR, currently \$5k for all members, with a maximum of \$500k per occurrence, as well as excess coverage purchased up to \$1B. This equates to an estimated 29.2% increase in the risk-sharing layer and an estimated 20% increase for excess property through the Alliant Insurance Property Program (APIP).
  - As previously discussed in Agenda Item 11, the Year 2 (of 3) repayment plan is included as part of the Property Program member contributions.

The other major components of the Budget are outlined below:

Agenda Item 12.A. Page 2

## 1. Overall Rates for Coverage

With an increase in estimated payroll of 8.8% and a 5.9% increase in Total Insured Values, combined with 27% CARMA and 15% Reinsurance/Excess estimations and excess Property premiums of 20%, the budgeted contributions are projected to increase from \$32.7M to \$40M for 2024/25. An increase of 22% over the prior year. Below is a summary by program.

## Liability Program (Page 2 of Budget)

The Liability Program is projecting a 22.8% increase in contributions over the 2023/24 Approved Budget. The underlying assumptions used in compiling the preliminary budget include:

- *Payroll* overall, is estimated to increase by 8.8% from the prior year, with thirteen members of the twenty-eight, experiencing at least a 10% increase. The 2024/25 estimated payroll is based upon the actual payroll collected on a quarterly basis, annualized with a conservative 3.0% trend increase.
- *Primary Funding Layer* an increase of 35.5% from the prior year due to estimated payroll increase and adverse claims development.
- *Insurance Cost* The insurance cost is projected to increase by 21.7% over the prior year.
  - CARMA is projected to increase by 27%.
  - Reinsurance and Excess are projected to increase by 15%.
- *Administrative Expenses* budgeted to increase by 4.4%. See note 5 below which outlines the estimated changes.

## Experience Modification (ex-mod) Factors:

PLAN's actuary developed the ex-mod factors by using the loss experience and payroll from 2018/19 through 2022/23. The losses were limited to \$250,000 per occurrence. Credibility was given to payroll, limited to a minimum of 10% and maximum of 90%. Ex-mod change, from year over year, has been capped at 30%.

## Allocation of Administrative Expenses:

Administrative costs are first split between the two programs. Then split again into fixed and variable portions. The fixed costs (33%) are allocated among the members evenly. The remaining variables costs (67%) are allocated based upon the following: a) one-third of the costs are allocated based upon reported claims greater than \$1 and b) two-thirds of the costs are allocated based upon paid losses in the period of 2018/19 to 2022/23. The allocation of administrative costs is the same as it has been in the past years.

# Agenda Item 12.A. Page 3

# Property Program (Page 3 of Budget)

The Property Program is projected to increase by 19.2% in 2024/25, over the 2023/24 Approved Budget. The preliminary budget includes:

- Funding the 2024/25 program year at the increased 80% confidence level, previously 75%.
- The Total Insured Values (TIV) increasing by 5.9%; these are preliminary as Alliant is still gathering the data.
- Excess premium includes a projection of a 20% increase over prior year actuals. The proposed increase takes into account the same property coverage as 2023/24 of \$500,000 per occurrence, with no aggregate deductible.
- Draft Actuarial Report dated March 11, 2024, was used to compile the proposed contributions for 2024/25.

# 2. <u>Claims Expense</u>

The overall claims expenses for the program year 2024/25 are budgeted at the expected CL and are expected to increase by 31.8% over 2023/24. The Liability Program is projected to increase by 35.1% due to unfavorable claims development and increase in estimated payroll, and the Property Program is projected to increase by 20.2% due to both increases in claims activity and TIV.

# 3. <u>Insurance Expense</u>

Total insurance expense is projected to increase by 21.7% over the prior year's budget. The Liability Program is projected to increase by 21.7% as the liability market continues to experience a hard market, while the Property Program is also projected to increase by 20%. Excess Cyber Coverage is projected to increase by 9.3%, while employment liability (for members who have elected coverage) is estimated to increase by 183.2% due to new member participation. All costs are conservative estimates and will be revised once staff receives more up-to-date information from Alliant.

# 4. <u>Risk Management Grants</u>

As approved by the Board of Directors, the funding of Risk Management Grants in the current year 2023/24 was reestablished and \$500,000 was funded out of PLAN's net position. The allocation was based on current member contributions to the Liability Program. In the upcoming 2024/25 Program Year, a pause on further allocation is noted on the budget due to low utilization and to prevent further reducing PLAN's net position.

# Agenda Item 12.A. Page 4

# 5. <u>Administration Expenses</u>

Administrative expenses are projected to increase by 4.4%, or \$108,343, over the prior year. The 2024/25 proposed budget includes the following line-item variances from the prior year:

- Program Administration: contractual 3% increase from the prior year.
- Financial Audit: 23.8% increase from the prior year, or \$5,450, for updated agreements.
- Actuarial Studies: 15% increase, or \$7,867, for individual member reports.
- Claims Admin & Audit: contractual 2.9% increase for claims administration, and claims audit cost of \$8k budgeted for in 2024/25.
- Legal Counsel: increase of 10%, or \$5,738 from the prior year's budget for an increase in legal costs of claims activity and coverage opinions.
- Risk Control Services: contractual 3% increase from the prior year.
- Other Insurance: projected 10% increase, or \$6,109 for Deadly Weapon Response, E&O, and Crime coverages.
- Meetings & Strategic Planning: in-person meetings for the 2024/25 program year, staff is proposing an increase of \$20k due to allowance for the board member and alternate from each member to participate in the Annual Meeting.
- Allowance for Contingencies: continue with \$10k for 2024/25, similar to the prior year.

# **STAFF RECOMMENDATION:**

None.

