

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

# FINANCE COMMITTEE MEETING AGENDA

Wednesday, March 20, 2024 2:00 p.m.

# Zoom Please Contact Katie Sullivan for Videoconference Information

All or portions of this meeting will be conducted by teleconferencing in accordance with Government Code Section 54953(b). Teleconference locations are as follows: Sedgwick, 1750 Creekside Oak Drive, Suite 200, Sacramento, CA 95833; City of Burlingame, 501 Primrose Road, Burlingame, CA 94010; Town of Hillsborough, 1600 Floribunda Avenue, Hillsborough, CA 94010; City of Milpitas, 455 E. Calaveras Boulevard, Milpitas, CA 95035; and Town of Woodside, 2955 Woodside Road, Woodside, CA 94062.

Each location is accessible to the public, and members of the public may address the Finance Committee from any teleconference location.

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 <a href="mailto:katie.sullivan@sedgwick.com">katie.sullivan@sedgwick.com</a> (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 Joint Powers Authority (PLAN JPA) Finance Committee 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.

### Page 1. CALL TO ORDER

- 2. INTRODUCTIONS
- 3. APPROVAL OF AGENDA AS POSTED (OR AMENDED)
- **4. PUBLIC COMMENTS** This time is reserved for members of the public to address the Committee relative to matters of the PLAN JPA 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.

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

### Page 5. CONSENT CALENDAR

4

If a Committee member would like to discuss any item listed, it may be pulled from the Consent Calendar.

\*A. Minutes from the March 9, 2023, Finance Committee Meeting Recommendation: Staff recommends the Committee approve the Consent Calendar.

### 6. FINANCIAL MATTERS

\*A. Review of PLAN JPA's Investment Performance Report and Updates to PLAN JPA's Investment Policy

Recommendation: Staff recommends the Finance Committee recommend approval of the PLAN JPA Investment Policy to the Executive Committee.

- \*B. Liability Program Updates and Preliminary Actuarial Data *Recommendation: None.*
- \*C. Property Program Updates and Preliminary Actuarial Data *Recommendation: None*
- \*D. Review of the 2024/25 Draft Preliminary Operating Budget *Recommendation: None.*
- E. Report from PLAN JPA's Finance Manager

  Recommendation: Staff recommends the Finance Committee provide direction.

### 7. CLOSING COMMENTS

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

- A. Finance Committee
- B. Staff

### 8. ADJOURNMENT

### **NOTICES:**

- The next Executive Committee Meeting will be held on April 25, 2024. Location TBD.
- ➤ The next Board of Directors Meeting will be held on June 20, 2024. Location TBD.

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

March 20, 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 self-explanatory and require no discussion. If a Committee member would like to discuss any item listed, it may be pulled from the Consent Calendar.

### **STAFF RECOMMENDATION:**

Staff recommends the Committee approve the Consent Calendar.

### **REFERENCE MATERIALS ATTACHED:**

A. Minutes from the March 9, 2023, Finance Committee Meeting

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

# MINUTES OF THE FINANCE COMMITTEE MEETING OF MARCH 9, 2023

A regular meeting of the Finance Committee was held on March 9, 2023, via videoconference.

**MEMBERS PRESENT:** Pak Lin, Chair, Colma

Jan Cooke, Hillsborough Cindy Safe, Woodside

**MEMBERS ABSENT:** None

**OTHERS PRESENT:** Eric Dahlen, General Manager

Katie Sullivan, Assistant General Manager John Burdette, Administrative Assistant

Min Su, Finance Manager

Olawale Kajopaiye, PFM Asset Management

Miguel Baes, Sedgwick Tony Pasquarello, Sedgwick

### 1. CALL TO ORDER:

The Regular Meeting of the PLAN JPA Finance Committee meeting was called to order at 10:02 a.m.

### 2. <u>INTRODUCTIONS:</u>

Roll call was taken and it was determined there was a quorum present.

### 3. <u>APPROVAL OF THE AGENDA AS POSTED (OR AMENDED):</u>

Cindy Safe moved to approve the agenda as posted. Pak Lin seconded the motion. A roll call vote was taken and the motion passed unanimously by Pak Lin, Jan Cooke, and Cindy Safe.

### 4. PUBLIC COMMENTS:

None.

### 5. CONSENT CALENDAR:

Jan Cooke moved to approve the following items: A) Minutes from the March 10, 2022, Finance Committee Meeting. Cindy Safe seconded the motion. A roll call vote was taken and the motion passed unanimously by Pak Lin, Jan Cooke, and Cindy Safe.

### 6. FINANCIAL MATTERS:

# A. Review of PLAN JPA's Investment Performance Report and Updates to the PLAN JPA's Investment Policy

Olawale Kajopaiye, Senior Managing Consultant with PFM Asset Management LLC (PFM), was present to provide a thorough review of the Quarterly Investment Report and updates to the Investment Policy.

In a memorandum provided to Min Su, Finance Manager, Mr. Kajopaiye stated the Investment Policy is in compliance with the sections of California Government Code (Code) that govern the investment of public funds; however, there were minor recommended changes to the policy. He reviewed the updates with the Committee, advising the updates pertained to recent Code updates and newly implement Senate Bill modifications.

Mr. Su noted funds from LAIF were moved to CAMP for a higher yield and the market value was in the positive and outperformed for the first time in a while.

Cindy Safe moved to recommend approval of the PLAN JPA Investment Policy to the Executive Committee. Cindy Safe seconded the motion. A roll call vote was taken and the motion passed unanimously by Pak Lin, Jan Cooke, and Cindy Safe.

### **B.** Liability-Property Loan Program Structure

In 1992, PLAN JPA (formerly ABAG PLAN Corporation) began pooling its Pooled Property Program insurance coverage for what is currently twenty-eight member cities in the Bay Area. Since then, PLAN JPA's self-insured retention (SIR) for the Property Program has increased from \$100k per occurrence to \$225k in program years 2017-18 to

2020-21, with a Pool Annual Aggregate Deductible (PAAD) of \$1M. Once PLAN JPA met the PAAD for those program years, claims were subject to a pool maintenance deductible of \$10k. In 2021-22, the Property Program SIR was increased from \$250k to \$500k per occurrence, with the elimination of PAAD.

Mr. Su reminded the Committee as reported in the June 30, 2022, financial audit report, the Pooled Property Program is in a deficit for \$352,252. At the October 27, 2022, Executive Committee meeting, staff presented options to bring the Property Program into the positive. These options included Property equity building, higher confidence level funding, a paper transaction between the Liability and Property Programs, and/or risk grant fund balance transfer. With this topic affecting all PLAN JPA members, the Executive Committee felt it was best staff bring this topic to the Board of Directors. During the December 8, 2022, Strategic Planning Session and Board of Directors meeting, staff was instructed to develop a loan structure between the Liability and Property Programs. The loan was subject to the following components:

- Three-year repayment loan structure;
- Equity building by way of increased confidence level funding to 85% in three years; and
- Risk Grant Fund usage for loan repayment.

Discussion ensued around what PLAN JPA would need to do if they were to go back into a deficit after the three years as the repayment loan was not intended to become a regular best practice. Mr. Su advised by funding at the 85% confidence level would lower the risk of returning to a deficit; however, the option to fund higher is always recommended.

Staff also request the Committee discuss the need to update the governing documents to memorialize the repayment loan. The Committee agreed not to update the governing documents and to memorialize the loan via a resolution as it's a temporary solution.

### C. Review of the 2023/24 Preliminary Operating Budget

Mr. Su reviewed the 2023/24 Preliminary Operating Budget with the Committee. He noted the funding model is similar to what PLAN JPA has approved in the past. Mr. Su detailed the budget, as follows:

• For the Liability Program, member contributions are presented at the 60% confidence level, with a 2% discount factor. PLAN JPA's SIR is up to \$1M above each member's SIR. PLAN JPA joined CARMA in 2021/22 at the \$9M excess \$1M layer. Above

CARMA's pooled layer, PLAN JPA purchases reinsurance and excess above \$10M; these coverage layers are conservatively estimated at 20% over 2022/23 actuals.

- For the Property Program, member contributions are presented at the increased 75% confidence level with a 2% discount factor. The proposed coverage is losses pooled from member's SIR up to \$500,000 per occurrence with zero aggregate deductible and excess coverage purchased up to \$1 billion. In addition, valuation increases continue into the 2023/24 fiscal year, a direct result of factors such as the supply chain crisis, higher costs for construction materials like lumber and steel, general inflation, and real estate pricing escalation in California. This equates to an estimated 35.6% increase in the risk sharing layer and a 24.9% increase for excess property.
  - o As discussed in Agenda Item 6.B, Loan Program Structure, Year 1 (of 3) repayment plan is included as part of the Property Program member contributions.

Mr. Su reviewed the major components of the budget, stating overall claims expense for Program Year 2023/24 is budgeted at the expected confidence level and expected to increase by 20.9% over 2022/23 and total insurance expense is projected to increase by 21.1% over prior year budget.

### 7. CLOSING COMMENTS:

### A. Finance Committee

None.

### B. Staff

None.

### 8. ADJOURNMENT

The Regular Meeting of the PLAN JPA Finance Committee was adjourned at 11:14 a.m.

Katie Sullivan, Assistant Board Secretary

March 20, 2024

Agenda Item 6.A.

### FINANCIAL MATTERS

SUBJECT: Review of PLAN JPA's Investment Performance Report and Updates to PLAN JPA's Investment Policy

### **BACKGROUND AND HISTORY:**

### **Investment Performance Report**

Michael Kronbetter, Relationship Manager with PFM Asset Management LLC (PFM), will be present to provide a thorough overview of PLAN JPA's December 31, 2023, Quarterly Investment Performance Report.

### **PLAN JPA Investment Policy**

An annual review of PLAN JPA's Investment Policy (Policy) is recommended under California Government Code 53646 (a) (2). Furthermore, annual approval of the Policy fulfills the annual delegation of investment authority to PLAN JPA's Treasurer. In addition, under section 5.0 *Delegation of Authority* of the Policy, PLAN JPA's Treasurer may delegate investment decision making and execution authority to an investment advisor. PLAN JPA's Investment Policy was last approved on March 9, 2023.

The Policy has been reviewed by Mr. Kronbetter whose recommended changes are detailed in his memorandum to Min Su, PLAN JPA Finance Manager.

Staff has reviewed the proposed amended Policy and agrees with the suggested changes.

Mr. Kronbetter will guide the Committee through the suggested changes.

### STAFF RECOMMENDATION:

Staff recommends the Finance Committee recommend approval of the PLAN JPA Investment Policy to the Executive Committee.

### **REFERENCE MATERIALS ATTACHED:**

- Investment Performance Report for the Quarter Ended December 31, 2023
- PLAN JPA Investment Policy Memo
- PLAN JPA Investment Policy Redlined, Revised March 14, 2024



# **Pooled Liability Assurance Network JPA**

# **Example 2.1** Investment Performance Review For the Quarter Ended December 31, 2023

### **Client Management Team**

**PFM Asset Management LLC** 

Michael Kronbetter, Relationship Manager Lesley Murphy, Director Allison Kaune, Senior Analyst 1 California Street Ste. 1000 San Francisco, CA 94111-5411 415-393-7270 213 Market Street Harrisburg, PA 17101-2141 717-232-2723

# **Agenda**

- Market Summary
- Account Summary
- Portfolio Review

**Market Summary** 

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### Summary

- ► The fourth quarter was characterized by economic resilience but expectations for a modest slowdown, cooling inflation that remains above the target set by the Federal Reserve (Fed), the labor market coming into better balance, and consumers that continue to support U.S. economic growth through spending.
- ▶ The Fed kept the overnight target rate at its current range of 5.25% to 5.50% at its December 13 meeting and indicated that the historic 2022-23 hiking cycle had likely come to an end. The Fed also messaged a more dovish policy stance for 2024 as its updated "dot plot" showed three 25 basis points (bps) rate cuts for the year, which was more than previously projected. Yields fell significantly as a result, and Q4 was defined by a strong rally in both equities and bonds.
- ▶ With the Fed pivoting to easier monetary policy and a soft-landing scenario coming into focus, yields on U.S. Treasury maturities from one to 30 years declined 65 to 80 bps in Q4, while the S&P 500 Index jumped 11.7% and the technology-heavy NASDAQ was higher by 13.8%.

### **Economic Snapshot**

- ▶ Real gross domestic product (GDP) increased at an annual rate of 2.1% in Q2 2023. Although slightly U.S. inflation (as measured by CPI) continued to trend lower in Q4 as both headline and core inflation (which excludes food and energy) continued to decline from their peaks in mid-2022. Shelter costs – the average household's biggest expense – accounted for nearly 70% of the total increase in core CPI over the past year as home prices remain elevated.
- Real GDP expanded at an annualized pace of 4.9% in Q3 2023, after a 2.1% increase in Q2. The increase in Q3 reflected upticks in most segments, underscoring the resiliency of the U.S. economy. Estimates for 2024 indicate quarterly expectations on average of less than 1%, although positive, a confirmation of a slower pace of growth for the foreseeable future.
- ▶ The U.S. labor market remained strong, providing a continuing tailwind for the economy, although that strength has begun to moderate. In Q4, the U.S. economy added 494,000 new jobs compared to 663,000 from Q3, which represented the lowest quarterly increase since Q4 of 2019. Labor force participation dipped at year-end, while the unemployment rate of 3.7% was a few tenths of a percent off the generational low reached early in 2023. While still low from a historic perspective, this remains in line with the Fed's projections for the headline unemployment rate to trend slightly higher over the next 12 months.
- Mortgage rates also descended from multi-decade highs, mirroring changes in overall yields, although they remained near the highest level of the past 20 years, ending the quarter around 6.6%. Despite lower mortgage rates, housing activity remained low, as existing home sales fell to the lowest level in over 20 years and Q4 new home sales declined 15% through November.

### **Interest Rates**

- After peaking in October, a more dovish Fed and increased likelihood that the overnight target rate has reached its cycle-high drove interest rates lower through Q4. By the end of the year, the yield on a 2-year U.S. Treasury reached a 7-month low of 4.25%, while the 10-year U.S. Treasury note ended the year at 3.88%.
- Over the quarter, the yield on 2-, 5-, and 10-year U.S. Treasuries declined 79 bps, 76 bps, and 69 bps, respectively. Even the yield on a 3-month U.S. Treasury Bill declined by 11 bps, reflecting how aggressively markets have begun pricing in potential Fed rate cuts in the first half of 2024.
- As a result of notably lower yields, bond markets posted one of the best quarters over the past several decades. The ICE BofA 2-, 5-, and 10-year U.S. Treasury indices returned 2.44%, 4.41%, and 6.60% respectively.

#### **Sector Performance**

- Market optimism also drove yield spreads on investment-grade (IG) corporates and other "spread sectors" lower in Q4, which resulted in strong excess returns across most non-government fixed income sectors. Diversification benefited portfolios during Q4 with longer duration and lower quality adding the most incremental value.
- Federal agency, municipal, and supranational spreads drifted slightly lower in Q4, having remained in a narrow range for most of the past year. As a result, these sectors posted positive excess returns relative to Treasuries, mostly from their modest incremental income. Excess returns of callable agencies outperformed bullet agencies as spreads tightened more as yields fell.
- ▶ IG corporates were one of the best performing fixed-income sectors for both Q4 and calendar year 2023. After a brief sell-off in late September and most of October, the IG corporate sector did an about-face and finished the year with spreads rallying to their lowest spread levels in over nine months. As a result, the combination of elevated incremental income and spread contraction helped buoy portfolio performance.
- The asset-backed securities (ABS) sector also generated positive excess returns in Q4, although they trailed the performance of IG corporates. While spreads tightened into year-end, the relatively muted rally vs. corporates underscores the potential for modestly weaker consumer fundamentals moving forward. Incremental income from ABS remains attractive and our fundamental outlook for the economy is supportive for the sector.
- ▶ Mortgage-backed securities (MBS) were one of the best performing IG sectors in Q4, despite a volatile roller coaster ride. After widening in October to their highest levels since the spring of 2020, MBS yield spreads proceeded to rally into year-end, finishing near nine-month lows. Agency commercial MBS performed particularly well.