# **<u>REFERENCE MATERIALS ATTACHED</u>**:

- Draft Preliminary Operating Budget for 2024/25 at the 60% Confidence Level
- Draft Preliminary Operating Budget for 2024/25 at the 70% Confidence Level

# 2024/2025 Preliminary Operating Budget Summary of Contributions by Program

					-	iaar Comporison			<b>,</b>			Ex-mod Comparison			
						ear Compari	son		<b>/</b>	Compariso		Ex-m	nod Compa	rison	
				2024/25	2023/24				Estimated	Estimated					
	Liability	Property	EPL	Total	Total	Increase/	Percent		Payroll	Payroll	%			-	
Member	Program	Program	Liability	Contributions	Contributions	(Decrease)	Change		2024/25	2023/24	Change	2024/25	2023/24	Change	
	Page 2	Page 3													
American Canyon	\$ 615,170	\$ 300,000	\$ 55,645	\$ 970,815	\$ 848,839	\$ 121,976	14%	\$	\$ 9,165,300	\$ 8,431,8	00 9%	52%	60%	-13%	
Atherton	423,516	215,272	62,338	701,127	509,422	191,704	38%		8,112,600	6,742,7	00 20%	157%	121%	30%	
Benicia	1,233,227	926,397	-	2,159,624	1,879,367	280,256	15%		27,076,600	24,540,4	00 10%	112%	148%	-24%	
Burlingame	1,262,432	776,044	196,228	2,234,704	1,681,636	553,068	33%		29,391,900	26,215,5	00 12%	146%	132%	11%	
Campbell	1,417,028	395,800	-	1,812,828	1,432,948	379,879	27%		27,352,200	26,083,4	00 5%	108%	92%	17%	
Colma	154,167	107,825	-	261,991	238,900	23,092	10%		7,021,400	6,113,6	00 15%	78%	100%	-22%	
Cupertino	1,489,777	459,209	-	1,948,986	1,626,671	322,316	20%		25,330,500	26,692,4	00 -5%	58%	57%	2%	
Dublin	2,001,119	1,000,168	-	3,001,287	2,450,121	551,166	22%		12,234,200	11,560,4	00 6%	162%	142%	14%	
East Palo Alto	797,969	117,487	-	915,455	814,687	100,769	12%		11,910,200	12,825,0	00 -7%	69%	94%	-27%	
Foster City	980,191	606,577	-	1,586,768	1,308,384	278,385	21%		29,591,900	23,744,6	00 25%	48%	51%	-6%	
Half Moon Bay	411,161	125,689	-	536,849	413,022	123,827	30%		5,552,500	5,100,9	00 9%	137%	105%	30%	
Hillsborough	584,590	313,361	-	897,951	663,989	233,962	35%		13,746,600	11,918,2	00 15%	117%	90%	30%	
Los Altos Hills	290,389	68,979	31,234	390,603	304,440	86,162	28%		3,704,500	3,296,5	00 12%	107%	84%	27%	
Los Gatos	987,825	272,731	-	1,260,557	997,484	263,072	26%		23,464,200	22,514,8	00 4%	52%	40%	30%	
Millbrae	742,225	512,259	-	1,254,484	1,053,421	201,063	19%		10,073,700	9,527,2	00 6%	136%	160%	-15%	
Milpitas	2,529,677	910,645	-	3,440,322	2,881,218	559,104	19%		67,897,000	61,670,9	00 10%	64%	80%	-20%	
Morgan Hill	1,438,866	611,014	-	2,049,881	1,738,114	311,767	18%		35,838,500	34,313,5	00 4%	75%	83%	-10%	
Newark	1,413,748	624,118	-	2,037,865	1,659,321	378,545	23%		27,209,200	25,484,3	00 7%	85%	80%	6%	
Pacifica	1,461,506	909,343	-	2,370,850	2,011,935	358,915	18%		24,579,500	20,371,6	00 21%	123%	153%	-20%	
Portola Valley	161,329	61,149	-	222,478	187,906	34,572	18%		2,404,600	2,324,8	00 3%	84%	81%	4%	
Ross	123,292	30,263	-	153,555	120,458	33,097	27%		2,526,600	2,290,1	00 10%	93%	71%	31%	
San Bruno	1,549,015	403,055	-	1,952,070	1,673,808	278,261	17%		39,509,400	32,417,4	00 22%	87%	125%	-30%	
San Carlos	1,194,466	306,254	-	1,500,720	1,084,403	416,317	38%		14,895,900	10,945,8	00 36%	232%	205%	13%	
Saratoga	908,346	187,354	-	1,095,700	933,302	162,398	17%		8,674,200	8,193,1	00 6%	115%	141%	-18%	
South San Francisco	1,844,090	1,556,373	-	3,400,463	2,774,466	625,997	23%		45,360,100	49,221,5	00 -8%	56%	43%	30%	
Suisun City	1,035,148	187,654	-	1,222,802	911,166	311,636	34%		13,139,500	10,109,0	00 30%	145%	123%	18%	
Tiburon	346,057	63,074	-	409,131	327,320	81,810	25%		4,428,300	4,088,1	00 8%	153%	128%	20%	
Woodside	206,446	44,048	13,670	264,165	216,315	47,850	22%		2,183,800	2,380,3	-8%	130%	100%	30%	
Total	\$ 27,602,772	\$ 12,092,142	\$ 359,115	\$ 40,054,029	\$ 32,743,063	\$ 7,310,966	22%	\$	\$ 532,374,900	\$ 489,117,8	00 8.8%				
Prior Year Actuals	22,473,839	10,142,419	\$126,805	32,743,063											
\$ Incr./ (Decr.)	\$ 5,128,933	\$ 1,949,723	\$ 232,310	\$ 7,310,966											

#### Notes:

% Change

Payroll comparison was obtained from the actuarial study. The payroll numbers are estimates that were used at the time of funding.

183.2%

19.2%

22.3%

The ex-mod comparisons were obtained from actuarial reports.

22.8%

EPL coverage is through Employment Risk Management Authority (ERMA).