# **Economic Snapshot**

Labor Market	L	atest	Sep '23	Dec '22	
Unemployment Rate	Dec '23	3.7%	3.8%	3.5%	Unemployment Rate (left) vs. Change in Non-farm Payrolls (right)  Change In Non-Farm Payrolls  Unemployment Rate
Change In Non-Farm Payrolls	Dec '23	216,000	262,000	239,000	8.0% 1,000K 800K 6.0% 600K
Average Hourly Earnings (YoY)	Dec '23	4.1%	4.2%	4.8%	4.0% 400K 200K
Personal Income (YoY)	Nov '23	4.6%	4.6%	4.5%	2.0% - 0 -200K
Initial Jobless Claims (week)	1/6/24	202,000	209,000	206,000	0.0% — -400K Dec '20 Jun '21 Dec '21 Jun '22 Dec '22 Jun '23 Dec '23
Growth					
Real GDP (QoQ SAAR)	2023Q3	4.9%	2.1%	2.7% 2	Real GDP (QoQ)
GDP Personal Consumption (QoQ SAAR)	2023Q3	3.1%	0.8%	1.6%	30% -
Retail Sales (YoY)	Nov '23	4.1%	4.0%	6.0%	10% -
ISM Manufacturing Survey (month)	Dec '23	47.4	49.0	48.4	-10%
Existing Home Sales SAAR (month)	Nov '23	3.82 mil.	3.95 mil.	4.03 mil.	Sep '20 Mar '21 Sep '21 Mar '22 Sep '22 Mar '23 Sep '23
Inflation/Prices					
Personal Consumption Expenditures (YoY)	Nov '23	2.6%	3.4%	5.4%	Consumer Price Index —— CPI (YoY) —— Core CPI (YoY)
Consumer Price Index (YoY)	Dec '23	3.4%	3.7%	6.5%	10% 9% 8%
Consumer Price Index Core (YoY)	Dec '23	3.9%	4.1%	5.7%	10% 9% 8% 7% 6% 5% 4% 4% 2%
Crude Oil Futures (WTI, per barrel)	Dec 31	\$71.65	\$90.79	\$80.26	2% 1% 0%
Gold Futures (oz.)	Dec 31	\$2,072	\$1,848	\$1,826	Dec '20 Jun '21 Dec '21 Jun '22 Dec '22 Jun '23 Dec '23

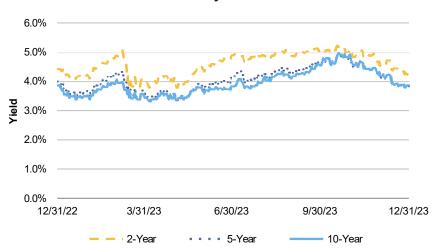
<sup>1.</sup> Data as of Second Quarter 2023.

Note: YoY = year-over-year, QoQ = quarter-over-quarter, SAAR = seasonally adjusted annual rate, WTI = West Texas Intermediate crude oil. Source: Bloomberg.

<sup>2.</sup> Data as of Third Quarter 2022.

### **Interest Rate Overview**

**U.S. Treasury Note Yields** 

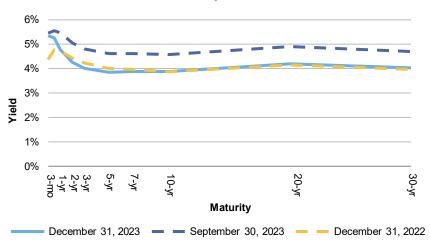


**U.S. Treasury Yields** 

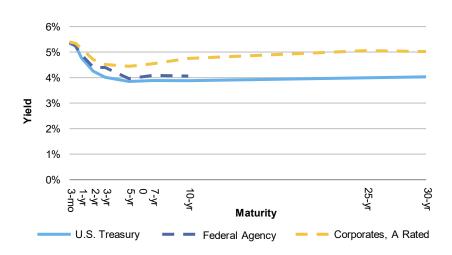
Maturity	Dec '23	Sep '23	Change over Quarter	Dec '22	Change over Year
3-Month	5.34%	5.45%	(0.11%)	4.37%	0.97%
1-Year	4.77%	5.46%	(0.69%)	4.71%	0.06%
2-Year	4.25%	5.05%	(0.80%)	4.43%	(0.18%)
5-Year	3.85%	4.61%	(0.76%)	4.01%	(0.16%)
10-Year	3.88%	4.57%	(0.69%)	3.88%	0.00%
30-Year	4.03%	4.70%	(0.67%)	3.97%	0.06%

Source: Bloomberg.

U.S. Treasury Yield Curve



### Yield Curves as of December 31, 2023



## **ICE BofAML Index Returns**

As of 12/31/2023

Returns for Periods ended 12/31/2023

<b>December 31, 2023</b>	Duration	Yield	3 Month	1 Year	3 Years
1-3 Year Indices					
U.S. Treasury	1.83	4.34%	2.49%	4.26%	(0.04%)
Federal Agency	1.60	4.44%	2.53%	4.69%	0.11%
U.S. Corporates, A-AAA rated	1.80	5.02%	2.98%	5.33%	0.46%
Agency MBS (0 to 3 years)	1.77	5.11%	3.23%	4.83%	(1.06%)
Taxable Municipals	1.49	4.75%	2.39%	4.86%	1.10%
1-5 Year Indices					
U.S. Treasury	2.59	4.17%	3.10%	4.30%	(0.76%)
Federal Agency	1.97	4.36%	2.81%	4.68%	(0.55%)
U.S. Corporates, A-AAA rated	2.51	4.92%	3.82%	5.89%	(0.25%)
Agency MBS (0 to 5 years)	2.63	4.94%	4.90%	4.88%	(1.38%)
Taxable Municipals	2.29	4.65%	2.99%	5.30%	0.07%
Master Indices (Maturities 1 '	Year or Greate	er)			
U.S. Treasury	6.43	4.11%	5.72%	3.87%	(4.04%)
Federal Agency	3.35	4.33%	3.86%	4.90%	(1.63%)
U.S. Corporates, A-AAA rated	6.94	4.95%	7.62%	7.43%	(3.55%)
Agency MBS (0 to 30 years)	5.44	4.73%	7.37%	4.98%	(2.96%)
Taxable Municipals	9.15	4.92%	8.45%	8.35%	(4.30%)

Returns for periods greater than one year are annualized.

Source: ICE BofAML Indices.

### **Disclosures**

PFM Asset Management LLC ("PFMAM") is an investment adviser registered with the U.S. Securities and Exchange Commission and a subsidiary of U.S. Bancorp Asset Management, Inc. ("USBAM"). USBAM is a subsidiary of U.S. Bank National Association ("U.S. Bank"). U.S. Bank is a separate entity and subsidiary of U.S. Bancorp. U.S. Bank is not responsible for and does not guarantee the products, services or performance of PFMAM.

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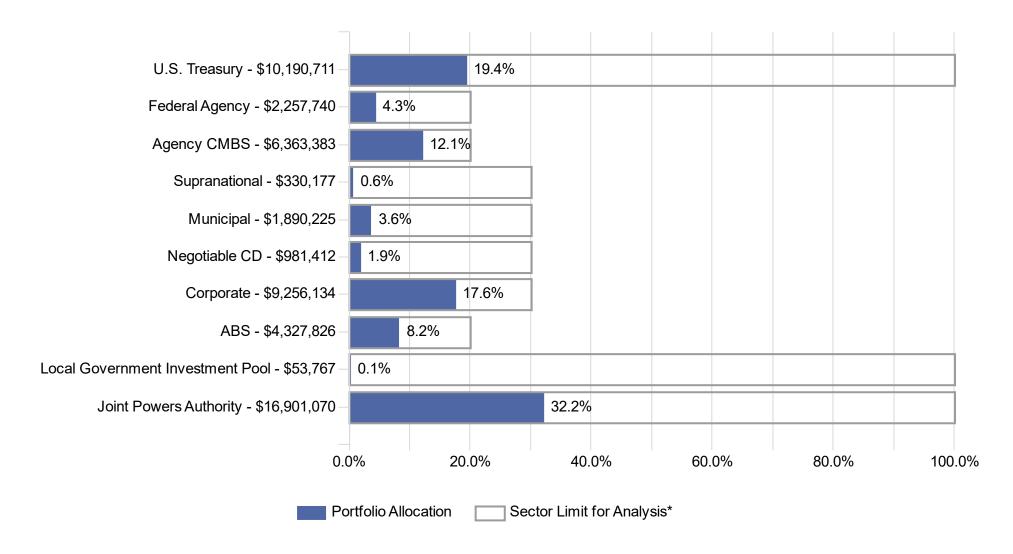
### NOT FDIC INSURED: NO BANK GUARANTEE: MAY LOSE VALUE

Further distribution is not permitted without prior written consent.

**Account Summary** 

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## **Sector Allocation Analytics**



For informational/analytical purposes only and is not provided for compliance assurance. Includes accrued interest.

<sup>\*</sup>Sector Limit for Analysis is as derived from our interpretation of your most recent Investment Policy as provided.

# **Certificate of Compliance**

During the reporting period for the quarter ended December 31, 2023, the account(s) managed by PFM Asset Management ("PFMAM") were in compliance with the applicable investment policy and guidelines as furnished to PFMAM.

Acknowledged: PFM Asset Management LLC

Note: Pre- and post-trade compliance for the account(s) managed by PFM Asset Management is provided via Bloomberg Asset and Investment Management ("AIM").

Portfolio Review

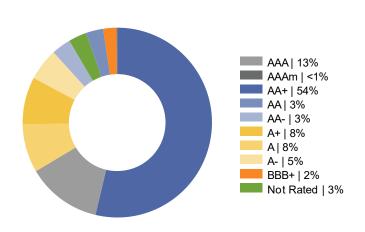
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# Portfolio Snapshot - CAMP-PLAN INVESTMENT PORTFOLIO<sup>1</sup>

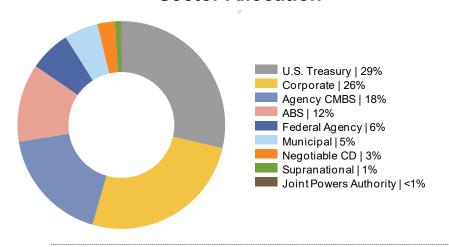
### **Portfolio Statistics**

Total Market Value	\$35,638,820.29
Managed Account Sub-Total	\$35,411,233.51
Accrued Interest	\$186,375.28
Pool	\$41,211.50
Portfolio Effective Duration	2.51 years
Benchmark Effective Duration	2.53 years
Yield At Cost	3.24%
Yield At Market	4.41%
Portfolio Credit Quality	AA

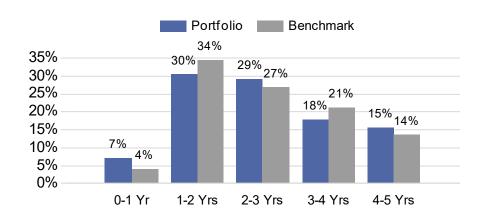
# **Credit Quality - S&P**



### **Sector Allocation**



### **Duration Distribution**



Total market value includes accrued interest and balances invested in CAMP, as of December 31, 2023.
 Yield and duration calculations exclude balances invested in CAMP.
 The portfolio's benchmark is the ICE BofA 1-5 Year U.S. Treasury Index. Source: Bloomberg.
 An average of each security's credit rating was assigned a numeric value and adjusted for its relative weighting in the portfolio.

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# **Account Summary**

Pooled Liability Assurance Network JPA - PLAN - Investment Account - 4011-002					
Portfolio Values	<b>December 31, 2023</b>	Analytics¹	<b>December 31, 2023</b>		
CAMP Managed Account	\$35,411,234	Yield at Market	4.41%		
CAMP Pool	\$41,212	Yield on Cost	3.24%		
Amortized Cost	\$36,117,944	Portfolio Duration	2.51		
Market Value	\$35,411,234	CAMP Pool 7-Day Yield <sup>2</sup>	5.56%		
Accrued Interest	\$186,375				
Cash	\$0				

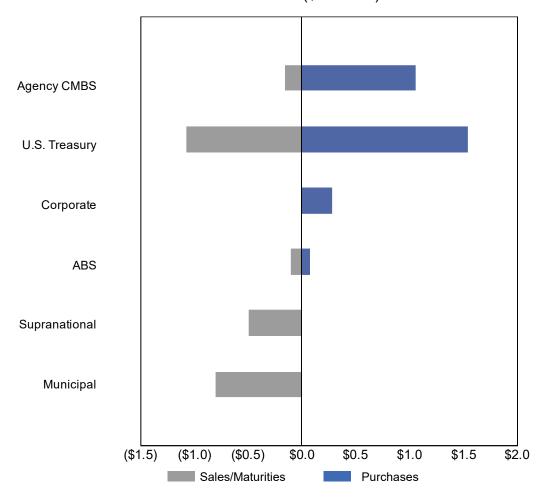
<sup>1.</sup> Yield at market, yield on cost, and portfolio duration only include investments held within the separately managed account(s), excludes balances invested in overnight funds.

<sup>2.</sup> The current 7-day yield is the net change, exclusive of capital changes and income other than investment income, in the value of a hypothetical fund account with a balance of one share over the seven-day base period including the statement date, expressed as a percentage of the value of one share (normally \$1.00 per share) at the beginning of the seven-day period. This resulting net change in account value is then annualized by multiplying it by 365 and dividing the result by 7. The yields quoted should not be considered a representation of the yield of the fund in the future, since the yield is not fixed.

# Portfolio Activity - CAMP-PLAN INVESTMENT PORTFOLIO

## **Net Activity by Sector**

(\$ millions)

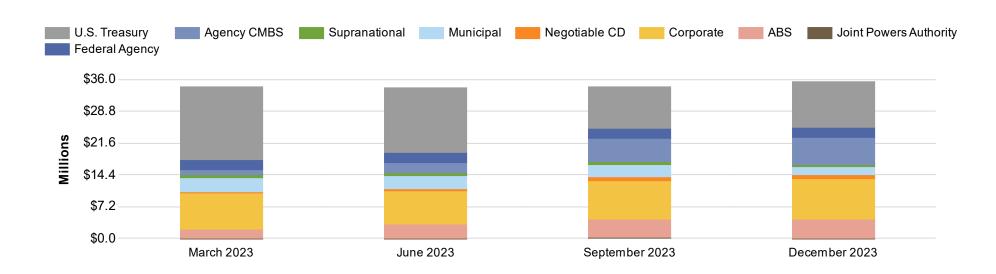


Sector	Net Activity
Agency CMBS	\$899,178
U.S. Treasury	\$471,454
Corporate	\$275,072
ABS	(\$29,760)
Supranational	(\$489,461)
Municipal	(\$801,491)
Total Net Activity	\$324,992

Based on total proceeds (principal and accrued interest) of buys, sells, maturities, and principal paydowns. Detail may not add to total due to rounding.

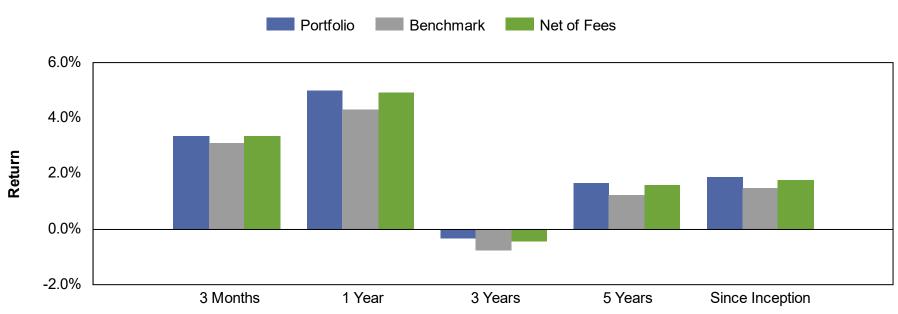
### Sector Allocation Review - CAMP-PLAN INVESTMENT PORTFOLIO

Security Type	Mar-23	% of Total	Jun-23	% of Total	Sep-23	% of Total	Dec-23	% of Total
U.S. Treasury	\$16.5	48.1%	\$14.8	43.3%	\$9.4	27.3%	\$10.2	28.6%
Federal Agency	\$2.3	6.7%	\$2.2	6.4%	\$2.2	6.4%	\$2.3	6.4%
Agency CMBS	\$1.1	3.1%	\$2.2	6.5%	\$5.3	15.3%	\$6.3	17.9%
Supranational	\$0.8	2.3%	\$0.8	2.3%	\$0.8	2.4%	\$0.3	0.9%
Municipal	\$3.1	8.9%	\$3.1	8.9%	\$2.6	7.7%	\$1.9	5.3%
Negotiable CD	\$0.4	1.0%	\$0.4	1.1%	\$1.0	2.8%	\$1.0	2.7%
Corporate	\$8.3	24.0%	\$7.6	22.1%	\$8.6	25.1%	\$9.2	25.9%
ABS	\$1.9	5.5%	\$3.2	9.2%	\$4.3	12.5%	\$4.3	12.2%
Joint Powers Authority	\$0.1	0.4%	\$0.1	0.2%	\$0.2	0.5%	\$0.0	0.1%
Total	\$34.4	100.0%	\$34.2	100.0%	\$34.3	100.0%	\$35.5	100.0%



Market values, excluding accrued interest. Only includes fixed-income securities held within the separately managed account(s) and LGIPs managed by PFMAM. Detail may not add to total due to rounding.