# 2024/2025 Preliminary Operating Budget

Liability Program Contribution Schedule

Pool Funding @ 60% Confidence Level, 2.0% Discount Factor

									_					Budge	t Comparison	
		Funding fo	r	Reins	uran	ce/Excess I	nsu	rance				2024/25		2023/24	Dollar	Percent
	Member	Losses	_	CARMA	Re	ein/Excess		Total	A	dministration		60% CL		60% CL	Increase /	Increase /
Members	SIR	SIR-\$1M		\$9M x \$1M	\$2	5M x \$10M		Insurance		Expense	Li	ability Budget	Lia	ability Budget	(Decrease)	(Decrease)
	Note 1	Note 2						Note 3		Note 4		Note 5		Note 6		
American Canyon	\$25,000	\$ 80,1	98	\$ 279,876	\$	191,719	\$	471,595	\$	63,378	\$	615,170		530,737	84,433	15.9%
Atherton	\$25,000	215,4	14	87,591		60,001		147,592		60,479		423,516		285,607	137,909	48.3%
Benicia	\$25,000	511,4	39	343,385		235,224		578,609		143,179		1,233,227		1,109,128	124,099	11.2%
Burlingame	\$250,000	347,3	33	395,273		270,768		666,041		249,008		1,262,432		1,042,150	220,282	21.1%
Campbell	\$100,000	373,3	79	560,237		383,771		944,008		99,641		1,417,028		1,110,923	306,105	27.6%
Colma	\$50,000	82,1	26	17,825		12,211		30,036		42,006		154,167		146,635	7,532	5.1%
Cupertino	\$250,000	117,6	65	775,882		531,491		1,307,372		64,740		1,489,777		1,231,725	258,052	21.0%
Dublin	\$50,000	297,8	94	941,095		644,664		1,585,759		117,465		2,001,119		1,609,914	391,204	24.3%
East Palo Alto	\$100,000	103,2	54	374,943		256,841		631,784		62,931		797,969		714,359	83,610	11.7%
Foster City	\$100,000	179,5	36	428,943		293,832		722,775		77,831		980,191		796,891	183,301	23.0%
Half Moon Bay	\$50,000	114,4	71	147,244		100,864		248,108		48,582		411,161		309,245	101,915	33.0%
Hillsborough	\$50,000	241,6	31	143,781		98,492		242,273		100,686		584,590		398,478	186,112	46.7%
Los Altos Hills	\$25,000	67,2	12	109,915		75,293		185,208		37,939		290,389		222,350	68,039	30.6%
Los Gatos	\$50,000	183,6	29	434,176		297,417		731,593		72,603		987,825		765,879	221,946	29.0%
Millbrae	\$100,000	172,5	50	294,947		202,043		496,989		72,685		742,225		622,972	119,252	19.1%
Milpitas	\$100,000	546,9	64	1,063,300		728,376		1,791,676		191,038		2,529,677		2,112,548	417,129	19.7%
Morgan Hill	\$100,000	339,6	31	601,934		412,333		1,014,267		84,918		1,438,866		1,223,523	215,343	17.6%
Newark	\$100,000	290,8	58	622,487		426,413		1,048,899		73,991		1,413,748		1,131,751	281,997	24.9%
Pacifica	\$50,000	454,3	20	486,379		333,177		819,556		187,630		1,461,506		1,256,303	205,203	16.3%
Portola Valley	\$25,000	33,9	69	55,705		38,159		93,864		33,497		161,329		135,350	25,979	19.2%
Ross	\$25,000	39,5	33	29,734		20,369		50,103		33,606		123,292		93,737	29,555	31.5%
San Bruno	\$100,000	436,4	50	551,593		377,850		929,443		183,112		1,549,015		1,333,296	215,719	16.2%
San Carlos	\$100,000	437,3	25	386,879		265,018		651,897		105,244		1,194,466		850,969	343,497	40.4%
Saratoga	\$25,000	168,0	)5	400,926		274,640		675,566		64,775		908,346		773,769	134,578	17.4%
South San Francisco	\$100,000	318,3	37	843,680		577,933		1,421,613		104,090		1,844,090		1,468,714	375,376	25.6%
Suisun City	\$25,000	321,5	38	373,435		255,808		629,243		84,367		1,035,148		758,855	276,293	36.4%
Tiburon	\$50,000	102,1	29	115,397		79,049		194,446		49,482		346,057		273,970	72,087	26.3%
Woodside	\$25,000	47,8	90	67,260		46,074		113,334		45,222		206,446		164,061	42,386	25.8%
Total		\$ 6,625,0	00	\$ 10,933,820	\$	7,489,829	\$	18,423,649	\$	2,554,123	\$	27,602,772	\$	22,473,839	5,128,933	22.8%
Prior Year Actuals		4,888,0	00	8,627,164		6,512,895		15,140,059		2,445,780		22,473,839				
\$ Incr./ (Decr.)		\$ 1,737,0		\$ 2,306,656	\$	976,934	\$	3,283,590	\$		\$	5,128,933				
% Change		35.	5%	26.7%		15.0%		21.7%		4.4%		22.8%				
									_		_					

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NOTES:		<u>\$1M SIR</u>	<u>\$1M SIR</u>
Note 1: Member Selected Self-Insured Retention.		23/24	24/25
Note 2: Adjusted pool funding between member SIR to \$1,000,000 at the 60% confidence level from draft Actuarial Study dated March 11, 2024.	Expected Undisc.	5,100,000	6,915,000
Note 3: Preliminary estimates for CARMA and reinsurance/excess insurance from Alliant. Allocation based upon draft actuarial study dated March 11, 2024.	Expected Disc.	4,764,000	6,438,000
Note 4: Administrative Expense allocation: 33% allocated to the member equally. Of the remaining 67%,	60% CL Disc.	4,888,000	6,625,000
one-third is allocated using reported claims and two-thirds using paid losses; these numbers were provided in the draft actuarial study.	70% CL Disc.	5,593,000	7,520,000
Note 5: Total 2024/25 Liability Contributions by members.	80% CL Disc.	6,517,000	8,698,000
Note 6: 2023/24 Liability Contributions.	90% CL Disc.	7,999,000	10,559,000

Funding for the Pool Layer @ 2.0%

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# 2024/2025 Preliminary Operating Budget Property Program Contributions Schedule