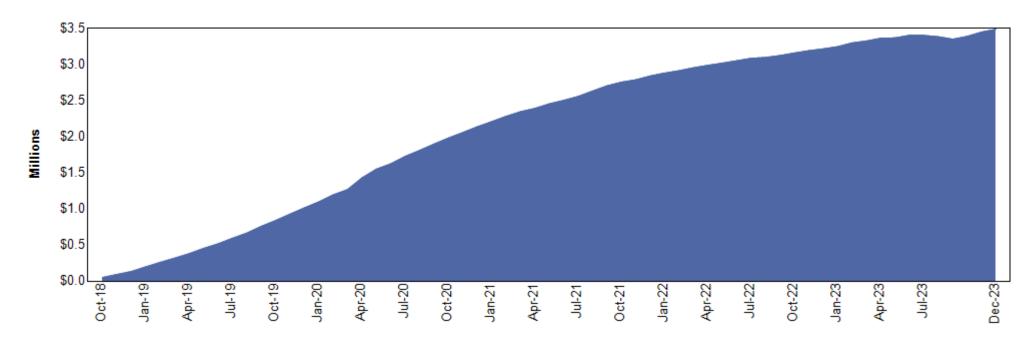
## **Portfolio Performance**



Market Value Basis Earnings	3 Months	1 Year	3 Years	5 Years	Since Inception <sup>1</sup>
Interest Earned²	\$242,357	\$759,543	\$1,849,978	\$3,304,557	\$3,464,996
Change in Market Value	\$921,002	\$940,498	(\$2,229,961)	(\$474,027)	(\$145,746)
Total Dollar Return	\$1,163,359	\$1,700,041	(\$379,983)	\$2,830,530	\$3,319,250
Total Return³					
Portfolio	3.37%	5.01%	-0.35%	1.66%	1.87%
Benchmark⁴	3.10%	4.30%	-0.76%	1.21%	1.48%
Basis Point Fee	0.02%	0.09%	0.09%	0.09%	0.09%
Net of Fee Return	3.35%	4.91%	-0.44%	1.57%	1.78%

- 1. The lesser of 10 years or since inception is shown. Since inception returns for periods one year or less are not shown. Performance inception date is September 30, 2018.
- 2. Interest earned calculated as the ending accrued interest less beginning accrued interest, plus net interest activity.
- 3. Returns for periods one year or less are presented on a periodic basis. Returns for periods greater than one year are presented on an annualized basis.
- 4. The portfolio's benchmark is the ICE BofA 1-5 Year U.S. Treasury Index. Source: Bloomberg.

# **Accrual Basis Earnings - CAMP-PLAN INVESTMENT PORTFOLIO**



Accrual Basis Earnings	3 Months	1 Year	3 Years	5 Year	Since Inception <sup>1</sup>
Interest Earned²	\$242,357	\$759,543	\$1,849,978	\$3,304,557	\$3,464,996
Realized Gains / (Losses)³	(\$137,544)	(\$591,405)	(\$491,605)	\$6,264	(\$43,742)
Change in Amortized Cost	\$32,907	\$104,103	(\$8,065)	\$42,930	\$65,265
Total Earnings	\$137,720	\$272,241	\$1,350,309	\$3,353,751	\$3,486,520

<sup>1.</sup> The lesser of 10 years or since inception is shown. Performance inception date is September 30, 2018.

<sup>2.</sup> Interest earned calculated as the ending accrued interest less beginning accrued interest, plus net interest activity.

<sup>3.</sup> Realized gains / (losses) are shown on an amortized cost basis.

Portfolio Holdings and Transactions

## **Issuer Diversification**

Security Type / Issuer	Market Value (%)	S&P / Moody's / Fitch
U.S. Treasury	28.6%	
UNITED STATES TREASURY	28.6%	AA / Aaa / AA
Federal Agency	6.3%	
FANNIE MAE	4.6%	AA / Aaa / AA
FREDDIE MAC	1.8%	AA / Aaa / AA
Agency CMBS	17.9%	
FANNIE MAE	1.2%	AA / Aaa / AA
FREDDIE MAC	16.7%	AA / Aaa / AA
Supranational	0.9%	
INTER-AMERICAN DEVELOPMENT BANK	0.9%	AAA / Aaa / AAA
Municipal	5.3%	
FLORIDA STATE BOARD OF ADMIN FIN COR	P 1.1%	AA / Aa / AA
LOS ANGELES COMMUNITY COLLEGE DISTRICT	0.4%	AA / Aaa / NR
LOS ANGELES UNIFIED SCHOOL DISTRICT	0.2%	NR / Aa / AAA
NEW YORK ST URBAN DEVELOPMENT CORF	1.0%	NR / NR / AA
SAN DIEGO COUNTY WATER AUTHORITY	0.4%	AAA / Aa / AA
SAN RAMON VALLEY UNIFIED SCHOOL DISTRICT	0.4%	AA / Aa / NR
STATE OF CONNECTICUT	0.7%	AA / Aa / AA
STATE OF MINNESOTA	0.3%	AAA / Aaa / AAA
STATE OF WISCONSIN	0.7%	AAA / NR / AA
Negotiable CD	2.8%	
NATIXIS NY BRANCH	0.7%	A/A/A
RABOBANK NEDERLAND	1.0%	A / Aa / AA
TORONTO-DOMINION BANK	1.0%	A / A / NR

Security Type / Issuer	Market Value (%)	S&P / Moody's / Fitch
Corporate	26.0%	
AMAZON.COM INC	1.1%	AA / A / AA
AMERICAN EXPRESS CO	0.7%	BBB / A / A
AMERICAN HONDA FINANCE	0.8%	A/A/A
ANALOG DEVICES INC	0.6%	A/A/A
ASTRAZENECA PLC	0.7%	A/A/A
BANK OF AMERICA CO	1.5%	A / Aa / AA
BRISTOL-MYERS SQUIBB CO	0.4%	A/A/NR
CHEVRON CORPORATION	0.7%	AA / Aa / NR
CITIGROUP INC	1.7%	A/A/A
DEERE & COMPANY	0.7%	A/A/A
GOLDMAN SACHS GROUP INC	0.8%	BBB / A / A
HOME DEPOT INC	0.4%	A/A/A
HONEYWELL INTERNATIONAL	0.4%	A/A/A
INTEL CORPORATION	0.7%	A/A/A
JP MORGAN CHASE & CO	1.2%	A/A/AA
LOCKHEED MARTIN CORP	0.3%	A/A/A
MASTERCARD INC	0.8%	A / Aa / NR
MERCK & CO INC	0.3%	A/A/NR
Meta Platforms Inc	0.5%	AA / A / NR
NATIONAL AUSTRALIA BANK LTD	1.5%	AA / Aa / NR
NATIONAL RURAL UTILITIES CO FINANCE CORP	0.7%	A/A/A
NORTHERN TRUST	0.5%	A/A/A
PACCAR FINANCIAL CORP	0.5%	A/A/NR
PEPSICO INC	0.2%	A/A/NR
PNC FINANCIAL SERVICES GROUP	0.7%	A/A/A
STATE STREET CORPORATION	1.1%	A/A/AA

Ratings shown are calculated by assigning a numeral value to each security rating, then calculating a weighted average rating for each security type / issuer category using all available security ratings, excluding Not-Rated (NR) ratings. For security type / issuer categories where a rating from the applicable NRSRO is not available, a rating of NR is assigned. Includes accrued interest and excludes balances invested in overnight funds.

## **Issuer Diversification**

Security Type / Issuer	Market Value (%)	S&P / Moody's / Fitch
Corporate	26.0%	
TARGET CORP	0.6%	A/A/A
THE BANK OF NEW YORK MELLON CORPORATION	0.5%	A/A/AA
TOYOTA MOTOR CORP	0.7%	A/A/A
TRUIST FIN CORP	0.7%	A/A/A
UNITEDHEALTH GROUP INC	0.7%	A/A/A
US BANCORP	1.0%	A/A/A
WAL-MART STORES INC	0.7%	AA / Aa / AA
WELLS FARGO & COMPANY	1.6%	A / Aa / AA
ABS	12.2%	
ALLY AUTO RECEIVABLES TRUST	0.4%	NR / Aaa / AAA
AMERICAN EXPRESS CO	0.4%	AAA / NR / AAA
BANK OF AMERICA CO	1.3%	AAA / Aaa / AAA
BMW VEHICLE OWNER TRUST	0.4%	AAA / Aaa / AAA
CAPITAL ONE FINANCIAL CORP	1.6%	AAA / NR / AAA
CARMAX AUTO OWNER TRUST	0.8%	AAA / NR / AAA
CHASE ISSURANCE	0.8%	AAA / NR / AAA
Daimler Trucks Retail Trust	0.6%	NR / Aaa / AAA
DISCOVER FINANCIAL SERVICES	1.7%	AAA / Aaa / AAA
FIFTH THIRD AUTO TRUST	0.7%	AAA / Aaa / NR
FORD CREDIT AUTO OWNER TRUST	0.3%	AAA / NR / AAA
GM FINANCIAL CONSUMER AUTOMOBILE TRUST	0.4%	AAA / Aaa / AAA
HONDA AUTO RECEIVABLES	0.8%	AAA / NR / AAA
HYUNDAI AUTO RECEIVABLES	0.8%	AAA / NR / AAA
MERCEDES-BENZ AUTO RECEIVABLES	0.8%	AAA / Aaa / NR
NISSAN AUTO RECEIVABLES	0.2%	NR / Aaa / AAA

Security Type / Issuer	Market Value (%)	S&P / Moody's / Fitch
ABS	12.2%	
WORLD OMNI AUTO REC TRUST	0.2%	AAA / NR / AAA
Total	100.0%	

Ratings shown are calculated by assigning a numeral value to each security rating, then calculating a weighted average rating for each security type / issuer category using all available security ratings, excluding Not-Rated (NR) ratings. For security type / issuer categories where a rating from the applicable NRSRO is not available, a rating of NR is assigned. Includes accrued interest and excludes balances invested in overnight funds.

# **Managed Account Detail of Securities Held**

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
U.S. Treasury											
US TREASURY NOTES DTD 08/15/2021 0.375% 08/15/2024	91282CCT6	250,000.00	AA+	Aaa	9/1/2021	9/3/2021	249,824.22	0.40	354.11	249,962.95	242,773.45
US TREASURY NOTES DTD 01/31/2018 2.500% 01/31/2025	9128283V0	300,000.00	AA+	Aaa	2/3/2020	2/5/2020	316,394.53	1.36	3,138.59	303,563.25	292,968.75
US TREASURY NOTES DTD 02/15/2022 1.500% 02/15/2025	91282CDZ1	90,000.00	AA+	Aaa	5/2/2022	5/4/2022	86,575.78	2.93	509.92	88,617.53	86,850.00
US TREASURY NOTES DTD 05/15/2022 2.750% 05/15/2025	91282CEQ0	160,000.00	AA+	Aaa	7/1/2022	7/6/2022	159,431.25	2.88	568.13	159,727.61	156,175.01
US TREASURY NOTES DTD 05/15/2022 2.750% 05/15/2025	91282CEQ0	150,000.00	AA+	Aaa	9/18/2023	9/19/2023	144,216.80	5.21	532.63	145,212.58	146,414.07
US TREASURY NOTES DTD 09/30/2023 5.000% 09/30/2025	91282CJB8	350,000.00	AA+	Aaa	11/30/2023	12/7/2023	351,626.95	4.73	4,446.72	351,568.16	353,609.38
US TREASURY NOTES DTD 12/31/2020 0.375% 12/31/2025	91282CBC4	825,000.00	AA+	Aaa	5/5/2021	5/7/2021	811,625.98	0.73	8.50	819,253.66	764,671.88
US TREASURY NOTES DTD 01/31/2021 0.375% 01/31/2026	91282CBH3	725,000.00	AA+	Aaa	9/1/2021	9/3/2021	715,172.85	0.69	1,137.74	720,357.88	669,718.75
US TREASURY NOTES DTD 01/31/2021 0.375% 01/31/2026	91282CBH3	275,000.00	AA+	Aaa	7/2/2021	7/7/2021	269,714.85	0.80	431.55	272,590.17	254,031.25
US TREASURY NOTES DTD 02/28/2021 0.500% 02/28/2026	91282CBQ3	125,000.00	AA+	Aaa	3/31/2021	4/5/2021	122,612.30	0.90	211.20	123,947.54	115,507.81
US TREASURY NOTES DTD 03/31/2021 0.750% 03/31/2026	91282CBT7	425,000.00	AA+	Aaa	4/9/2021	4/12/2021	422,742.19	0.86	809.94	423,979.38	394,453.13
US TREASURY NOTES DTD 05/31/2021 0.750% 05/31/2026	91282CCF6	250,000.00	AA+	Aaa	6/2/2021	6/4/2021	249,453.13	0.79	163.93	249,735.57	230,781.25
US TREASURY NOTES DTD 06/30/2021 0.875% 06/30/2026	91282CCJ8	130,000.00	AA+	Aaa	4/1/2022	4/5/2022	120,859.38	2.64	3.13	124,617.26	120,229.69
US TREASURY NOTES DTD 07/31/2021 0.625% 07/31/2026	91282CCP4	375,000.00	AA+	Aaa	1/3/2022	1/5/2022	363,427.73	1.32	980.81	368,464.58	343,476.56
US TREASURY NOTES DTD 08/15/2016 1.500% 08/15/2026	9128282A7	250,000.00	AA+	Aaa	5/2/2022	5/4/2022	234,853.52	3.02	1,416.44	240,731.98	233,984.38

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
U.S. Treasury											
US TREASURY NOTES DTD 09/30/2021 0.875% 09/30/2026	91282CCZ2	215,000.00	AA+	Aaa	10/1/2021	10/6/2021	214,328.13	0.94	478.02	214,629.73	197,531.25
US TREASURY NOTES DTD 10/31/2021 1.125% 10/31/2026	91282CDG3	275,000.00	AA+	Aaa	2/11/2022	2/14/2022	265,256.84	1.92	526.96	269,142.77	253,773.44
US TREASURY NOTES DTD 10/31/2021 1.125% 10/31/2026	91282CDG3	270,000.00	AA+	Aaa	11/1/2021	11/3/2021	268,744.93	1.22	517.37	269,288.13	249,159.37
US TREASURY NOTES DTD 11/30/2021 1.250% 11/30/2026	91282CDK4	440,000.00	AA+	Aaa	12/1/2021	12/3/2021	441,254.69	1.19	480.87	440,732.30	406,862.50
US TREASURY NOTES DTD 02/15/2017 2.250% 02/15/2027	912828V98	260,000.00	AA+	Aaa	7/1/2022	7/6/2022	252,342.19	2.94	2,209.65	254,814.50	246,837.50
US TREASURY NOTES DTD 02/15/2017 2.250% 02/15/2027	912828V98	350,000.00	AA+	Aaa	8/1/2022	8/5/2022	342,849.61	2.73	2,974.52	345,070.34	332,281.25
US TREASURY NOTES DTD 02/15/2017 2.250% 02/15/2027	912828V98	530,000.00	AA+	Aaa	6/2/2022	6/6/2022	514,037.89	2.94	4,504.28	519,380.31	503,168.75
US TREASURY NOTES DTD 05/15/2017 2.375% 05/15/2027	912828X88	325,000.00	AA+	Aaa	12/5/2022	12/7/2022	306,147.46	3.81	996.65	310,686.03	308,699.24
US TREASURY NOTES DTD 08/15/2017 2.250% 08/15/2027	9128282R0	75,000.00	AA+	Aaa	3/1/2023	3/3/2023	68,809.57	4.31	637.40	69,966.94	70,734.38
US TREASURY NOTES DTD 08/31/2020 0.500% 08/31/2027	91282CAH4	600,000.00	AA+	Aaa	12/5/2022	12/7/2022	515,789.06	3.77	1,013.74	534,795.00	530,250.00
US TREASURY NOTES DTD 10/31/2020 0.500% 10/31/2027	91282CAU5	200,000.00	AA+	Aaa	1/3/2023	1/5/2023	169,828.12	3.97	170.33	176,016.78	175,875.00
US TREASURY NOTES DTD 11/15/2017 2.250% 11/15/2027	9128283F5	625,000.00	AA+	Aaa	1/30/2023	1/31/2023	585,522.46	3.70	1,815.76	593,083.91	587,793.00
US TREASURY NOTES DTD 12/31/2022 3.875% 12/31/2027	91282CGC9	165,000.00	AA+	Aaa	5/1/2023	5/4/2023	166,637.11	3.64	17.57	166,404.34	164,819.52
US TREASURY NOTES DTD 02/28/2021 1.125% 02/29/2028	91282CBP5	425,000.00	AA+	Aaa	5/18/2023	5/24/2023	377,818.36	3.68	1,615.64	383,831.18	380,109.38
US TREASURY NOTES DTD 04/30/2021 1.250% 04/30/2028	91282CBZ3	150,000.00	AA+	Aaa	6/1/2023	6/5/2023	133,265.62	3.76	319.37	135,227.78	134,343.75
US TREASURY NOTES DTD 07/31/2021 1.000% 07/31/2028	91282CCR0	600,000.00	AA+	Aaa	11/30/2023	12/7/2023	517,523.44	4.29	2,510.87	518,737.76	527,906.28