Pool Funding @ 80% Confidence Level, 2.0% Discount Factor

		Insured	Values								Budget Comparison			
		2023/24	2024/25	Pool	Excess	Flood	Excess	Resolute	Repayment	2024/25	2023/24	Dollar	Percent	
		Insured	Insured	Funding	Prop. Premium	Premium	Cyber	Guard	Year 2 of 3	80% CL	75% CL	Increase /	Increase /	
Member	SIR	Values	Values	SIR-\$500K	\$500k-\$1B		Coverage			Property Budget	Property Budget	(Decrease)	(Decrease)	
		Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	Note 8	Note 9	Note 10			
American Canyon	\$5,000	\$ 96,332,759	\$ 93,716,336	\$ 56,418	\$ 206,952	\$ 1,750	\$ 8,309	\$ 4,500	\$ 22,070	\$ 300,000	\$ 271,292	\$ 28,708	10.6%	
Atherton	\$5,000	67,691,702	70,909,229	42,688	156,588	-	7,469	4,500	4,027	215,272	180,256	35,017	19.4%	
Benicia	\$5,000	274,652,385	293,515,972	176,700	648,167	4,377	22,591	5,650	68,912	926,397	770,239	156,158	20.3%	
Burlingame	\$5,000	226,684,224	244,677,489	147,299	540,317	2,387	24,438	5,650	55,953	776,044	639,486	136,558	21.4%	
Campbell	\$5,000	110,479,076	121,875,390	73,370	269,135	-	22,811	5,650	24,833	395,800	322,025	73,775	22.9%	
Colma	\$5,000	29,734,484	31,087,817	18,715	68,651	1,751	6,599	4,500	7,609	107,825	92,265	15,559	16.9%	
Cupertino	\$5,000	136,921,873	142,200,391	85,606	314,019	1,751	21,199	5,650	30,984	459,209	394,946	64,263	16.3%	
Dublin	\$5,000	312,405,016	328,303,343	197,642	724,987	1,751	10,756	4,500	60,532	1,000,168	840,207	159,962	19.0%	
East Palo Alto	\$5,000	31,755,720	33,938,605	20,431	74,946	-	10,497	4,500	7,112	117,487	100,328	17,159	17.1%	
Foster City	\$5,000	182,765,587	191,018,892	114,996	421,824	-	24,597	5,650	39,511	606,577	511,493	95,084	18.6%	
Half Moon Bay	\$5,000	35,774,409	38,759,497	23,334	85,592	-	5,428	4,500	6,836	125,689	103,777	21,912	21.1%	
Hillsborough	\$5,000	93,275,856	97,575,594	58,742	215,475	-	11,962	4,500	22,683	313,361	265,511	47,850	18.0%	
Los Altos Hills	\$5,000	19,097,521	19,864,108	11,958	43,866	-	3,954	4,500	4,701	68,979	59,468	9,511	16.0%	
Los Gatos	\$5,000	77,720,158	81,875,203	49,290	180,804	-	19,711	5,650	17,277	272,731	231,605	41,126	17.8%	
Millbrae	\$5,000	157,243,761	165,610,518	99,699	365,715	2,616	9,033	4,500	30,696	512,259	430,449	81,811	19.0%	
Milpitas	\$5,000	264,950,001	278,867,505	167,881	615,819	4,883	55,142	6,800	60,120	910,645	768,670	141,975	18.5%	
Morgan Hill	\$5,000	178,392,070	188,860,520	113,696	417,058	1,751	29,578	5,650	43,281	611,014	514,591	96,423	18.7%	
Newark	\$5,000	189,828,178	198,845,203	119,707	439,107	-	22,697	5,650	36,957	624,118	527,570	96,548	18.3%	
Pacifica	\$5,000	267,348,423	285,697,426	171,993	630,901	13,129	20,600	5,650	67,070	909,343	755,632	153,711	20.3%	
Portola Valley	\$5,000	16,830,091	17,661,627	10,633	39,002	-	2,917	4,500	4,097	61,149	52,556	8,592	16.3%	
Ross	\$5,000	6,584,981	6,884,778	4,145	15,204	1,751	3,015	4,500	1,649	30,263	26,721	3,541	13.3%	
San Bruno	\$5,000	114,675,265	119,855,753	72,155	264,676	-	32,506	5,650	28,069	403,055	340,512	62,542	18.4%	
San Carlos	\$5,000	81,835,578	95,887,373	57,725	211,747	1,751	12,878	4,500	17,654	306,254	233,434	72,820	31.2%	
Saratoga	\$5,000	54,457,911	57,062,665	34,352	126,011	1,751	7,917	4,500	12,823	187,354	159,533	27,821	17.4%	
South San Francisco	\$5,000	473,375,590	501,525,475	301,924	1,107,511	13,129	37,171	6,800	89,838	1,556,373	1,305,752	250,621	19.2%	
Suisun City	\$5,000	50,543,816	55,566,553	33,452	122,707	4,377	11,478	4,500	11,141	187,654	152,311	35,344	23.2%	
Tiburon	\$5,000	15,605,016	16,892,799	10,170	37,304	1,751	4,531	4,500	4,818	63,074	53,350	9,724	18.2%	
Woodside	\$5,000	11,552,992	12,089,655	7,278	26,697	-	2,741	4,500	2,831	44,048	38,440	5,608	14.6%	
Total		\$3,578,514,443	\$ 3,790,625,716	\$ 2,282,000	\$ 8,370,777	\$ 60,655	\$ 452,525	\$ 142,100	\$ 784,084	\$ 12,092,142	\$ 10,142,419	\$ 1,949,723	19.2%	
Prior Year Actuals			3,578,514,443	1,766,000	6,978,285	58,018	413,932	142,100	784,084	10,142,419				
\$ Incr./ (Decr.)			\$ 212,111,273	\$ 516,000				,	,	\$ 1,949,723				
% Change			5.9%	29.2%		4.5%	9.3%	. 0.0%	0.0%					
			2.070		_51070									

1,399,000

1,373,000

1,635,000

1,766,000

1,921,000

2,116,000

85% CL Discounted

23/24

1,694,000

1,650,000

1,955,000

2,105,000

2,282,000

2,505,000

Notes:	Funding for the Pooled Laye	er @ 2%
Note 1: 2023/24 Total Insured property values obtained from Alliant.		<u>23/24</u>
Note 2: 2024/25 Property Total Insured Values (TIV) as submitted by members, updated as of 1/8/24.	Expected Undiscounted	1,399,00
Note 3: Adjusted pool funding from draft Actuarial Report dated March 11, 2024, allocated using Note 2.	Expected Discounted	1,373,00
Note 4: Estimate for Alliant Property Insurance Program (APIP) allocated using Note 2.	70% CL Discounted	1,635,00
Note 5: Flood cost are based upon 2022/23 expiring premiums with a 4.5% increase.	75% CL Discounted	1,766,00
Note 6: Excess Cyber coverage: minimum \$1K per member and remaining allocated based upon estimated payroll 2024/25.	80% CL Discounted	1,921,00

Note 6: Excess Cyber coverage: minimum \$1K per member and remaining allocated based upon estimated payroll 2024/25.

Note 7: Continuation of Resolute Guard Services, no increase over prior year.

Note 8: Year 2 of 3, Property Rehabilitation Repayment.

Note 9: Total 2024/25 Property Contributions by members (Total Notes 3 through 8).

Note 10: 2023/24 Property Contributions.