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
U.S. Treasury											
US TREASURY NOTES DTD 11/15/2018 3.125% 11/15/2028	9128285M8	700,000.00	AA+	Aaa	12/4/2023	12/7/2023	665,109.38	4.25	2,824.52	665,592.63	676,593.75
Security Type Sub-Total		10,885,000.00					10,423,796.32	2.52	38,326.86	10,509,730.53	10,152,383.72
Supranational											
INTER-AMERICAN DEVELOPMENT BANK NOTES DTD 01/16/2020 1.750% 03/14/2025	4581X0DK1	340,000.00	AAA	Aaa	2/19/2021	2/23/2021	357,442.00	0.47	1,768.47	345,161.89	328,408.72
Security Type Sub-Total		340,000.00					357,442.00	0.47	1,768.47	345,161.89	328,408.72
Negotiable CD											
TORONTO DOMINION BANK NY CERT DEPOS DTD 10/31/2022 5.600% 10/27/2025	89115B6K1	360,000.00	A	A1	10/27/2022	10/31/2022	360,000.00	5.58	3,808.00	360,000.00	366,906.64
COOPERAT RABOBANK UA/NY CERT DEPOS DTD 07/20/2023 5.080% 07/17/2026	21684LGS5	350,000.00	A+	Aa2	7/17/2023	7/20/2023	350,000.00	5.08	7,951.61	350,000.00	343,277.55
NATIXIS NY BRANCH CERT DEPOS DTD 09/20/2023 5.610% 09/18/2026	63873QP65	250,000.00	Α	A1	9/18/2023	9/20/2023	250,000.00	5.61	4,012.71	250,000.00	255,455.00
Security Type Sub-Total		960,000.00					960,000.00	5.41	15,772.32	960,000.00	965,639.19
Municipal											
NY ST URBAN DEV CORP TXBL REV BONDS DTD 12/23/2020 0.870% 03/15/2025	650036DT0	360,000.00	NR	NR	12/16/2020	12/23/2020	360,000.00	0.87	922.20	360,000.00	341,586.00
SAN DEIGO CNTY WTR AUTH, CA TXBL REV BON DTD 07/22/2020 0.743% 05/01/2025	797412DM2	155,000.00	AAA	Aa2	7/9/2020	7/22/2020	155,000.00	0.74	191.94	155,000.00	146,833.05
FL ST BOARD OF ADMIN TXBL REV BONDS DTD 09/16/2020 1.258% 07/01/2025	341271AD6	100,000.00	AA	Aa3	9/3/2020	9/16/2020	100,663.00	1.12	629.00	100,207.35	94,965.00

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Municipal											
WI DEPT OF TRANS TXBL REV BONDS DTD 07/30/2020 0.774% 07/01/2025	977123X78	280,000.00	AAA	NR	7/10/2020	7/30/2020	280,000.00	0.77	1,083.60	280,000.00	264,177.20
FL ST BOARD OF ADMIN TXBL REV BONDS DTD 09/16/2020 1.258% 07/01/2025	341271AD6	220,000.00	AA	Aa3	9/3/2020	9/16/2020	220,000.00	1.26	1,383.80	220,000.00	208,923.00
FL ST BOARD OF ADMIN TXBL REV BONDS DTD 09/16/2020 1.258% 07/01/2025	341271AD6	85,000.00	AA	Aa3	9/3/2020	9/16/2020	85,600.95	1.11	534.65	85,187.95	80,720.25
MN ST TXBL GO BONDS DTD 08/25/2020 0.630% 08/01/2025	60412AVJ9	125,000.00	AAA	Aaa	8/11/2020	8/25/2020	125,000.00	0.63	328.13	125,000.00	117,506.25
SAN RAMON VALLEY USD, CA TXBL GO BONDS DTD 10/20/2020 0.740% 08/01/2025	799408Z85	155,000.00	AA+	Aa1	10/2/2020	10/20/2020	155,000.00	0.74	477.92	155,000.00	145,983.65
LOS ANGELES CCD, CA TXBL GO BONDS DTD 11/10/2020 0.773% 08/01/2025	54438CYK2	155,000.00	AA+	Aaa	10/30/2020	11/10/2020	155,000.00	0.77	499.23	155,000.00	145,682.95
CT ST TXBL GO BONDS DTD 09/13/2018 3.743% 09/15/2025	20772KEW5	250,000.00	AA-	Aa3	11/17/2020	11/19/2020	284,407.50	0.83	2,755.26	262,172.56	246,050.00
LOS ANGELES USD, CA TXBL GO BONDS DTD 11/10/2021 1.455% 07/01/2026	544647FC9	95,000.00	NR	Aa3	10/28/2021	11/10/2021	95,000.00	1.46	691.13	95,000.00	88,300.60
Security Type Sub-Total		1,980,000.00					2,015,671.45	0.90	9,496.86	1,992,567.86	1,880,727.95
Joint Powers Authority											
CAMP Pool		41,211.50	AAAm	NR			41,211.50		0.00	41,211.50	41,211.50
Security Type Sub-Total		41,211.50					41,211.50		0.00	41,211.50	41,211.50
Federal Agency											
FANNIE MAE NOTES DTD 04/24/2020 0.625% 04/22/2025	3135G03U5	275,000.00	AA+	Aaa	6/2/2020	6/4/2020	276,529.00	0.51	329.43	275,409.05	261,432.33
FREDDIE MAC NOTES DTD 07/23/2020 0.375% 07/21/2025	3137EAEU9	205,000.00	AA+	Aaa	7/21/2020	7/23/2020	203,979.10	0.48	341.67	204,682.65	192,628.46

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Federal Agency											
FANNIE MAE NOTES DTD 08/27/2020 0.375% 08/25/2025	3135G05X7	250,000.00	AA+	Aaa	11/4/2020	11/5/2020	249,260.00	0.44	328.13	249,746.02	234,102.50
FREDDIE MAC NOTES DTD 09/25/2020 0.375% 09/23/2025	3137EAEX3	460,000.00	AA+	Aaa	9/23/2020	9/25/2020	458,615.40	0.44	469.58	459,521.01	429,708.08
FANNIE MAE NOTES DTD 11/12/2020 0.500% 11/07/2025	3135G06G3	270,000.00	AA+	Aaa	11/9/2020	11/12/2020	269,033.40	0.57	202.50	269,641.17	251,738.55
FANNIE MAE NOTES DTD 11/12/2020 0.500% 11/07/2025	3135G06G3	400,000.00	AA+	Aaa	12/3/2020	12/4/2020	399,820.00	0.51	300.00	399,932.36	372,946.00
FANNIE MAE NOTES DTD 11/12/2020 0.500% 11/07/2025	3135G06G3	550,000.00	AA+	Aaa	12/2/2020	12/4/2020	548,938.50	0.54	412.50	549,601.13	512,800.75
Security Type Sub-Total		2,410,000.00					2,406,175.40	0.50	2,383.81	2,408,533.39	2,255,356.67
Corporate											
US BANCORP NOTES (CALLABLE) DTD 07/29/2019 2.400% 07/30/2024	91159HHX1	375,000.00	Α	A3	7/30/2019	8/1/2019	374,666.25	2.42	3,775.00	374,961.41	368,533.50
PNC BANK NA CORP NOTES (CALLABLE) DTD 11/01/2019 2.200% 11/01/2024	693475AY1	250,000.00	A-	A3	11/5/2019	11/8/2019	249,917.50	2.21	916.67	249,986.17	243,222.75
CHEVRON CORP (CALLABLE) NOTES DTD 05/11/2020 1.554% 05/11/2025	166764BW9	250,000.00	AA-	Aa2	5/13/2020	5/15/2020	251,240.00	1.45	539.58	250,322.46	239,794.75
JPMORGAN CHASE & CO (CALLABLE) CORP NOTE DTD 06/01/2021 0.824% 06/01/2025	46647PCH7	265,000.00	A-	A1	5/24/2021	6/1/2021	265,000.00	0.82	181.97	265,000.00	260,409.67
NATIONAL RURAL UTIL COOP CORPORATE NOTES DTD 05/04/2022 3.450% 06/15/2025	63743HFE7	60,000.00	A-	A2	4/27/2022	5/4/2022	59,983.80	3.46	92.00	59,992.44	58,761.66
BRISTOL-MYERS SQUIBB CO CORPORATE NOTES DTD 11/13/2020 0.750% 11/13/2025	110122DN5	142,000.00	A	A2	6/17/2021	6/21/2021	140,585.68	0.98	142.00	141,399.40	132,318.58
CITIGROUP INC CORPORATE NOTES DTD 01/12/2016 3.700% 01/12/2026	172967KG5	270,000.00	BBB+	А3	10/1/2021	10/6/2021	297,256.50	1.26	4,689.75	282,972.63	263,104.47
GOLDMAN SACHS GROUP INC CORP NOTES (CALL DTD 02/12/2021 0.855% 02/12/2026	38141GXS8	300,000.00	BBB+	A2	2/12/2021	2/17/2021	300,612.00	0.81	990.38	300,171.49	284,626.80

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Corporate											
JP MORGAN CORP (CALLABLE) NOTES DTD 03/23/2016 3.300% 04/01/2026	46625HQW3	160,000.00	A-	A1	7/19/2023	7/21/2023	152,609.60	5.16	1,320.00	153,840.08	154,963.68
ASTRAZENECA FINANCE LLC (CALLABLE) CORP DTD 05/28/2021 1.200% 05/28/2026	04636NAA1	265,000.00	Α	A2	7/15/2021	7/19/2021	265,280.90	1.18	291.50	265,136.58	245,100.36
STATE STREET CORP NOTES (CALLABLE) DTD 08/03/2023 5.272% 08/03/2026	857477CD3	220,000.00	А	A1	8/1/2023	8/3/2023	220,079.20	5.26	4,768.23	220,068.29	223,108.16
STATE STREET CORP NOTES (CALLABLE) DTD 08/03/2023 5.272% 08/03/2026	857477CD3	145,000.00	А	A1	7/31/2023	8/3/2023	145,000.00	5.27	3,142.70	145,000.00	147,048.56
WELLS FARGO BANK NA BANK NOTES (CALLABLE DTD 08/09/2023 5.450% 08/07/2026	94988J6D4	545,000.00	A+	Aa2	8/2/2023	8/9/2023	544,956.40	5.45	11,715.99	544,962.18	554,046.46
TOYOTA MOTOR CREDIT CORP CORPORATE NOTES DTD 08/14/2023 5.000% 08/14/2026	89236TKX2	135,000.00	A+	A1	8/9/2023	8/14/2023	134,836.65	5.04	2,568.75	134,857.52	136,672.92
BANK OF AMERICA NA CORPORATE NOTES DTD 08/18/2023 5.526% 08/18/2026	06428CAA2	335,000.00	A+	Aa1	8/14/2023	8/18/2023	335,000.00	5.53	6,839.19	335,000.00	341,446.07
JOHN DEERE CAPITAL CORP CORPORATE NOTES DTD 09/08/2023 5.150% 09/08/2026	24422EXD6	50,000.00	Α	A2	9/5/2023	9/8/2023	49,964.50	5.18	808.26	49,967.99	50,911.40
AMERICAN HONDA FINANCE CORPORATE NOTES DTD 09/09/2021 1.300% 09/09/2026	02665WDZ1	145,000.00	A-	А3	11/29/2021	12/1/2021	142,916.35	1.61	586.44	143,826.08	133,225.71
HOME DEPOT INC CORP (CALLABLE) NOTES DTD 09/15/2016 2.125% 09/15/2026	437076BN1	145,000.00	А	A2	8/18/2023	8/22/2023	133,034.60	5.07	907.26	134,444.81	136,452.11
AMERICAN EXPRESS CO (CALLABLE) CORPORATE DTD 11/04/2021 1.650% 11/04/2026	025816CM9	275,000.00	BBB+	A2	12/14/2021	12/16/2021	274,573.75	1.68	718.44	274,751.99	253,733.98
PEPSICO INC CORPORATE NOTES (CALLABLE) DTD 11/10/2023 5.125% 11/10/2026	713448FW3	65,000.00	A+	A1	11/8/2023	11/10/2023	64,982.45	5.13	471.93	64,983.23	66,323.86

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Corporate											
JOHN DEERE CAPITAL CORP CORPORATE NOTES DTD 01/10/2022 1.700% 01/11/2027	24422EWA3	175,000.00	A	A2	1/11/2022	1/13/2022	174,013.00	1.82	1,404.86	174,401.52	161,648.03
TARGET CORP CORP NOTES (CALLABLE) DTD 01/24/2022 1.950% 01/15/2027	87612EBM7	50,000.00	А	A2	1/19/2022	1/24/2022	49,915.00	1.99	449.58	49,948.07	46,659.10
TARGET CORP CORP NOTES (CALLABLE) DTD 01/24/2022 1.950% 01/15/2027	87612EBM7	170,000.00	Α	A2	1/21/2022	1/25/2022	170,372.30	1.90	1,528.59	170,225.05	158,640.94
BANK OF NY MELLON CORP (CALLABLE) CORPOR DTD 01/26/2022 2.050% 01/26/2027	06406RBA4	200,000.00	Α	A1	1/26/2022	1/28/2022	200,242.00	2.02	1,765.28	200,147.12	186,029.00
HONEYWELL INTERNATIONAL (CALLABLE) CORP DTD 08/16/2021 1.100% 03/01/2027	438516CE4	175,000.00	Α	A2	3/1/2022	3/3/2022	166,824.00	2.09	641.67	169,822.76	158,736.20
TRUIST FINANCIAL CORP NOTES (CALLABLE) DTD 03/02/2021 1.267% 03/02/2027	89788MAD4	270,000.00	A-	А3	3/10/2022	3/14/2022	253,692.00	2.57	1,130.80	259,607.47	247,113.72
NORTHERN TRUST CORP NOTE (CALLABLE) DTD 05/10/2022 4.000% 05/10/2027	665859AW4	175,000.00	A+	A2	5/10/2022	5/12/2022	176,690.50	3.79	991.67	176,126.06	172,623.68
UNITEDHEALTH GROUP INC CORP NOTES (CALLA DTD 05/20/2022 3.700% 05/15/2027	91324PEG3	55,000.00	A+	A2	5/17/2022	5/20/2022	54,970.30	3.71	260.03	54,979.94	53,670.65
UNITEDHEALTH GROUP INC CORP NOTES (CALLA DTD 05/20/2022 3.700% 05/15/2027	91324PEG3	200,000.00	A+	A2	6/2/2022	6/6/2022	201,632.00	3.52	945.55	201,103.95	195,166.00
NATIONAL AUSTRALIA BK/NY CORPORATE NOTES DTD 06/09/2022 3.905% 06/09/2027	63254ABE7	270,000.00	AA-	Aa3	6/9/2022	6/13/2022	267,659.10	4.10	644.33	268,387.58	264,149.37
BANK OF AMERICA CORP CORP NOTES (CALLABL DTD 04/22/2021 1.734% 07/22/2027	06051GJS9	190,000.00	A-	A1	6/2/2023	6/6/2023	169,573.10	4.62	1,455.12	172,406.03	174,236.27
INTEL CORP NOTES (CALLABLE) DTD 08/05/2022 3.750% 08/05/2027	458140BY5	250,000.00	Α	A2	8/9/2022	8/11/2022	248,852.50	3.85	3,802.08	249,172.79	244,721.25

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Corporate											
WALMART INC CORP NOTES (CALLABLE) DTD 09/09/2022 3.950% 09/09/2027	931142EX7	265,000.00	AA	Aa2	9/12/2022	9/14/2022	265,429.30	3.91	3,256.56	265,315.62	263,435.18
AMAZON.COM INC CORP NOTE (CALLABLE) DTD 12/01/2022 4.550% 12/01/2027	023135CP9	400,000.00	AA	A1	12/6/2022	12/7/2022	401,560.00	4.46	1,516.67	401,220.11	405,848.80
MASTERCARD INC CORP NOTES (CALLABLE) DTD 03/09/2023 4.875% 03/09/2028	57636QAW4	265,000.00	A+	Aa3	3/14/2023	3/17/2023	267,432.70	4.67	4,019.17	267,038.58	272,868.65
NATIONAL RURAL UTIL COOP CORP NOTES (CAL DTD 12/16/2022 4.800% 03/15/2028	63743HFG2	200,000.00	A-	A2	6/9/2023	6/13/2023	199,414.00	4.87	2,826.67	199,482.15	202,400.20
META PLATFORMS INC COPR NOTES (CALLABLE) DTD 05/03/2023 4.600% 05/15/2028	30303M8L9	170,000.00	AA-	A1	6/1/2023	6/5/2023	170,255.00	4.56	999.22	170,224.85	172,465.00
LOCKHEED MARTIN CORP NOTES (CALLABLE) DTD 05/25/2023 4.450% 05/15/2028	539830BZ1	25,000.00	A-	A2	5/23/2023	5/25/2023	24,955.00	4.49	142.15	24,960.47	25,117.40
LOCKHEED MARTIN CORP NOTES (CALLABLE) DTD 05/25/2023 4.450% 05/15/2028	539830BZ1	75,000.00	A-	A2	6/2/2023	6/6/2023	74,730.00	4.53	426.46	74,761.26	75,352.20
MERCK & CO INC CORP NOTES CALLABLE DTD 05/17/2023 4.050% 05/17/2028	58933YBH7	100,000.00	A+	A1	5/8/2023	5/17/2023	99,919.00	4.07	495.00	99,929.15	99,682.20
NATIONAL AUSTRALIA BK/NY CORPORATE NOTES DTD 06/13/2023 4.900% 06/13/2028	63253QAE4	250,000.00	AA-	Aa3	6/6/2023	6/13/2023	249,572.50	4.94	612.50	249,619.77	252,641.25
AMERICAN HONDA FINANCE CORPORATE NOTES DTD 07/07/2023 5.125% 07/07/2028	02665WEM9	135,000.00	A-	А3	7/5/2023	7/7/2023	134,940.60	5.14	3,344.06	134,946.39	139,096.31
JOHN DEERE CAPITAL CORP CORPORATE NOTES DTD 07/14/2023 4.950% 07/14/2028	24422EXB0	45,000.00	А	A2	7/11/2023	7/14/2023	44,932.95	4.98	1,033.31	44,939.23	46,141.92
PACCAR FINANCIAL CORP CORPORATE NOTES DTD 08/10/2023 4.950% 08/10/2028	69371RS64	165,000.00	A+	A1	8/3/2023	8/10/2023	164,739.30	4.99	3,198.94	164,759.85	169,559.12

CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
89236TLB9	120,000.00	A+	A1	9/6/2023	9/11/2023	119,791.20	5.29	1,925.00	119,802.54	123,837.96
17325FBB3	325,000.00	A+	Aa3	9/26/2023	9/29/2023	325,000.00	5.80	4,819.71	325,000.00	338,356.53
032654AU9	250,000.00	A-	A2	10/30/2023	11/1/2023	209,735.00	5.48	1,062.50	211,102.58	221,968.50
	9,367,000.00					9,289,338.48	3.65	90,163.52	9,291,075.64	9,165,970.88
3136AJB54	64,815.23	AA+	Aaa	12/13/2019	12/18/2019	67,964.85	2.14	180.73	64,938.34	64,398.52
3137FBTA4	275,720.57	AA+	Aaa	5/25/2022	5/31/2022	276,086.77	3.00	704.01	275,818.93	271,538.42
3137BGK24	290,755.83	AA+	Aaa	3/19/2020	3/25/2020	305,157.33	1.95	741.91	293,573.88	284,935.44
3137BJP64	200,000.00	AA+	Aaa	8/3/2022	8/8/2022	198,507.81	3.51	534.17	199,322.46	195,689.73
3137FJXQ7	352,677.97	AA+	Aaa	8/10/2023	8/15/2023	342,905.27	5.24	1,102.12	344,799.84	346,553.63
3137FLN34	340,000.00	AA+	Aaa	8/11/2023	8/16/2023	325,284.38	5.08	908.93	327,540.78	330,848.89
3137BSP72	335,000.00	AA+	Aaa	4/12/2023	4/17/2023	319,754.88	4.14	740.63	323,039.81	319,834.53
3137BTUM1	234,648.75	AA+	Aaa	5/19/2023	5/24/2023	227,425.97	4.31	654.47	228,701.59	227,809.88
3137BVZ82	340,000.00	AA+	Aaa	5/19/2023	5/24/2023	329,707.03	4.34	971.83	331,440.75	330,572.60
3137BXQY1	365,000.00	AA+	Aaa	8/16/2023	8/18/2023	344,297.66	4.98	980.63	346,478.54	352,613.94
	89236TLB9  17325FBB3  032654AU9  3136AJB54  3137FBTA4  3137BJP64  3137FJXQ7  3137FLN34  3137BSP72  3137BTUM1  3137BVZ82	89236TLB9 120,000.00  17325FBB3 325,000.00  032654AU9 250,000.00  3136AJB54 64,815.23  3137FBTA4 275,720.57  3137BGK24 290,755.83  3137BJP64 200,000.00  3137FJXQ7 352,677.97  3137FLN34 340,000.00  3137BSP72 335,000.00  3137BTUM1 234,648.75  3137BVZ82 340,000.00	CUSIP       Par       Rating         89236TLB9       120,000.00       A+         17325FBB3       325,000.00       A+         032654AU9       250,000.00       A-         3136AJB54       64,815.23       AA+         3137FBTA4       275,720.57       AA+         3137BGK24       290,755.83       AA+         3137FJXQ7       352,677.97       AA+         3137FLN34       340,000.00       AA+         3137BSP72       335,000.00       AA+         3137BTUM1       234,648.75       AA+         3137BVZ82       340,000.00       AA+	CUSIP       Par       Rating       Rating         89236TLB9       120,000.00       A+       A1         17325FBB3       325,000.00       A+       Aa3         032654AU9       250,000.00       A-       A2         3136AJB54       64,815.23       AA+       Aaa         3137FBTA4       275,720.57       AA+       Aaa         3137BJP64       290,755.83       AA+       Aaa         3137FJXQ7       352,677.97       AA+       Aaa         3137FLN34       340,000.00       AA+       Aaa         3137BSP72       335,000.00       AA+       Aaa         3137BTUM1       234,648.75       AA+       Aaa         3137BVZ82       340,000.00       AA+       Aaa	CUSIP         Par         Rating         Rating         Date           89236TLB9         120,000.00         A+         A1         9/6/2023           17325FBB3         325,000.00         A+         Aa3         9/26/2023           9,367,000.00         A-         A2         10/30/2023           3136AJB54         64,815.23         AA+         Aaa         12/13/2019           3137FBTA4         275,720.57         AA+         Aaa         5/25/2022           3137BGK24         290,755.83         AA+         Aaa         3/19/2020           3137BJP64         200,000.00         AA+         Aaa         8/3/2022           3137FJXQ7         352,677.97         AA+         Aaa         8/11/2023           3137BSP72         335,000.00         AA+         Aaa         4/12/2023           3137BTUM1         234,648.75         AA+         Aaa         5/19/2023           3137BVZ82         340,000.00         AA+         Aaa         5/19/2023	CUSIP         Par         Rating         Rating         Date         Date           89236TLB9         120,000.00         A+         A1         9/6/2023         9/11/2023           17325FBB3         325,000.00         A+         Aa3         9/26/2023         9/29/2023           9,367,000.00         A-         A2         10/30/2023         11/1/2023           3136AJB54         64,815.23         AA+         Aaa         12/13/2019         12/18/2019           3137FBTA4         275,720.57         AA+         Aaa         5/25/2022         5/31/2022           3137BJP64         290,755.83         AA+         Aaa         8/3/2022         8/8/2022           3137FJXQ7         352,677.97         AA+         Aaa         8/10/2023         8/15/2023           3137FLN34         340,000.00         AA+         Aaa         8/11/2023         8/16/2023           3137BSP72         335,000.00         AA+         Aaa         5/19/2023         5/24/2023           3137BTUM1         234,648.75         AA+         Aaa         5/19/2023         5/24/2023           3137BVZ82         340,000.00         AA+         Aaa         5/19/2023         5/24/2023	CUSIP Par Rating Rating Date Date Cost  89236TLB9 120,000.00 A+ A1 9/6/2023 9/11/2023 119,791.20  17325FBB3 325,000.00 A+ Aa3 9/26/2023 9/29/2023 325,000.00  032654AU9 250,000.00 A- A2 10/30/2023 11/1/2023 209,735.00  9,367,000.00 9,289,338.48  3136AJB54 64,815.23 AA+ Aaa 12/13/2019 12/18/2019 67,964.85  3137FBTA4 275,720.57 AA+ Aaa 5/25/2022 5/31/2022 276,086.77  3137BJP64 290,755.83 AA+ Aaa 3/19/2020 3/25/2020 305,157.33  3137BJP64 200,000.00 AA+ Aaa 8/3/2022 8/8/2022 198,507.81  3137FJXQ7 352,677.97 AA+ Aaa 8/10/2023 8/15/2023 325,284.38  3137BSP72 335,000.00 AA+ Aaa 8/11/2023 8/16/2023 325,284.38  3137BSP72 335,000.00 AA+ Aaa 4/12/2023 4/17/2023 319,754.88  3137BSUM1 234,648.75 AA+ Aaa 5/19/2023 5/24/2023 227,425.97  3137BVZ82 340,000.00 AA+ Aaa 5/19/2023 5/24/2023 329,707.03	CUSIP         Par         Rating         Rating         Date         Date         Cost         at Cost           89236TLB9         120,000.00         A+         A1         9/6/2023         9/11/2023         119,791.20         5.29           17325FBB3         325,000.00         A+         Aa3         9/26/2023         9/29/2023         325,000.00         5.80           9,367,000.00         A-         A2         10/30/2023         11/1/2023         209,735.00         5.48           3136AJB54         64,815.23         AA+         Aaa         12/13/2019         12/18/2019         67,964.85         2.14           3137FBTA4         275,720.57         AA+         Aaa         5/25/2022         5/31/2022         276,086.77         3.00           3137BJP64         200,000.00         AA+         Aaa         8/3/2022         8/8/2022         198,507.81         3.51           3137FJXQ7         352,677.97         AA+         Aaa         8/10/2023         8/15/2023         342,905.27         5.24           3137BSP72         335,000.00         AA+         Aaa         8/11/2023         8/16/2023         325,284.38         5.08           3137BVZ82         340,000.00         AA+         Aaa	CUSIP         Par         Rating         Rating         Date         Date         Cost         at Cost         Interest           89236TLB9         120,000.00         A+         A1         9/6/2023         9/11/2023         119,791.20         5.29         1,925.00           17325FBB3         325,000.00         A+         Aa3         9/26/2023         9/29/2023         325,000.00         5.80         4,819.71           032654AU9         250,000.00         A-         A2         10/30/2023         11/1/2023         209,735.00         5.48         1,062.50           9,367,000.00         A-         A2         10/30/2023         11/1/2023         209,735.00         5.48         1,062.50           3136AJB54         64,815.23         AA+         Aaa         12/13/2019         12/18/2019         67,964.85         2.14         180.73           3137FBTA4         275,720.57         AA+         Aaa         5/25/2022         5/31/2022         276,086.77         3.00         704.01           3137BJP64         200,000.00         AA+         Aaa         8/19/2020         3/25/2020         305,157.33         1.95         741.91           3137FLN34         340,000.00         AA+         Aaa         8/10/2023 <td>CUSIP         Par         Rating         Rating         Date         Date         Cost         at Cost         Interest         Cost           89236TLB9         120,000.00         A+         A1         9/6/2023         9/11/2023         119,791.20         5.29         1,925.00         119,802.54           17325FBB3         325,000.00         A+         Aa3         9/26/2023         9/29/2023         325,000.00         5.80         4,819.71         325,000.00           032654AU9         250,000.00         A-         A2         10/30/2023         11/1/2023         209,735.00         5.48         1,062.50         211,102.58           3136AJB54         64,815.23         AA+         Aaa         12/13/2019         12/18/2019         67,964.85         2.14         180.73         64,938.34           3137FBTA4         275,720.57         AA+         Aaa         5/25/2022         5/31/2022         276,086.77         3.00         704.01         275,818.93           3137BJP64         290,755.83         AA+         Aaa         8/3/2022         8/8/2022         198,507.81         3.51         534.17         199,322.46           3137FJXQ7         352,677.97         AA+         Aaa         8/11/2023         8/16/2023</td>	CUSIP         Par         Rating         Rating         Date         Date         Cost         at Cost         Interest         Cost           89236TLB9         120,000.00         A+         A1         9/6/2023         9/11/2023         119,791.20         5.29         1,925.00         119,802.54           17325FBB3         325,000.00         A+         Aa3         9/26/2023         9/29/2023         325,000.00         5.80         4,819.71         325,000.00           032654AU9         250,000.00         A-         A2         10/30/2023         11/1/2023         209,735.00         5.48         1,062.50         211,102.58           3136AJB54         64,815.23         AA+         Aaa         12/13/2019         12/18/2019         67,964.85         2.14         180.73         64,938.34           3137FBTA4         275,720.57         AA+         Aaa         5/25/2022         5/31/2022         276,086.77         3.00         704.01         275,818.93           3137BJP64         290,755.83         AA+         Aaa         8/3/2022         8/8/2022         198,507.81         3.51         534.17         199,322.46           3137FJXQ7         352,677.97         AA+         Aaa         8/11/2023         8/16/2023

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
Agency CMBS											
FHLMC MULTIFAMILY STRUCTURED P DTD 07/01/2017 3.243% 04/01/2027	3137F1G44	355,000.00	AA+	Aaa	6/8/2023	6/13/2023	340,175.98	4.44	959.39	342,333.37	342,641.16
FHMS K743 A2 DTD 06/30/2021 1.770% 05/01/2028	3137H14B9	385,000.00	AA+	Aaa	8/10/2023	8/15/2023	336,965.24	4.73	567.88	340,844.86	345,892.04
FHMS KJ46 A1 DTD 07/01/2023 4.777% 06/01/2028	3137HAD45	279,245.89	AA+	Aaa	7/19/2023	7/27/2023	279,238.89	4.78	1,111.63	279,239.51	280,466.15
FHMS K505 A2 DTD 07/01/2023 4.819% 06/01/2028	3137HACX2	340,000.00	AA+	Aaa	7/13/2023	7/20/2023	343,395.92	4.59	1,365.38	343,080.78	345,575.65
FNA 2023-M6 A2 DTD 07/01/2023 4.190% 07/01/2028	3136BQDE6	350,000.00	AA+	Aaa	7/18/2023	7/31/2023	344,066.41	4.58	1,222.08	344,574.91	347,538.64
FHMS KJ47 A1 DTD 09/01/2023 5.272% 08/01/2028	3137HAMN3	184,296.98	AA+	Aaa	9/19/2023	9/28/2023	184,296.06	5.27	809.68	184,296.11	188,781.62
FHMS K508 A2 DTD 10/01/2023 4.740% 08/01/2028	3137HAQ74	325,000.00	AA+	Aaa	10/11/2023	10/19/2023	317,870.80	5.26	1,283.75	318,136.45	329,910.02
FHMS K506 A2 DTD 09/01/2023 4.650% 08/01/2028	3137HAMH6	350,000.00	AA+	Aaa	9/7/2023	9/14/2023	344,822.45	4.99	1,356.25	345,103.05	354,046.19
FHMS K507 A2 DTD 09/01/2023 4.800% 09/01/2028	3137HAMS2	325,000.00	AA+	Aaa	9/20/2023	9/28/2023	321,115.28	5.07	1,300.00	321,295.87	330,970.88
FHMS K509 A2 DTD 10/01/2023 4.850% 09/01/2028	3137HAST4	255,000.00	AA+	Aaa	10/25/2023	10/31/2023	246,869.84	5.60	1,030.63	247,118.97	260,117.79
FHMS K510 A2 DTD 11/01/2023 5.069% 10/01/2028	3137HB3D4	125,000.00	AA+	Aaa	11/14/2023	11/21/2023	124,638.63	5.14	528.02	124,645.92	128,539.73
FHMS K511 A2 DTD 12/01/2023 4.860% 10/01/2028	3137HB3G7	185,000.00	AA+	Aaa	11/28/2023	12/7/2023	184,468.50	4.93	749.25	184,475.08	188,919.51
FHMS K512 A2 DTD 12/01/2023 5.000% 11/01/2028	3137HBCF9	170,000.00	AA+	Aaa	12/11/2023	12/21/2023	171,587.46	4.78	708.33	171,578.88	174,676.82
Security Type Sub-Total		6,427,161.22	_	_			6,276,603.41	4.56	20,511.70	6,282,378.68	6,342,871.78

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
ABS											
GMCAR 2020-3 A3 DTD 08/19/2020 0.450% 04/16/2025	362590AC5	5,709.56	NR	Aaa	8/11/2020	8/19/2020	5,708.26	0.46	1.07	5,709.20	5,691.62
HART 2021-A A3 DTD 04/28/2021 0.380% 09/15/2025	44933LAC7	21,690.17	AAA	NR	4/20/2021	4/28/2021	21,687.89	0.38	3.66	21,689.28	21,394.07
HAROT 2021-3 A3 DTD 08/25/2021 0.410% 11/18/2025	43815EAC8	59,252.32	AAA	NR	8/17/2021	8/25/2021	59,251.45	0.41	8.77	59,251.93	57,652.98
CARMX 2021-1 A3 DTD 01/27/2021 0.340% 12/15/2025	14316NAC3	12,181.16	AAA	NR	1/20/2021	1/27/2021	12,178.76	0.34	1.84	12,180.20	11,961.25
CARMX 2021-2 A3 DTD 04/21/2021 0.520% 02/17/2026	14314QAC8	46,028.65	AAA	NR	4/13/2021	4/21/2021	46,018.73	0.52	10.64	46,024.27	45,008.10
BMWOT 2022-A A3 DTD 05/18/2022 3.210% 08/25/2026	05602RAD3	97,628.67	AAA	Aaa	5/10/2022	5/18/2022	97,623.59	3.21	52.23	97,625.52	95,981.52
WOART 2021-D A3 DTD 11/03/2021 0.810% 10/15/2026	98163KAC6	73,104.27	AAA	NR	10/26/2021	11/3/2021	73,094.32	0.81	26.32	73,098.66	70,983.93
HART 2022-A A3 DTD 03/16/2022 2.220% 10/15/2026	448977AD0	189,363.08	AAA	NR	3/9/2022	3/16/2022	189,355.79	2.22	186.84	189,358.65	184,853.91
COMET 2021-A3 A3 DTD 11/30/2021 1.040% 11/15/2026	14041NFY2	250,000.00	AAA	NR	11/18/2021	11/30/2021	249,965.55	1.04	115.56	249,980.05	241,185.23
GMCAR 2022-1 A3 DTD 01/19/2022 1.260% 11/16/2026	380146AC4	62,546.46	AAA	NR	1/11/2022	1/19/2022	62,541.02	1.26	32.84	62,543.22	60,683.41
DTRT 2023-1 A3 DTD 09/27/2023 5.900% 03/15/2027	233868AC2	205,000.00	NR	Aaa	9/20/2023	9/27/2023	204,996.86	5.90	537.56	204,997.08	207,216.30
CARMX 2022-3 A3 DTD 07/20/2022 3.970% 04/15/2027	14318MAD1	245,000.00	AAA	NR	7/12/2022	7/20/2022	244,994.22	3.97	432.29	244,995.99	241,662.24
DCENT 2022-A3 A3 DTD 08/09/2022 3.560% 07/15/2027	254683CW3	190,000.00	AAA	Aaa	8/2/2022	8/9/2022	189,976.42	3.56	300.62	189,983.10	186,335.01
MBART 2022-1 A3 DTD 11/22/2022 5.210% 08/16/2027	58768PAC8	295,000.00	AAA	Aaa	11/15/2022	11/22/2022	294,941.65	5.21	683.09	294,955.33	295,346.06
HAROT 2023-3 A3 DTD 08/22/2023 5.410% 02/18/2028	43815QAC1	220,000.00	AAA	NR	8/15/2023	8/22/2023	219,954.64	5.42	429.79	219,958.29	223,057.63
BMWOT 2023-A A3 DTD 07/18/2023 5.470% 02/25/2028	05592XAD2	60,000.00	AAA	NR	7/11/2023	7/18/2023	59,989.37	5.47	54.70	59,990.42	60,759.55
DCENT 2023-A1 A DTD 04/11/2023 4.310% 03/15/2028	254683CY9	255,000.00	NR	Aaa	4/4/2023	4/11/2023	254,985.21	4.31	488.47	254,987.39	253,215.79