# PLAN JPA 2024/2025 Preliminary Operating Budget

			2024/25			
	202	3/24	Preliminary	Prior Y	'ear	
	Approved	Projected	Operating	Increase/	Percent	
	Budget	Actuals	Budget	(Decrease)	Incr./(Decr.)	
Revenues:						
Contributions	\$ 32,743,063	\$ 32,743,063	\$ 40,054,029	\$ 7,310,966	22.3%	
Funding from Equity	500,000			(500,000)	0.0%	С
Investment Income	116,406	1,699,073	166,294	49,888	42.9%	
Less: Investment Fees	(38,000)	(36,960)	(38,000)	-	0.0%	
Total Revenues	33,321,469	34,405,176	40,182,323	6,860,854	20.6%	
Expenses						
Claims Expense	6,137,000	6,709,042	8,088,000	1,951,000	31.8%	а
Insurance Expense						
Insurance - Liability	15,140,059	15,140,059	18,423,649	3,283,590	21.7%	
Insurance - Property	6,978,285	6,978,284	8,370,777	1,392,492	20.0%	
Flood Insurance	58,018	58,018	60,655	2,637	4.5%	
Excess Cyber Coverage	413,932	413,932	452,525	38,593	9.3%	
Resolute Guard	142,100	97,100	142,100	-	0.0%	
Employment Liability Coverage	126,805	126,805	359,115	232,310	183.2%	
	22,859,199	22,814,199	27,808,822	4,949,623	21.7%	b
Risk Management Grants				/=	/	
Risk Management Fund	500,000	500,000		(500,000)	0.0%	С
Administration						
Program Administration	1,027,406	1,027,406	1,058,228	30,822	3.0%	
Financial Audit	22,900	22,900	28,350	5,450	23.8%	
Actuarial Studies	52,448	53,280	60,315	7,867	15.0%	
Claims Admin & Audit	809,165	800,273	832,300	23,135	2.9%	
Legal Counsel	57,377	53,169	63,115	5,738	10.0%	
Risk Control Services	307,393	307,393	316,615	9,222	3.0%	
Sewer Summit	20,000	13,951	20,000	-	0.0%	
Other Insurance	61,091	60,487	67,200	6,109	10.0%	
CAJPA Accreditation	12,000	-	12,000	-	0.0%	
Bank Fees	6,000	4,300	6,000	-	0.0%	
Board Meetings/Strategic Planning	60,000	43,073	80,000	20,000	33.3%	
Allowance for Contingencies	10,000	-	10,000		0.0%	
Total Administration Expenses:	2,445,780	2,386,234	2,554,123	108,343	4.4%	d
Total Expenses	31,941,979	32,409,475	38,450,945	6,508,966	20.4%	
Budgeted Net Income (Loss)	1,379,490	1,995,701	1,731,378	351,888	25.5%	

Notes:

a Claims expenses are recorded at expected. The breakout of expenses by programs are:

are recorded at er	vpecieu. The bleako	ut of expenses by	programs are.	
	2023/24	2024/25	Difference	<u>% Difference</u>
Liability	\$4,764,000	\$6,438,000	\$1,674,000	35.1%
Property	1,373,000	1,650,000	277,000	20.2%
Total	\$6,137,000	\$8,088,000	\$1,951,000	31.8%

b Insurance expenses are budgeted to increase by 21.2% in comparison to 2023/24 budget. Liability insurance expense are budgeted to increase 21.7% due to a continued hardening insurance market. Property rates are budgeted to increase 20% as the property market is continuing an upward trend. Cyber excess coverage is budgeted to increase 9.3% & employment liability coverage is budgeted to increase 183% with a new member joining ERMA JPA.

c Staff proposing a moratorium on additional funds from PLAN's net position, to the Risk Mgmt Grant Fund until 2025/26.

d Administration expenses are expected to increase by 4.4% in comparison to the 23/24 budget. While the majority of the administrative expenses are related to contractual increases, actuarial studies have increased \$8K due to new member reports. An increase of \$20K to Board Meetings/Strategic Planning line item is for both board member and alternate participation.

# 2024/2025 Preliminary Operating Budget Summary of Contributions by Program

					Prior Year Comparison				Ē	Pavroll	~	mparison	T	Ex-mod Comparison			
	70% CL			2024/25	2023/24		30/1	1	L	Estimated		Estimated		EX-111	ou compa	113011	
	Liability	Property	EPL	Total	Total	Increase/	Percent			Payroll		Payroll	%				
Member	Program	Program	Liability	Contributions	Contributions	(Decrease)	Change			2024/25		2023/24	Change	2024/25	2023/24	Change	
	Page 2	Page 3				(20010000)	enange	-					<u>enange</u>			ge	
	ÿ	<u> </u>															
American Canyon	\$ 626,005	\$ 300,000	\$ 55,645	\$ 981,649	\$ 848,839	\$ 132,811	16%		\$	9,165,300	\$	8,431,800	9%	52%	60%	-13%	
Atherton	452,621	215,272	62,338	730,232	509,422	220,810	43%			8,112,600		6,742,700	20%	157%	121%	30%	
Benicia	1,302,319	926,397	-	2,228,716	1,879,367	349,349	19%			27,076,600		24,540,400	10%	112%	148%	-24%	
Burlingame	1,309,361	776,044	196,228	2,281,633	1,681,636	599,997	36%			29,391,900		26,215,500	12%	146%	132%	11%	
Campbell	1,467,469	395,800	-	1,863,269	1,432,948	430,321	30%			27,352,200		26,083,400	5%	108%	92%	17%	
Colma	165,262	107,825	-	273,086	238,900	34,186	14%			7,021,400		6,113,600	15%	78%	100%	-22%	
Cupertino	1,505,673	459,209	-	1,964,882	1,626,671	338,212	21%			25,330,500		26,692,400	-5%	58%	57%	2%	
Dublin	2,041,363	1,000,168	-	3,041,531	2,450,121	591,410	24%			12,234,200		11,560,400	6%	162%	142%	14%	
East Palo Alto	811,918	117,487	-	929,404	814,687	114,718	14%			11,910,200		12,825,000	-7%	69%	94%	-27%	
Foster City	1,004,452	606,577	-	1,611,030	1,308,384	302,646	23%			29,591,900		23,744,600	25%	48%	51%	-6%	
Half Moon Bay	426,625	125,689	-	552,313	413,022	139,291	34%			5,552,500		5,100,900	9%	137%	105%	30%	
Hillsborough	617,233	313,361	-	930,594	663,989	266,605	40%			13,746,600		11,918,200	15%	117%	90%	30%	
Los Altos Hills	299,473	68,979	31,234		304,440	95,246	31%			3,704,500		3,296,500	12%	107%	84%	27%	
Los Gatos	1,012,632	272,731	-	1,285,364	997,484	287,880	29%			23,464,200		22,514,800	4%	52%	40%	30%	
Millbrae	765,535	512,259	-	1,277,794	1,053,421	224,374	21%			10,073,700		9,527,200	6%	136%	160%	-15%	
Milpitas	2,603,569	910,645	-	3,514,214	2,881,218	632,996	22%			67,897,000		61,670,900	10%	64%	80%	-20%	
Morgan Hill	1,484,755	611,014	-	2,095,770	1,738,114	357,656	21%			35,838,500		34,313,500	4%	75%	83%	-10%	
Newark	1,453,041	624,118	-	2,077,159	1,659,321	417,838	25%			27,209,200		25,484,300	7%	85%	80%	6%	
Pacifica	1,522,882	909,343	-	2,432,226	2,011,935	420,291	21%			24,579,500		20,371,600	21%	123%	153%	-20%	
Portola Valley	165,918	61,149	-	227,067	187,906	39,161	21%			2,404,600		2,324,800	3%	84%	81%	4%	
Ross	128,640	30,263	-	158,902	120,458	38,444	32%			2,526,600		2,290,100	10%	93%	71%	31%	
San Bruno	1,607,978	403,055	-	2,011,033	1,673,808	337,225	20%			39,509,400		32,417,400	22%	87%	125%	-30%	
San Carlos	1,253,546	306,254	-	1,559,800	1,084,403	475,397	44%			14,895,900		10,945,800	36%	232%	205%	13%	
Saratoga	931,043	187,354	-	1,118,397	933,302	185,095	20%			8,674,200		8,193,100	6%	115%	141%	-18%	
South San Francisco	1,887,102	1,556,373	-	3,443,475	2,774,466	669,009	24%			45,360,100		49,221,500	-8%	56%	43%	30%	
Suisun City	1,078,585	187,654	-	1,266,240	911,166	355,074	39%			13,139,500		10,109,000	30%	145%	123%	18%	
Tiburon	359,854	63,074	-	422,928	327,320	95,607	29%			4,428,300		4,088,100	8%	153%	128%	20%	
Woodside	212,916	44,048	13,670	270,635	216,315	54,320	25%			2,183,800		2,380,300	-8%	130%	100%	30%	
Total	\$ 28,497,772	\$ 12,092,142	\$ 359,115	\$ 40,949,029	\$ 32,743,063	\$ 8,205,966	25%	-	\$	532,374,900	\$	489,117,800	8.8%				
Prior Year Actuals	22,473,839	10,142,419	\$126,805	32,743,063													
\$ Incr./ (Decr.)	\$ 6,023,933			, ,													