Security Type/Description Dated Date/Coupon/Maturity	CUSIP	Par	S&P Rating	Moody's Rating	Trade Date	Settle Date	Original Cost	YTM at Cost	Accrued Interest	Amortized Cost	Market Value
ABS											
NAROT 2023-B A3 DTD 10/25/2023 5.930% 03/15/2028	65480MAD5	70,000.00	NR	Aaa	10/18/2023	10/25/2023	69,985.79	5.94	184.49	69,986.32	71,757.94
BACCT 2022-A2 A2 DTD 11/23/2022 5.000% 04/15/2028	05522RDF2	340,000.00	AAA	Aaa	5/31/2023	6/2/2023	341,607.03	4.89	755.56	341,414.62	342,161.69
HART 2023-B A3 DTD 07/19/2023 5.480% 04/17/2028	44933XAD9	75,000.00	AAA	NR	7/11/2023	7/19/2023	74,996.75	5.48	182.67	74,997.06	76,047.83
ALLYA 2023-1 A3 DTD 07/19/2023 5.460% 05/15/2028	02007WAC2	125,000.00	NR	Aaa	7/11/2023	7/19/2023	124,978.69	5.46	303.33	124,980.70	126,495.31
COMET 2023-A1 A DTD 05/24/2023 4.420% 05/15/2028	14041NGD7	330,000.00	AAA	NR	5/17/2023	5/24/2023	329,924.33	4.43	648.27	329,933.57	328,637.46
AMXCA 2023-1 A DTD 06/14/2023 4.870% 05/15/2028	02582JJZ4	130,000.00	AAA	NR	6/7/2023	6/14/2023	129,988.47	4.87	281.38	129,989.76	131,001.92
BACCT 2023-A1 A1 DTD 06/16/2023 4.790% 05/15/2028	05522RDG0	115,000.00	AAA	NR	6/8/2023	6/16/2023	114,973.96	4.79	244.82	114,976.85	115,376.35
FORDO 2023-B A3 DTD 06/26/2023 5.230% 05/15/2028	344930AD4	100,000.00	AAA	NR	6/21/2023	6/26/2023	99,998.65	5.23	232.44	99,998.79	101,064.98
DCENT 2023-A2 A DTD 06/28/2023 4.930% 06/15/2028	254683CZ6	165,000.00	AAA	Aaa	6/21/2023	6/28/2023	164,977.71	4.93	361.53	164,980.01	166,320.18
GMCAR 2023-3 A3 DTD 07/19/2023 5.450% 06/16/2028	36267KAD9	70,000.00	AAA	Aaa	7/11/2023	7/19/2023	69,997.30	5.45	158.96	69,997.55	71,079.85
FITAT 2023-1 A3 DTD 08/23/2023 5.530% 08/15/2028	31680EAD3	240,000.00	AAA	Aaa	8/15/2023	8/23/2023	239,985.12	5.53	589.87	239,986.19	242,627.69
CHAIT 2023-A1 A DTD 09/15/2023 5.160% 09/15/2028	161571HT4	280,000.00	AAA	NR	9/7/2023	9/15/2023	279,922.38	5.17	642.13	279,926.44	284,314.80
Security Type Sub-Total		4,327,504.34					4,328,599.91	4.30	7,951.74	4,328,496.44	4,319,874.60
Managed Account Sub Total		36,696,665.56					36,057,626.97	3.24	186,375.28	36,117,944.43	35,411,233.51
Securities Sub Total		\$36,737,877.06					\$36,098,838.47	3.24%	\$186,375.28	\$36,159,155.93	\$35,452,445.01
Accrued Interest											\$186,375.28
Total Investments											\$35,638,820.29

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
BUY									
10/11/2023	10/19/2023	325,000.00	3137HAQ74	FHMS K508 A2	4.74%	8/1/2028	318,641.05	5.26%	
10/18/2023	10/25/2023	70,000.00	65480MAD5	NAROT 2023-B A3	5.93%	3/15/2028	69,985.79	5.94%	
10/25/2023	10/31/2023	255,000.00	3137HAST4	FHMS K509 A2	4.85%	9/1/2028	247,900.47	5.60%	
10/30/2023	11/1/2023	250,000.00	032654AU9	ANALOG DEVICES INC (CALLABLE) CORPORATE	1.70%	10/1/2028	210,089.17	5.48%	
11/8/2023	11/10/2023	65,000.00	713448FW3	PEPSICO INC CORPORATE NOTES (CALLABLE)	5.12%	11/10/2026	64,982.45	5.13%	
11/14/2023	11/21/2023	125,000.00	3137HB3D4	FHMS K510 A2	5.06%	10/1/2028	124,990.64	5.14%	
11/28/2023	12/7/2023	185,000.00	3137HB3G7	FHMS K511 A2	4.86%	10/1/2028	184,618.35	4.93%	
11/30/2023	12/7/2023	600,000.00	91282CCR0	US TREASURY NOTES	1.00%	7/31/2028	519,626.70	4.29%	
11/30/2023	12/7/2023	350,000.00	91282CJB8	US TREASURY NOTES	5.00%	9/30/2025	354,878.32	4.73%	
12/4/2023	12/7/2023	700,000.00	9128285M8	US TREASURY NOTES	3.12%	11/15/2028	666,431.50	4.25%	
12/11/2023	12/21/2023	170,000.00	3137HBCF9	FHMS K512 A2	5.00%	11/1/2028	172,059.68	4.78%	
Total BUY		3,095,000.00					2,934,204.12		0.00
INTEREST									
10/1/2023	10/1/2023	160,000.00	46625HQW3	JP MORGAN CORP (CALLABLE) NOTES	3.30%	4/1/2026	2,640.00		
10/1/2023	10/25/2023	353,235.54	3137FJXQ7	FHMS K733 A2	3.75%	8/1/2025	1,103.86		
10/1/2023	10/25/2023	335,000.00	3137BSP72	FHMS K058 A2	2.65%	8/1/2026	740.63		
10/1/2023	10/25/2023	105,327.61	3137BTU25	FHMS K724 A2	3.06%	11/1/2023	268.76		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
10/1/2023	10/25/2023	235,000.00	3137BTUM1	FHMS K061 A2	3.34%	11/1/2026	655.45		
10/1/2023	10/25/2023	355,000.00	3137F1G44	FHLMC MULTIFAMILY STRUCTURED P	3.24%	4/1/2027	959.39		
10/1/2023	10/25/2023	385,000.00	3137H14B9	FHMS K743 A2	1.77%	5/1/2028	567.88		
10/1/2023	10/25/2023	350,000.00	3136BQDE6	FNA 2023-M6 A2	4.19%	7/1/2028	1,222.08		
10/1/2023	10/25/2023	365,000.00	3137BXQY1	FHMS K064 A2	3.22%	3/1/2027	980.63		
10/1/2023	10/25/2023	340,000.00	3137FLN34	FHMS K734 A2	3.20%	2/1/2026	908.93		
10/1/2023	10/25/2023	350,000.00	3137HAMH6	FHMS K506 A2	4.65%	8/1/2028	1,356.25		
10/1/2023	10/25/2023	65,304.06	3136AJB54	FANNIEMAE-ACES	3.34%	3/1/2024	182.08		
10/1/2023	10/25/2023	340,000.00	3137HACX2	FHMS K505 A2	4.81%	6/1/2028	1,365.38		
10/1/2023	10/25/2023	200,000.00	3137BJP64	FHMS K046 A2	3.20%	3/1/2025	534.17		
10/1/2023	10/25/2023	295,000.00	3137BGK24	FHMS K043 A2	3.06%	12/1/2024	752.74		
10/1/2023	10/25/2023	340,000.00	3137BVZ82	FHMS K063 A2	3.43%	1/1/2027	971.83		
10/1/2023	10/25/2023	312,596.58	3137FBTA4	FHLMC MULTIFAMILY STRUCTURED POOL	3.06%	8/1/2024	798.16		
10/1/2023	10/25/2023	325,000.00	3137HAMS2	FHMS K507 A2	4.80%	9/1/2028	1,300.00		
10/1/2023	10/25/2023	185,000.00	3137HAMN3	FHMS KJ47 A1	5.27%	8/1/2028	812.77		
10/1/2023	10/25/2023	279,729.28	3137HAD45	FHMS KJ46 A1	4.77%	6/1/2028	1,113.56		
10/15/2023	10/15/2023	245,000.00	14318MAD1	CARMX 2022-3 A3	3.97%	4/15/2027	810.54		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
10/15/2023	10/15/2023	250,000.00	14041NFY2	COMET 2021-A3 A3	1.04%	11/15/2026	216.67		
10/15/2023	10/15/2023	32,583.46	44933LAC7	HART 2021-A A3	0.38%	9/15/2025	10.32		
10/15/2023	10/15/2023	190,000.00	254683CW3	DCENT 2022-A3 A3	3.56%	7/15/2027	563.67		
10/15/2023	10/15/2023	295,000.00	58768PAC8	MBART 2022-1 A3	5.21%	8/16/2027	1,280.79		
10/15/2023	10/15/2023	60,254.12	14314QAC8	CARMX 2021-2 A3	0.52%	2/17/2026	26.11		
10/15/2023	10/15/2023	165,000.00	254683CZ6	DCENT 2023-A2 A	4.93%	6/15/2028	677.87		
10/15/2023	10/15/2023	16,900.28	14316NAC3	CARMX 2021-1 A3	0.34%	12/15/2025	4.79		
10/15/2023	10/15/2023	205,000.00	233868AC2	DTRT 2023-1 A3	5.90%	3/15/2027	604.75		
10/15/2023	10/15/2023	340,000.00	05522RDF2	BACCT 2022-A2 A2	5.00%	4/15/2028	1,416.67		
10/15/2023	10/15/2023	330,000.00	14041NGD7	COMET 2023-A1 A	4.42%	5/15/2028	1,215.50		
10/15/2023	10/15/2023	240,000.00	31680EAD3	FITAT 2023-1 A3	5.53%	8/15/2028	1,106.00		
10/15/2023	10/15/2023	255,000.00	254683CY9	DCENT 2023-A1 A	4.31%	3/15/2028	915.88		
10/15/2023	10/15/2023	125,000.00	02007WAC2	ALLYA 2023-1 A3	5.46%	5/15/2028	568.75		
10/15/2023	10/15/2023	88,749.89	98163KAC6	WOART 2021-D A3	0.81%	10/15/2026	59.91		
10/15/2023	10/15/2023	130,000.00	02582JJZ4	AMXCA 2023-1 A	4.87%	5/15/2028	527.58		
10/15/2023	10/15/2023	100,000.00	344930AD4	FORDO 2023-B A3	5.23%	5/15/2028	435.83		
10/15/2023	10/15/2023	195,000.00	448977AD0	HART 2022-A A3	2.22%	10/15/2026	360.75		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
10/15/2023	10/15/2023	115,000.00	05522RDG0	BACCT 2023-A1 A1	4.79%	5/15/2028	459.04		
10/15/2023	10/15/2023	2,225.67	89237VAB5	TAOT 2020-C A3	0.44%	10/15/2024	0.82		
10/15/2023	10/15/2023	75,000.00	44933XAD9	HART 2023-B A3	5.48%	4/17/2028	342.50		
10/15/2023	10/15/2023	1,760.59	14315FAD9	CARMX 2020-3 A3	0.62%	3/17/2025	0.91		
10/15/2023	10/15/2023	280,000.00	161571HT4	CHAIT 2023-A1 A	5.16%	9/15/2028	1,204.00		
10/16/2023	10/16/2023	74,314.63	380146AC4	GMCAR 2022-1 A3	1.26%	11/16/2026	78.03		
10/16/2023	10/16/2023	17,538.69	362590AC5	GMCAR 2020-3 A3	0.45%	4/16/2025	6.58		
10/16/2023	10/16/2023	70,000.00	36267KAD9	GMCAR 2023-3 A3	5.45%	6/16/2028	317.92		
10/18/2023	10/18/2023	220,000.00	43815QAC1	HAROT 2023-3 A3	5.41%	2/18/2028	991.83		
10/18/2023	10/18/2023	76,603.13	43815EAC8	HAROT 2021-3 A3	0.41%	11/18/2025	26.17		
10/20/2023	10/20/2023	1,319.47	92290BAA9	VZOT 2020-B A	0.47%	2/20/2025	0.52		
10/22/2023	10/22/2023	275,000.00	3135G03U5	FANNIE MAE NOTES	0.62%	4/22/2025	859.38		
10/25/2023	10/25/2023	100,000.00	05602RAD3	BMWOT 2022-A A3	3.21%	8/25/2026	267.50		
10/25/2023	10/25/2023	60,000.00	05592XAD2	BMWOT 2023-A A3	5.47%	2/25/2028	273.50		
10/25/2023	10/25/2023	360,000.00	89115B6K1	TORONTO DOMINION BANK NY CERT DEPOS	5.60%	10/27/2025	20,104.00		
10/31/2023	10/31/2023	200,000.00	91282CAU5	US TREASURY NOTES	0.50%	10/31/2027	500.00		
10/31/2023	10/31/2023	545,000.00	91282CDG3	US TREASURY NOTES	1.12%	10/31/2026	3,065.63		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
10/31/2023	10/31/2023	150,000.00	91282CBZ3	US TREASURY NOTES	1.25%	4/30/2028	937.50		
11/1/2023	11/1/2023	250,000.00	693475AY1	PNC BANK NA CORP NOTES (CALLABLE)	2.20%	11/1/2024	2,750.00		
11/1/2023	11/1/2023	155,000.00	797412DM2	SAN DEIGO CNTY WTR AUTH, CA TXBL REV BON	0.74%	5/1/2025	575.83		
11/1/2023	11/1/2023	35,000.00	605581MZ7	MS ST TXBL GO BONDS	0.56%	11/1/2024	98.88		
11/1/2023	11/25/2023	325,000.00	3137HAQ74	FHMS K508 A2	4.74%	8/1/2028	1,283.75		
11/1/2023	11/25/2023	350,000.00	3136BQDE6	FNA 2023-M6 A2	4.19%	7/1/2028	1,222.08		
11/1/2023	11/25/2023	355,000.00	3137F1G44	FHLMC MULTIFAMILY STRUCTURED P	3.24%	4/1/2027	959.39		
11/1/2023	11/25/2023	235,000.00	3137BTUM1	FHMS K061 A2	3.34%	11/1/2026	655.45		
11/1/2023	11/25/2023	350,000.00	3137HAMH6	FHMS K506 A2	4.65%	8/1/2028	1,356.25		
11/1/2023	11/25/2023	335,000.00	3137BSP72	FHMS K058 A2	2.65%	8/1/2026	740.63		
11/1/2023	11/25/2023	325,000.00	3137HAMS2	FHMS K507 A2	4.80%	9/1/2028	1,300.00		
11/1/2023	11/25/2023	279,562.42	3137HAD45	FHMS KJ46 A1	4.77%	6/1/2028	1,112.89		
11/1/2023	11/25/2023	276,659.81	3137FBTA4	FHLMC MULTIFAMILY STRUCTURED POOL	3.06%	8/1/2024	706.40		
11/1/2023	11/25/2023	184,748.84	3137HAMN3	FHMS KJ47 A1	5.27%	8/1/2028	811.66		
11/1/2023	11/25/2023	255,000.00	3137HAST4	FHMS K509 A2	4.85%	9/1/2028	1,030.63		
11/1/2023	11/25/2023	340,000.00	3137FLN34	FHMS K734 A2	3.20%	2/1/2026	908.93		
11/1/2023	11/25/2023	365,000.00	3137BXQY1	FHMS K064 A2	3.22%	3/1/2027	980.63		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
11/1/2023	11/25/2023	200,000.00	3137BJP64	FHMS K046 A2	3.20%	3/1/2025	534.17		
11/1/2023	11/25/2023	65,138.77	3136AJB54	FANNIEMAE-ACES	3.34%	3/1/2024	181.62		
11/1/2023	11/25/2023	291,739.11	3137BGK24	FHMS K043 A2	3.06%	12/1/2024	744.42		
11/1/2023	11/25/2023	340,000.00	3137BVZ82	FHMS K063 A2	3.43%	1/1/2027	971.83		
11/1/2023	11/25/2023	340,000.00	3137HACX2	FHMS K505 A2	4.81%	6/1/2028	1,365.38		
11/1/2023	11/25/2023	353,045.64	3137FJXQ7	FHMS K733 A2	3.75%	8/1/2025	1,103.27		
11/1/2023	11/25/2023	385,000.00	3137H14B9	FHMS K743 A2	1.77%	5/1/2028	567.88		
11/4/2023	11/4/2023	275,000.00	025816CM9	AMERICAN EXPRESS CO (CALLABLE) CORPORATE	1.65%	11/4/2026	2,268.75		
11/7/2023	11/7/2023	1,220,000.00	3135G06G3	FANNIE MAE NOTES	0.50%	11/7/2025	3,050.00		
11/10/2023	11/10/2023	175,000.00	665859AW4	NORTHERN TRUST CORP NOTE (CALLABLE)	4.00%	5/10/2027	3,500.00		
11/11/2023	11/11/2023	250,000.00	166764BW9	CHEVRON CORP (CALLABLE) NOTES	1.55%	5/11/2025	1,942.50		
11/13/2023	11/13/2023	142,000.00	110122DN5	BRISTOL-MYERS SQUIBB CO CORPORATE NOTES	0.75%	11/13/2025	532.50		
11/15/2023	11/15/2023	295,000.00	58768PAC8	MBART 2022-1 A3	5.21%	8/16/2027	1,280.79		
11/15/2023	11/15/2023	190,000.00	254683CW3	DCENT 2022-A3 A3	3.56%	7/15/2027	563.67		
11/15/2023	11/15/2023	250,000.00	14041NFY2	COMET 2021-A3 A3	1.04%	11/15/2026	216.67		
11/15/2023	11/15/2023	330,000.00	14041NGD7	COMET 2023-A1 A	4.42%	5/15/2028	1,215.50		
11/15/2023	11/15/2023	255,000.00	254683CY9	DCENT 2023-A1 A	4.31%	3/15/2028	915.88		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
11/15/2023	11/15/2023	83,444.74	98163KAC6	WOART 2021-D A3	0.81%	10/15/2026	56.33		
11/15/2023	11/15/2023	130,000.00	02582JJZ4	AMXCA 2023-1 A	4.87%	5/15/2028	527.58		
11/15/2023	11/15/2023	15,257.70	14316NAC3	CARMX 2021-1 A3	0.34%	12/15/2025	4.32		
11/15/2023	11/15/2023	310,000.00	91282CEQ0	US TREASURY NOTES	2.75%	5/15/2025	4,262.50		
11/15/2023	11/15/2023	340,000.00	05522RDF2	BACCT 2022-A2 A2	5.00%	4/15/2028	1,416.67		
11/15/2023	11/15/2023	165,000.00	254683CZ6	DCENT 2023-A2 A	4.93%	6/15/2028	677.87		
11/15/2023	11/15/2023	115,000.00	05522RDG0	BACCT 2023-A1 A1	4.79%	5/15/2028	459.04		
11/15/2023	11/15/2023	195,000.00	448977AD0	HART 2022-A A3	2.22%	10/15/2026	360.75		
11/15/2023	11/15/2023	240,000.00	31680EAD3	FITAT 2023-1 A3	5.53%	8/15/2028	1,106.00		
11/15/2023	11/15/2023	458.78	14315FAD9	CARMX 2020-3 A3	0.62%	3/17/2025	0.24		
11/15/2023	11/15/2023	100,000.00	539830BZ1	LOCKHEED MARTIN CORP NOTES (CALLABLE)	4.45%	5/15/2028	2,101.39		
11/15/2023	11/15/2023	125,000.00	02007WAC2	ALLYA 2023-1 A3	5.46%	5/15/2028	568.75		
11/15/2023	11/15/2023	205,000.00	233868AC2	DTRT 2023-1 A3	5.90%	3/15/2027	1,007.92		
11/15/2023	11/15/2023	28,771.97	44933LAC7	HART 2021-A A3	0.38%	9/15/2025	9.11		
11/15/2023	11/15/2023	70,000.00	65480MAD5	NAROT 2023-B A3	5.93%	3/15/2028	230.61		
11/15/2023	11/15/2023	245,000.00	14318MAD1	CARMX 2022-3 A3	3.97%	4/15/2027	810.54		
11/15/2023	11/15/2023	75,000.00	44933XAD9	HART 2023-B A3	5.48%	4/17/2028	342.50		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
11/15/2023	11/15/2023	55,353.27	14314QAC8	CARMX 2021-2 A3	0.52%	2/17/2026	23.99		
11/15/2023	11/15/2023	100,000.00	344930AD4	FORDO 2023-B A3	5.23%	5/15/2028	435.83		
11/15/2023	11/15/2023	625,000.00	9128283F5	US TREASURY NOTES	2.25%	11/15/2027	7,031.25		
11/15/2023	11/15/2023	325,000.00	912828X88	US TREASURY NOTES	2.37%	5/15/2027	3,859.38		
11/15/2023	11/15/2023	255,000.00	91324PEG3	UNITEDHEALTH GROUP INC CORP NOTES (CALLA	3.70%	5/15/2027	4,717.50		
11/15/2023	11/15/2023	170,000.00	30303M8L9	META PLATFORMS INC COPR NOTES (CALLABLE)	4.60%	5/15/2028	4,170.67		
11/15/2023	11/15/2023	280,000.00	161571HT4	CHAIT 2023-A1 A	5.16%	9/15/2028	1,204.00		
11/16/2023	11/16/2023	13,461.89	362590AC5	GMCAR 2020-3 A3	0.45%	4/16/2025	5.05		
11/16/2023	11/16/2023	70,247.12	380146AC4	GMCAR 2022-1 A3	1.26%	11/16/2026	73.76		
11/16/2023	11/16/2023	70,000.00	36267KAD9	GMCAR 2023-3 A3	5.45%	6/16/2028	317.92		
11/17/2023	11/17/2023	100,000.00	58933YBH7	MERCK & CO INC CORP NOTES CALLABLE	4.05%	5/17/2028	2,025.00		
11/18/2023	11/18/2023	70,578.57	43815EAC8	HAROT 2021-3 A3	0.41%	11/18/2025	24.11		
11/18/2023	11/18/2023	220,000.00	43815QAC1	HAROT 2023-3 A3	5.41%	2/18/2028	991.83		
11/25/2023	11/25/2023	100,000.00	05602RAD3	BMWOT 2022-A A3	3.21%	8/25/2026	267.50		
11/25/2023	11/25/2023	60,000.00	05592XAD2	BMWOT 2023-A A3	5.47%	2/25/2028	273.50		
11/28/2023	11/28/2023	265,000.00	04636NAA1	ASTRAZENECA FINANCE LLC (CALLABLE) CORP	1.20%	5/28/2026	1,590.00		
11/30/2023	11/30/2023	440,000.00	91282CDK4	US TREASURY NOTES	1.25%	11/30/2026	2,750.00		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
11/30/2023	11/30/2023	250,000.00	91282CCF6	US TREASURY NOTES	0.75%	5/31/2026	937.50		
12/1/2023	12/25/2023	335,000.00	3137BSP72	FHMS K058 A2	2.65%	8/1/2026	740.63		
12/1/2023	12/25/2023	325,000.00	3137HAMS2	FHMS K507 A2	4.80%	9/1/2028	1,300.00		
12/1/2023	12/25/2023	340,000.00	3137FLN34	FHMS K734 A2	3.20%	2/1/2026	908.93		
12/1/2023	12/25/2023	276,206.07	3137FBTA4	FHLMC MULTIFAMILY STRUCTURED POOL	3.06%	8/1/2024	705.25		
12/1/2023	12/25/2023	385,000.00	3137H14B9	FHMS K743 A2	1.77%	5/1/2028	567.88		
12/1/2023	12/25/2023	279,420.35	3137HAD45	FHMS KJ46 A1	4.77%	6/1/2028	1,112.33		
12/1/2023	12/25/2023	350,000.00	3137HAMH6	FHMS K506 A2	4.65%	8/1/2028	1,356.25		
12/1/2023	12/25/2023	255,000.00	3137HAST4	FHMS K509 A2	4.85%	9/1/2028	1,030.63		
12/1/2023	12/25/2023	64,981.87	3136AJB54	FANNIEMAE-ACES	3.34%	3/1/2024	181.18		
12/1/2023	12/25/2023	184,550.67	3137HAMN3	FHMS KJ47 A1	5.27%	8/1/2028	810.79		
12/1/2023	12/25/2023	200,000.00	3137BJP64	FHMS K046 A2	3.20%	3/1/2025	534.17		
12/1/2023	12/25/2023	350,000.00	3136BQDE6	FNA 2023-M6 A2	4.19%	7/1/2028	1,222.08		
12/1/2023	12/25/2023	355,000.00	3137F1G44	FHLMC MULTIFAMILY STRUCTURED P	3.24%	4/1/2027	959.39		
12/1/2023	12/25/2023	340,000.00	3137HACX2	FHMS K505 A2	4.81%	6/1/2028	1,365.38		
12/1/2023	12/25/2023	352,869.23	3137FJXQ7	FHMS K733 A2	3.75%	8/1/2025	1,102.72		
12/1/2023	12/25/2023	325,000.00	3137HAQ74	FHMS K508 A2	4.74%	8/1/2028	1,283.75		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
12/1/2023	12/25/2023	340,000.00	3137BVZ82	FHMS K063 A2	3.43%	1/1/2027	971.83		
12/1/2023	12/25/2023	365,000.00	3137BXQY1	FHMS K064 A2	3.22%	3/1/2027	980.63		
12/1/2023	12/25/2023	125,000.00	3137HB3D4	FHMS K510 A2	5.06%	10/1/2028	528.02		
12/1/2023	12/25/2023	291,262.45	3137BGK24	FHMS K043 A2	3.06%	12/1/2024	743.20		
12/1/2023	12/25/2023	235,000.00	3137BTUM1	FHMS K061 A2	3.34%	11/1/2026	655.45		
12/1/2023	12/1/2023	265,000.00	46647PCH7	JPMORGAN CHASE & CO (CALLABLE) CORP NOTE	0.82%	6/1/2025	1,091.80		
12/1/2023	12/1/2023	400,000.00	023135CP9	AMAZON.COM INC CORP NOTE (CALLABLE)	4.55%	12/1/2027	9,100.00		
12/9/2023	12/9/2023	270,000.00	63254ABE7	NATIONAL AUSTRALIA BK/NY CORPORATE NOTES	3.90%	6/9/2027	5,271.75		
12/13/2023	12/13/2023	250,000.00	63253QAE4	NATIONAL AUSTRALIA BK/NY CORPORATE NOTES	4.90%	6/13/2028	6,125.00		
12/15/2023	12/15/2023	205,000.00	233868AC2	DTRT 2023-1 A3	5.90%	3/15/2027	1,007.92		
12/15/2023	12/15/2023	195,000.00	448977AD0	HART 2022-A A3	2.22%	10/15/2026	360.75		
12/15/2023	12/15/2023	50,579.32	14314QAC8	CARMX 2021-2 A3	0.52%	2/17/2026	21.92		
12/15/2023	12/15/2023	340,000.00	05522RDF2	BACCT 2022-A2 A2	5.00%	4/15/2028	1,416.67		
12/15/2023	12/15/2023	190,000.00	254683CW3	DCENT 2022-A3 A3	3.56%	7/15/2027	563.67		
12/15/2023	12/15/2023	250,000.00	14041NFY2	COMET 2021-A3 A3	1.04%	11/15/2026	216.67		
12/15/2023	12/15/2023	165,000.00	254683CZ6	DCENT 2023-A2 A	4.93%	6/15/2028	677.87		
12/15/2023	12/15/2023	280,000.00	161571HT4	CHAIT 2023-A1 A	5.16%	9/15/2028	1,204.00		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
12/15/2023	12/15/2023	60,000.00	63743HFE7	NATIONAL RURAL UTIL COOP CORPORATE NOTES	3.45%	6/15/2025	1,035.00		
12/15/2023	12/15/2023	240,000.00	31680EAD3	FITAT 2023-1 A3	5.53%	8/15/2028	1,106.00		
12/15/2023	12/15/2023	70,000.00	65480MAD5	NAROT 2023-B A3	5.93%	3/15/2028	345.92		
12/15/2023	12/15/2023	125,000.00	02007WAC2	ALLYA 2023-1 A3	5.46%	5/15/2028	568.75		
12/15/2023	12/15/2023	100,000.00	344930AD4	FORDO 2023-B A3	5.23%	5/15/2028	435.83		
12/15/2023	12/15/2023	295,000.00	58768PAC8	MBART 2022-1 A3	5.21%	8/16/2027	1,280.79		
12/15/2023	12/15/2023	245,000.00	14318MAD1	CARMX 2022-3 A3	3.97%	4/15/2027	810.54		
12/15/2023	12/15/2023	78,263.36	98163KAC6	WOART 2021-D A3	0.81%	10/15/2026	52.83		
12/15/2023	12/15/2023	25,148.51	44933LAC7	HART 2021-A A3	0.38%	9/15/2025	7.96		
12/15/2023	12/15/2023	330,000.00	14041NGD7	COMET 2023-A1 A	4.42%	5/15/2028	1,215.50		
12/15/2023	12/15/2023	130,000.00	02582JJZ4	AMXCA 2023-1 A	4.87%	5/15/2028	527.58		
12/15/2023	12/15/2023	115,000.00	05522RDG0	BACCT 2023-A1 A1	4.79%	5/15/2028	459.04		
12/15/2023	12/15/2023	255,000.00	254683CY9	DCENT 2023-A1 A	4.31%	3/15/2028	915.88		
12/15/2023	12/15/2023	75,000.00	44933XAD9	HART 2023-B A3	5.48%	4/17/2028	342.50		
12/15/2023	12/15/2023	13,699.85	14316NAC3	CARMX 2021-1 A3	0.34%	12/15/2025	3.88		
12/16/2023	12/16/2023	9,503.64	362590AC5	GMCAR 2020-3 A3	0.45%	4/16/2025	3.56		
12/16/2023	12/16/2023	66,376.13	380146AC4	GMCAR 2022-1 A3	1.26%	11/16/2026	69.69		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
INTEREST									
12/16/2023	12/16/2023	70,000.00	36267KAD9	GMCAR 2023-3 A3	5.45%	6/16/2028	317.92		
12/18/2023	12/18/2023	64,778.66	43815EAC8	HAROT 2021-3 A3	0.41%	11/18/2025	22.13		
12/18/2023	12/18/2023	220,000.00	43815QAC1	HAROT 2023-3 A3	5.41%	2/18/2028	991.83		
12/25/2023	12/25/2023	100,000.00	05602RAD3	BMWOT 2022-A A3	3.21%	8/25/2026	267.50		
12/25/2023	12/25/2023	60,000.00	05592XAD2	BMWOT 2023-A A3	5.47%	2/25/2028	273.50		
12/31/2023	12/31/2023	130,000.00	91282CCJ8	US TREASURY NOTES	0.87%	6/30/2026	568.75		
12/31/2023	12/31/2023	825,000.00	91282CBC4	US TREASURY NOTES	0.37%	12/31/2025	1,546.88		
12/31/2023	12/31/2023	165,000.00	91282CGC9	US TREASURY NOTES	3.87%	12/31/2027	3,196.88		
Total INTER	EST	40,051,551.74					204,047.05		0.00
PAYDOWNS	;								
10/1/2023	10/25/2023	105,327.61	3137BTU25	FHMS K724 A2	3.06%	11/1/2023	105,327.61		
10/1/2023	10/25/2023	166.86	3137HAD45	FHMS KJ46 A1	4.77%	6/1/2028	166.86		
10/1/2023	10/25/2023	35,936.77	3137FBTA4	FHLMC MULTIFAMILY STRUCTURED POOL	3.06%	8/1/2024	35,936.77		
10/1/2023	10/25/2023	165.29	3136AJB54	FANNIEMAE-ACES	3.34%	3/1/2024	165.29		
10/1/2023	10/25/2023	189.90	3137FJXQ7	FHMS K733 A2	3.75%	8/1/2025	189.90		
10/1/2023	10/25/2023	251.16	3137HAMN3	FHMS KJ47 A1	5.27%	8/1/2028	251.16		
10/1/2023	10/25/2023	3,260.89	3137BGK24	FHMS K043 A2	3.06%	12/1/2024	3,260.89		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
PAYDOWNS	;								
10/15/2023	10/15/2023	4,900.85	14314QAC8	CARMX 2021-2 A3	0.52%	2/17/2026	4,900.85		
10/15/2023	10/15/2023	1,642.58	14316NAC3	CARMX 2021-1 A3	0.34%	12/15/2025	1,642.58		
10/15/2023	10/15/2023	5,305.15	98163KAC6	WOART 2021-D A3	0.81%	10/15/2026	5,305.15		
10/15/2023	10/15/2023	2,225.67	89237VAB5	TAOT 2020-C A3	0.44%	10/15/2024	2,225.67		
10/15/2023	10/15/2023	3,811.49	44933LAC7	HART 2021-A A3	0.38%	9/15/2025	3,811.49		
10/15/2023	10/15/2023	1,301.81	14315FAD9	CARMX 2020-3 A3	0.62%	3/17/2025	1,301.81		
10/16/2023	10/16/2023	4,067.51	380146AC4	GMCAR 2022-1 A3	1.26%	11/16/2026	4,067.51		
10/16/2023	10/16/2023	4,076.80	362590AC5	GMCAR 2020-3 A3	0.45%	4/16/2025	4,076.80		
10/18/2023	10/18/2023	6,024.56	43815EAC8	HAROT 2021-3 A3	0.41%	11/18/2025	6,024.56		
10/20/2023	10/20/2023	1,319.47	92290BAA9	VZOT 2020-B A	0.47%	2/20/2025	1,319.47		
11/1/2023	11/25/2023	453.74	3137FBTA4	FHLMC MULTIFAMILY STRUCTURED POOL	3.06%	8/1/2024	453.74		
11/1/2023	11/25/2023	476.66	3137BGK24	FHMS K043 A2	3.06%	12/1/2024	476.66		
11/1/2023	11/25/2023	142.07	3137HAD45	FHMS KJ46 A1	4.77%	6/1/2028	142.07		
11/1/2023	11/25/2023	156.90	3136AJB54	FANNIEMAE-ACES	3.34%	3/1/2024	156.90		
11/1/2023	11/25/2023	198.17	3137HAMN3	FHMS KJ47 A1	5.27%	8/1/2028	198.17		
11/1/2023	11/25/2023	176.41	3137FJXQ7	FHMS K733 A2	3.75%	8/1/2025	176.41		
11/15/2023	11/15/2023	4,773.95	14314QAC8	CARMX 2021-2 A3	0.52%	2/17/2026	4,773.95		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
PAYDOWNS	1								
11/15/2023	11/15/2023	458.78	14315FAD9	CARMX 2020-3 A3	0.62%	3/17/2025	458.77		
11/15/2023	11/15/2023	3,623.46	44933LAC7	HART 2021-A A3	0.38%	9/15/2025	3,623.46		
11/15/2023	11/15/2023	5,181.38	98163KAC6	WOART 2021-D A3	0.81%	10/15/2026	5,181.38		
11/15/2023	11/15/2023	1,557.85	14316NAC3	CARMX 2021-1 A3	0.34%	12/15/2025	1,557.85		
11/16/2023	11/16/2023	3,958.25	362590AC5	GMCAR 2020-3 A3	0.45%	4/16/2025	3,958.25		
11/16/2023	11/16/2023	3,870.99	380146AC4	GMCAR 2022-1 A3	1.26%	11/16/2026	3,870.99		
11/18/2023	11/18/2023	5,799.91	43815EAC8	HAROT 2021-3 A3	0.41%	11/18/2025	5,799.91		
12/1/2023	12/25/2023	253.69	3137HAMN3	FHMS KJ47 A1	5.27%	8/1/2028	253.69		
12/1/2023	12/25/2023	485.50	3137FBTA4	FHLMC MULTIFAMILY STRUCTURED POOL	3.06%	8/1/2024	485.50		
12/1/2023	12/25/2023	351.25	3137BTUM1	FHMS K061 A2	3.34%	11/1/2026	351.25		
12/1/2023	12/25/2023	191.26	3137FJXQ7	FHMS K733 A2	3.75%	8/1/2025	191.26		
12/1/2023	12/25/2023	174.46	3137HAD45	FHMS KJ46 A1	4.77%	6/1/2028	174.46		
12/1/2023	12/25/2023	166.64	3136AJB54	FANNIEMAE-ACES	3.34%	3/1/2024	166.64		
12/1/2023	12/25/2023	506.62	3137BGK24	FHMS K043 A2	3.06%	12/1/2024	506.62		
12/15/2023	12/15/2023	3,458.34	44933LAC7	HART 2021-A A3	0.38%	9/15/2025	3,458.34		
12/15/2023	12/15/2023	1,518.69	14316NAC3	CARMX 2021-1 A3	0.34%	12/15/2025	1,518.69		
12/15/2023	12/15/2023	5,636.92	448977AD0	HART 2022-A A3	2.22%	10/15/2026	5,636.92		