#### Notes:

% Change

Payroll comparison was obtained from the actuarial study. The payroll numbers are estimates that were used at the time of funding.

183.2%

25.1%

19.2%

The ex-mod comparisons were obtained from actuarial reports.

26.8%

EPL coverage is through Employment Risk Management Authority (ERMA).

# 2024/2025 Preliminary Operating Budget Liability Program Contribution Schedule

Pool Funding @ 70% Confidence Level, 2.0% Discount Factor

															Budge	t Comparison	
		Fu	unding for		Reins	uran	ce/Excess I	nsu	rance				2024/25		2023/24	Dollar	Percent
	Member		Losses		CARMA	Re	ein/Excess		Total	A	dministration		60% CL		60% CL	Increase /	Increase /
Members	SIR		SIR-\$1M		\$9M x \$1M	\$2	5M x \$10M		Insurance		Expense	Li	ability Budget	Lia	ability Budget	(Decrease)	(Decrease)
	Note 1		Note 2						Note 3		Note 4		Note 5		Note 6		
American Canyon	\$25,000	\$	91,032	\$	279,876	\$	191,719	\$	471,595	\$	63,378	\$	626,005		530,737	95,267	18.0%
Atherton	\$25,000		244,549		87,591		60,001		147,592		60,479		452,621		285,607	167,014	58.5%
Benicia	\$25,000		580,532		343,385		235,224		578,609		143,179		1,302,319		1,109,128	193,191	17.4%
Burlingame	\$250,000		394,312		395,273		270,768		666,041		249,008		1,309,361		1,042,150	267,211	25.6%
Campbell	\$100,000		423,820		560,237		383,771		944,008		99,641		1,467,469		1,110,923	356,546	32.1%
Colma	\$50,000		93,221		17,825		12,211		30,036		42,006		165,262		146,635	18,627	12.7%
Cupertino	\$250,000		133,561		775,882		531,491		1,307,372		64,740		1,505,673		1,231,725	273,948	22.2%
Dublin	\$50,000		338,138		941,095		644,664		1,585,759		117,465		2,041,363		1,609,914	431,448	26.8%
East Palo Alto	\$100,000		117,203		374,943		256,841		631,784		62,931		811,918		714,359	97,559	13.7%
Foster City	\$100,000		203,847		428,943		293,832		722,775		77,831		1,004,452		796,891	207,562	26.0%
Half Moon Bay	\$50,000		129,935		147,244		100,864		248,108		48,582		426,625		309,245	117,380	38.0%
Hillsborough	\$50,000		274,274		143,781		98,492		242,273		100,686		617,233		398,478	218,755	54.9%
Los Altos Hills	\$25,000		76,326		109,915		75,293		185,208		37,939		299,473		222,350	77,123	34.7%
Los Gatos	\$50,000		208,436		434,176		297,417		731,593		72,603		1,012,632		765,879	246,754	32.2%
Millbrae	\$100,000		195,861		294,947		202,043		496,989		72,685		765,535		622,972	142,563	22.9%
Milpitas	\$100,000		620,856		1,063,300		728,376		1,791,676		191,038		2,603,569		2,112,548	491,021	23.2%
Morgan Hill	\$100,000		385,570		601,934		412,333		1,014,267		84,918		1,484,755		1,223,523	261,232	21.4%
Newark	\$100,000		330,151		622,487		426,413		1,048,899		73,991		1,453,041		1,131,751	321,290	28.4%
Pacifica	\$50,000		515,696		486,379		333,177		819,556		187,630		1,522,882		1,256,303	266,579	21.2%
Portola Valley	\$25,000		38,558		55,705		38,159		93,864		33,497		165,918		135,350	30,568	22.6%
Ross	\$25,000		44,930		29,734		20,369		50,103		33,606		128,640		93,737	34,903	37.2%
San Bruno	\$100,000		495,423		551,593		377,850		929,443		183,112		1,607,978		1,333,296	274,683	20.6%
San Carlos	\$100,000		496,405		386,879		265,018		651,897		105,244		1,253,546		850,969	402,577	47.3%
Saratoga	\$25,000		190,702		400,926		274,640		675,566		64,775		931,043		773,769	157,274	20.3%
South San Francisco	\$100,000		361,399		843,680		577,933		1,421,613		104,090		1,887,102		1,468,714	418,388	28.5%
Suisun City	\$25,000		364,976		373,435		255,808		629,243		84,367		1,078,585		758,855	319,731	42.1%
Tiburon	\$50,000		115,926		115,397		79,049		194,446		49,482		359,854		273,970	85,884	31.3%
Woodside	\$25,000		54,360		67,260		46,074		113,334		45,222		212,916		164,061	48,855	29.8%
Total		\$	7,520,000	\$	10,933,820	\$	7,489,829	\$	18,423,649	\$	2,554,123	\$	28,497,772	\$	22,473,839 \$	6,023,933	26.8%
Prior Year Actuals			4,888,000		8,627,164		6,512,895		15,140,059		2,445,780		22,473,839				
\$ Incr./ (Decr.)		\$	2,632,000	\$	2,306,656	\$	976,934	\$	3,283,590	\$	108,343	\$	6,023,933				
% Change			53.8%	,	26.7%		15.0%		21.7%		4.4%	_	26.8%				
5							-						-				

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11	
11	Expected Undisc.
11	Expected Disc.
11	60% CL Disc.
11	70% CL Disc.
	80% CL Disc.

Note 6: 2023/24 Liability Contributions.

Funding for the Pool Layer @ 2.0%

	<u>\$1M SIR</u>	<u>\$1M SIR</u>
	23/24	<u>24/25</u>
Expected Undis	sc. 5,100,000	6,915,000
Expected Dis	sc. 4,764,000	6,438,000
60% CL Dis	sc. 4,888,000	6,625,000
70% CL Dis	sc. 5,593,000	7,520,000
80% CL Dis	sc. 6,517,000	8,698,000
90% CL Dis	sc. 7,999,000	10,559,000

# 2024/2025 Preliminary Operating Budget Property Program Contributions Schedule

Pool Funding @ 80% Confidence Level, 2.0% Discount Factor

		Insured	Values								Budget Comparison			
		2023/24	2024/25	Pool	Excess	Flood	Excess	Resolute	Repayment	2024/25	2023/24	Dollar	Percent	
		Insured	Insured	Funding	Prop. Premium	Premium	Cyber	Guard	Year 2 of 3	80% CL	75% CL	Increase /	Increase /	
Member	SIR	Values	Values	SIR-\$500K	\$500k-\$1B		Coverage			Property Budget	Property Budget	(Decrease)	(Decrease)	
		Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	Note 8	Note 9	Note 10			
American Canyon	\$5,000	\$ 96,332,759	\$ 93,716,336	\$ 56,418	\$ 206,952	\$ 1,750	\$ 8,309	\$ 4,500	\$ 22,070	\$ 300,000	\$ 271,292	\$ 28,708	10.6%	
Atherton	\$5,000	67,691,702	70,909,229	42,688	156,588	-	7,469	4,500	4,027	215,272	180,256	35,017	19.4%	
Benicia	\$5,000	274,652,385	293,515,972	176,700	648,167	4,377	22,591	5,650	68,912	926,397	770,239	156,158	20.3%	
Burlingame	\$5,000	226,684,224	244,677,489	147,299	540,317	2,387	24,438	5,650	55,953	776,044	639,486	136,558	21.4%	
Campbell	\$5,000	110,479,076	121,875,390	73,370	269,135	-	22,811	5,650	24,833	395,800	322,025	73,775	22.9%	
Colma	\$5,000	29,734,484	31,087,817	18,715	68,651	1,751	6,599	4,500	7,609	107,825	92,265	15,559	16.9%	
Cupertino	\$5,000	136,921,873	142,200,391	85,606	314,019	1,751	21,199	5,650	30,984	459,209	394,946	64,263	16.3%	
Dublin	\$5,000	312,405,016	328,303,343	197,642	724,987	1,751	10,756	4,500	60,532	1,000,168	840,207	159,962	19.0%	
East Palo Alto	\$5,000	31,755,720	33,938,605	20,431	74,946	-	10,497	4,500	7,112	117,487	100,328	17,159	17.1%	
Foster City	\$5,000	182,765,587	191,018,892	114,996	421,824	-	24,597	5,650	39,511	606,577	511,493	95,084	18.6%	
Half Moon Bay	\$5,000	35,774,409	38,759,497	23,334	85,592	-	5,428	4,500	6,836	125,689	103,777	21,912	21.1%	
Hillsborough	\$5,000	93,275,856	97,575,594	58,742	215,475	-	11,962	4,500	22,683	313,361	265,511	47,850	18.0%	
Los Altos Hills	\$5,000	19,097,521	19,864,108	11,958	43,866	-	3,954	4,500	4,701	68,979	59,468	9,511	16.0%	
Los Gatos	\$5,000	77,720,158	81,875,203	49,290	180,804	-	19,711	5,650	17,277	272,731	231,605	41,126	17.8%	
Millbrae	\$5,000	157,243,761	165,610,518	99,699	365,715	2,616	9,033	4,500	30,696	512,259	430,449	81,811	19.0%	
Milpitas	\$5,000	264,950,001	278,867,505	167,881	615,819	4,883	55,142	6,800	60,120	910,645	768,670	141,975	18.5%	
Morgan Hill	\$5,000	178,392,070	188,860,520	113,696	417,058	1,751	29,578	5,650	43,281	611,014	514,591	96,423	18.7%	
Newark	\$5,000	189,828,178	198,845,203	119,707	439,107	-	22,697	5,650	36,957	624,118	527,570	96,548	18.3%	
Pacifica	\$5,000	267,348,423	285,697,426	171,993	630,901	13,129	20,600	5,650	67,070	909,343	755,632	153,711	20.3%	
Portola Valley	\$5,000	16,830,091	17,661,627	10,633	39,002	-	2,917	4,500	4,097	61,149	52,556	8,592	16.3%	
Ross	\$5,000	6,584,981	6,884,778	4,145	15,204	1,751	3,015	4,500	1,649	30,263	26,721	3,541	13.3%	
San Bruno	\$5,000	114,675,265	119,855,753	72,155	264,676	-	32,506	5,650	28,069	403,055	340,512	62,542	18.4%	
San Carlos	\$5,000	81,835,578	95,887,373	57,725	211,747	1,751	12,878	4,500	17,654	306,254	233,434	72,820	31.2%	
Saratoga	\$5,000	54,457,911	57,062,665	34,352	126,011	1,751	7,917	4,500	12,823	187,354	159,533	27,821	17.4%	
South San Francisco	\$5,000	473,375,590	501,525,475	301,924	1,107,511	13,129	37,171	6,800	89,838	1,556,373	1,305,752	250,621	19.2%	
Suisun City	\$5,000	50,543,816	55,566,553	33,452	122,707	4,377	11,478	4,500	11,141	187,654	152,311	35,344	23.2%	
Tiburon	\$5,000	15,605,016	16,892,799	10,170	37,304	1,751	4,531	4,500	4,818	63,074	53,350	9,724	18.2%	
Woodside	\$5,000	11,552,992	12,089,655	7,278	26,697	-	2,741	4,500	2,831	44,048	38,440	5,608	14.6%	
Total		\$3,578,514,443	\$ 3,790,625,716	\$ 2,282,000	\$ 8,370,777	\$ 60,655	\$ 452,525	\$ 142,100	\$ 784,084	\$ 12,092,142	\$ 10,142,419	\$ 1,949,723	19.2%	
Prior Year Actuals			3,578,514,443	1,766,000	6,978,285	58,018	413,932	142,100	784,084	10,142,419				
\$ Incr./ (Decr.)			\$ 212,111,273	\$ 516,000				,	,	\$ 1,949,723				
% Change			5.9%	29.2%		4.5%	9.3%	. 0.0%	0.0%					
			2.070		_51070									

1,399,000

1,373,000

1,635,000

1,766,000

1,921,000

2,116,000

85% CL Discounted

23/24

1,694,000

1,650,000

1,955,000

2,105,000

2,282,000

2,505,000

Notes:	Funding for the Pooled Layer @ 2%		
Note 1: 2023/24 Total Insured property values obtained from Alliant.		<u>23/24</u>	
Note 2: 2024/25 Property Total Insured Values (TIV) as submitted by members, updated as of 1/8/24.	Expected Undiscounted	1,399,00	
Note 3: Adjusted pool funding from draft Actuarial Report dated March 11, 2024, allocated using Note 2.	Expected Discounted	1,373,00	
Note 4: Estimate for Alliant Property Insurance Program (APIP) allocated using Note 2.	70% CL Discounted	1,635,00	
Note 5: Flood cost are based upon 2022/23 expiring premiums with a 4.5% increase.	75% CL Discounted	1,766,00	
Note 6: Excess Cyber coverage: minimum \$1K per member and remaining allocated based upon estimated payroll 2024/25.	80% CL Discounted	1,921,00	

Note 6: Excess Cyber coverage: minimum \$1K per member and remaining allocated based upon estimated payroll 2024/25.

Note 7: Continuation of Resolute Guard Services, no increase over prior year.

Note 8: Year 2 of 3, Property Rehabilitation Repayment.

Note 9: Total 2024/25 Property Contributions by members (Total Notes 3 through 8).

Note 10: 2023/24 Property Contributions.

# PLAN JPA 2024/2025 Preliminary Operating Budget

			2024/25			
	2023/24		Preliminary	liminary Prior Year		
	Approved Projected		Operating	Increase/	crease/ Percent	
	Budget	Actuals	Budget	(Decrease)	Incr./(Decr.)	
Revenues:						
Contributions	\$ 32,743,063	\$ 32,743,063	\$ 40,949,029	\$ 8,205,966	25.1%	
Funding from Equity	500,000			(500,000)	0.0%	С
Investment Income	116,406	1,699,073	166,294	49,888	42.9%	
Less: Investment Fees	(38,000)	(36,960)	(38,000)	-	0.0%	
Total Revenues	33,321,469	34,405,176	41,077,323	7,755,854	23.3%	
Expenses						
Claims Expense	6,137,000	6,709,042	8,088,000	1,951,000	31.8%	а
Insurance Expense						
Insurance - Liability	15,140,059	15,140,059	18,423,649	3,283,590	21.7%	
Insurance - Property	6,978,285	6,978,284	8,370,777	1,392,492	20.0%	
Flood Insurance	58,018	58,018	60,655	2,637	4.5%	
Excess Cyber Coverage	413,932	413,932	452,525	38,593	9.3%	
Resolute Guard	142,100	97,100	142,100	-	0.0%	
Employment Liability Coverage	126,805	126,805	359,115	232,310	183.2%	
	22,859,199	22,814,199	27,808,822	4,949,623	21.7%	b
Risk Management Grants						
Risk Management Fund	500,000	500,000		(500,000)	0.0%	С
Administration						
Program Administration	1,027,406	1,027,406	1,058,228	30,822	3.0%	
Financial Audit	22,900	22,900	28,350	5,450	23.8%	
Actuarial Studies	52,448	53,280	60,315	7,867	15.0%	
Claims Admin & Audit	809,165	800,273	832,300	23,135	2.9%	
Legal Counsel	57,377	53,169	63,115	5,738	10.0%	
Risk Control Services	307,393	307,393	316,615	9,222	3.0%	
Sewer Summit	20,000	13,951	20,000	-	0.0%	
Other Insurance	61,091	60,487	67,200	6,109	10.0%	
CAJPA Accreditation	12,000	-	12,000	-	0.0%	
Bank Fees	6,000	4,300	6,000	-	0.0%	
Board Meetings/Strategic Planning	60,000	43,073	80,000	20,000	33.3%	
Allowance for Contingencies	10,000	-	10,000		0.0%	
Total Administration Expenses:	2,445,780	2,386,234	2,554,123	108,343	4.4%	d
Total Expenses	31,941,979	32,409,475	38,450,945	6,508,966	20.4%	
Budgeted Net Income (Loss)	1,379,490	1,995,701	2,626,378	1,246,888	90.4%	

Notes:

a Claims expenses are recorded at expected. The breakout of expenses by programs are:

	2023/24	2024/25	Difference	<u>% Difference</u>
Liability	\$4,764,000	\$6,438,000	\$1,674,000	35.1%
Property	1,373,000	1,650,000	277,000	20.2%
Total	\$6,137,000	\$8,088,000	\$1,951,000	31.8%

b Insurance expenses are budgeted to increase by 21.2% in comparison to 2023/24 budget. Liability insurance expense are budgeted to increase 21.7% due to a continued hardening insurance market. Property rates are budgeted to increase 20% as the property market is continuing an upward trend. Cyber excess coverage is budgeted to increase 9.3% & employment liability coverage is budgeted to increase 105.5% with a new member joining ERMA JPA.

c Staff proposing a moratorium on additional funds from PLAN's net position, to the Risk Mgmt Grant Fund until 2025/26.

d Administration expenses are expected to increase by 3.8% in comparison to 23/24 budget. Increases are related to contractual increases.