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
PAYDOWNS									
12/15/2023	12/15/2023	5,159.09	98163KAC6	WOART 2021-D A3	0.81%	10/15/2026	5,159.09		
12/15/2023	12/15/2023	4,550.67	14314QAC8	CARMX 2021-2 A3	0.52%	2/17/2026	4,550.67		
12/16/2023	12/16/2023	3,829.67	380146AC4	GMCAR 2022-1 A3	1.26%	11/16/2026	3,829.67		
12/16/2023	12/16/2023	3,794.08	362590AC5	GMCAR 2020-3 A3	0.45%	4/16/2025	3,794.08		
12/18/2023	12/18/2023	5,526.34	43815EAC8	HAROT 2021-3 A3	0.41%	11/18/2025	5,526.34		
12/25/2023	12/25/2023	2,371.33	05602RAD3	BMWOT 2022-A A3	3.21%	8/25/2026	2,371.33		
Total PAYDO	OWNS	248,777.44					248,777.43		0.00
SELL									
10/12/2023	10/19/2023	200,000.00	91282CDG3	US TREASURY NOTES	1.12%	10/31/2026	180,496.94		-19,989.63
10/25/2023	10/31/2023	60,000.00	91282CBH3	US TREASURY NOTES	0.37%	1/31/2026	54,164.06		-5,469.87
10/25/2023	10/31/2023	140,000.00	91282CBH3	US TREASURY NOTES	0.37%	1/31/2026	126,382.82		-12,513.22
10/30/2023	11/1/2023	250,000.00	4581X0DZ8	INTER-AMERICAN DEVEL BK NOTES	0.50%	9/23/2024	239,339.44		-10,737.30
11/27/2023	11/29/2023	155,000.00	798306WN2	SAN JUAN USD, CA TXBL GO BONDS	0.70%	8/1/2024	150,426.11		-4,930.55
11/27/2023	11/29/2023	260,000.00	4581X0DZ8	INTER-AMERICAN DEVEL BK NOTES	0.50%	9/23/2024	250,121.73		-10,064.11
11/27/2023	11/29/2023	275,000.00	874857KK0	TAMALPAIS UHSD, CA TXBL GO BONDS	2.02%	8/1/2024	270,480.21		-6,341.50
11/27/2023	11/29/2023	65,000.00	20772KJW0	CT ST TXBL GO BONDS	1.99%	7/1/2024	64,148.11		-1,385.80
11/27/2023	11/29/2023	180,000.00	574193TQ1	MD ST TXBL GO BONDS	0.51%	8/1/2024	174,522.90		-5,769.49

Trade Date	Settle Date	Par (\$)	CUSIP	Security Description	Coupon	Maturity Date	Transact Amount (\$)	Yield at Market	Realized G/L (BV)
SELL									
11/27/2023	11/29/2023	110,000.00	797272QP9	SAN DIEGO CCD, CA TXBL GO BONDS	2.04%	8/1/2024	108,219.80		-2,517.90
12/4/2023	12/7/2023	190,000.00	91282CBH3	US TREASURY NOTES	0.37%	1/31/2026	174,136.87		-14,835.67
12/4/2023	12/7/2023	530,000.00	91282CBH3	US TREASURY NOTES	0.37%	1/31/2026	485,750.23		-40,149.51
12/19/2023	12/21/2023	50,000.00	91282CCT6	US TREASURY NOTES	0.37%	8/15/2024	48,551.55		-1,505.90
12/19/2023	12/21/2023	35,000.00	605581MZ7	MS ST TXBL GO BONDS	0.56%	11/1/2024	33,693.97		-1,333.50
Total SELL		2,500,000.00					2,360,434.74		-137,543.95

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- In accordance with generally accepted accounting principles, information is presented on a trade date basis; forward settling purchases are included in the monthly balances, and forward settling sales are excluded.
- Performance is presented in accordance with the CFA Institute's Global Investment Performance Standards (GIPS). Unless otherwise noted, performance is shown gross of fees. Quarterly returns are presented on an unannualized basis. Returns for periods greater than one year are presented on an annualized basis. Past performance is not indicative of future returns.
- Bank of America/Merrill Lynch Indices provided by Bloomberg Financial Markets.
- Money market fund/cash balances are included in performance and duration computations.
- Standard & Poor's is the source of the credit ratings. Distribution of credit rating is exclusive of money market fund/LGIP holdings.
- Callable securities in the portfolio are included in the maturity distribution analysis to their stated maturity date, although, they may be called prior to maturity.
- MBS maturities are represented by expected average life.

## **Glossary**

- Accrued Interest: Interest that is due on a bond or other fixed income security since the last interest payment was made.
- Agencies: Federal agency securities and/or Government-sponsored enterprises.
- Amortized Cost: The original cost of the principal of the security is adjusted for the amount of the periodic reduction of any discount or premium from the purchase date until the date of the report. Discount or premium with respect to short-term securities (those with less than one year to maturity at time of issuance) is amortized on a straight line basis. Such discount or premium with respect to longer-term securities is amortized using the constant yield basis.
- Asset-Backed Security: A financial instrument collateralized by an underlying pool of assets usually ones that generate a cash flow from debt, such as loans, leases, credit card balances, and receivables.
- Bankers' Acceptance: A draft or bill or exchange accepted by a bank or trust company. The accepting institution guarantees payment of the bill as well as the insurer.
- Commercial Paper: An unsecured obligation issued by a corporation or bank to finance its short-term credit needs, such as accounts receivable and inventory.
- Contribution to Total Return: The weight of each individual security multiplied by its return, then summed for each sector to determine how much each sector added or subtracted from the overall portfolio performance.
- Effective Duration: A measure of the sensitivity of a security's price to a change in interest rates, stated in years.
- Effective Yield: The total yield an investor receives in relation to the nominal yield or coupon of a bond. Effective yield takes into account the power of compounding on investment returns, while nominal yield does not.
- FDIC: Federal Deposit Insurance Corporation. A federal agency that insures bank deposits to a specified amount.
- Interest Rate: Interest per year divided by principal amount and expressed as a percentage.
- Market Value: The value that would be received or paid for an investment in an orderly transaction between market participants at the measurement date.
- Maturity: The date upon which the principal or stated value of an investment becomes due and payable.
- Negotiable Certificates of Deposit: A CD with a very large denomination, usually \$1 million or more, that can be traded in secondary markets.
- Par Value: The nominal dollar face amount of a security.
- Pass-through Security: A security representing pooled debt obligations that passes income from debtors to its shareholders. The most common type is the mortgage-backed security.

## **Glossary**

- Repurchase Agreements: A holder of securities sells these securities to an investor with an agreement to repurchase them at a fixed price on a fixed date.
- Settle Date: The date on which the transaction is settled and monies/securities are exchanged. If the settle date of the transaction (i.e., coupon payments and maturity proceeds) occurs on a non-business day, the funds are exchanged on the next business day.
- Supranational: A multinational union or association in which member countries cede authority and sovereignty on at least some internal matters to the group, whose decisions are binding on its members.
- Trade Date: The date on which the transaction occurred; however, the final consummation of the security transaction and payment has not yet taken place.
- Unsettled Trade: A trade which has been executed; however, the final consummation of the security transaction and payment has not yet taken place.
- U.S. Treasury: The department of the U.S. government that issues Treasury securities.
- Yield: The rate of return based on the current market value, the annual interest receipts, maturity value, and the time period remaining until maturity, stated as a percentage on an annualized basis.
- YTM at Cost: The yield to maturity at cost is the expected rate of return based on the original cost, the annual interest receipts, maturity value, and the time period from purchase date to maturity, stated as a percentage on an annualized basis.
- YTM at Market: The yield to maturity at market is the rate of return based on the current market value, the annual interest receipts, maturity value, and the time period remaining until maturity, stated as a percentage on an annualized basis.

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January 12, 2024



## Memorandum

To: Min Su, Finance Manager

Eric Dahlen, Executive Director
Pooled Liability Assurance Network

From: Michael Kronbetter, Relationship Manager

PFM Asset Management LLC ("PFMAM")

**RE:** Annual Investment Policy Review

PFM Asset Management LLC has completed its annual review of the Pooled Liability Assurance Network's (the "Authority") Investment Policy (the "Policy"). The Policy is in compliance with the sections of the California Government Code (the "Code") that govern the investment of public funds.

We are, however, recommending the Authority incorporate a recent Code change into the Policy. Senate Bill 882, which took effect January 1, 2024, also known as the Local Government Omnibus Act of 2023, made several changes to Code, including one change to Code Section 53601(o). The bill clarified that mortgage-backed securities issued by federal agencies are exempt from the Code's requirements described in Section 53601(o) for privately issued asset- and mortgage-backed securities. The Code update codifies the common understanding of how agency mortgage-backed securities are treated under Code. Although the Code change does not change what type of securities the Authority may purchase nor how the portfolio is managed, incorporating the Code change into the Policy will better align the Policy with the current Code language.

We have attached a marked-up copy of the Authority's Policy to illustrate our recommended change. Please let us know if you have any questions or if you would like to discuss further.

# Pooled Liability Assurance Network JPA (PLAN)

# **Investment Policy**

Adopted: September, 1987 **Revised:** May 6, 1997 **Revised:** May 22, 2002 May 25, 2005 **Revised:** Reaffirmed: June 11, 2009 **Revised:** January 24, 2017 **Revised:** June 20, 2018 **Revised:** June 12, 2019 **Revised:** June 11, 2020 **Revised:** June 18, 2021 February 14, 2023 **Revised:** 

1

### 1.0 Policy

It is the policy of the Pooled Liability Assurance Network JPA (PLAN) to invest its financial assets in a manner which will provide maximum security with a market rate of return, while meeting its cash flow demands and conforming to all applicable laws governing the investment of public funds.

### 2.0 Scope

This Investment Policy (the "Policy") shall apply to all funds and investment activities under the direct control of PLAN.

### 3.0 Prudence

Pursuant to California Government Code Section 53600.3, all persons authorized to make investment decisions on behalf of PLAN are trustees and therefore fiduciaries subject to the prudent investor standard: "When investing, reinvesting, purchasing, acquiring, exchanging, selling, or managing public funds, a trustee shall act with care, skill, prudence, and diligence under the circumstances then prevailing, including, but not limited to, the general economic conditions and the anticipated needs of the agency, that a prudent person acting in a like capacity and familiarity with those matters would use in the conduct of funds of a like character and with like aims, to safeguard the principal and maintain the liquidity needs of the agency. Within the limitations of this section and considering individual investments as part of an overall strategy, investments may be acquired as authorized by law."

### 4.0 Objectives

The overall program shall be designed and managed with a degree of professionalism worthy of the public trust. The primary objectives, in order of priority, of PLAN's investment activities shall be:

- 1) Safety. Safety of principal is the foremost objective of the investment program. PLAN's investments shall be undertaken in a manner that seeks to ensure preservation of capital in the overall portfolio.
- 2) Liquidity. PLAN's investment portfolio will remain sufficiently liquid to enable PLAN to meet its reasonably anticipated cash flow requirements.
- **3) Return on Investment.** PLAN seeks to maximize the return on its investments, consistent with constraints imposed by its objectives of safety and liquidity.

### 5.0 Delegation of Authority

The investment authority will be vested in the Treasurer, as defined and established in PLAN's bylaws. Upon the approval of this Investment Policy on an annual basis, PLAN will be adhering to Government Code Section 53607 which states in pertinent part: "The authority of the legislative body to invest or to reinvest funds of a local agency, or to sell or exchange securities so purchased, may be delegated for a one year period by the legislative body to the treasurer of the local agency, who shall thereafter assume full responsibility for those transactions until the delegation of authority is revoked or expires."

The Treasurer may delegate investment decision making and execution authority to an investment advisor. The advisor shall follow the Investment Policy and such other written instructions as are

provided.

The Treasurer and the delegated investment officers acting in accordance with written procedures and the Investment Policy and exercising due diligence shall be relieved of personal responsibility for an individual security's credit risk or market price changes, provided deviations from expectations are reported in a timely fashion and appropriate action is taken to control adverse developments.

### 6.0 Ethics and Conflicts of Interest

Officers and employees involved in the investment process shall refrain from personal business activities that could conflict with proper execution of the investment program, or which could impair their ability to make impartial investment decisions. Employees and investment officials shall disclose to the President any material financial interests in financial institutions that conduct business with PLAN, and they shall further disclose any material financial interest that could be related to the performance of PLAN, particularly with regard to the time of purchases and sales. For purposes of this section "material financial interests" means any interest described in Government Code Sections 87103(a)-(e), as they may be amended from time to time.

### 7.0 Internal Controls

The Treasurer shall maintain a system of written internal controls to regulate PLAN's investment activities, including the activities of any subordinate officials acting on behalf of PLAN. As part of the annual financial audit, PLAN's external auditor will perform a review of investment transactions to verify compliance with policies and procedures.

### 8.0 Authorized Financial Dealers and Institutions

A competitive bid process shall be used to place all investment transactions; a minimum of three quotes shall be obtained on all purchase and sales of securities, when practical. It shall be PLAN's policy to purchase securities only from those authorized institutions and firms. No deposit of public funds shall be made except in a qualified public depository as established by state laws.

The Treasurer shall maintain a list of authorized broker/dealers and financial institutions which are approved for investment purposes. The purchase by PLAN of any investment other than those purchased directly from the issuer, shall be purchased either from an institution licensed by the State as a broker-dealer, as defined in Section 25004 of the Corporations Code, which is a member of the Financial Industry Regulatory Authority (FINRA), or a member of a federally regulated securities exchange, a national or state chartered bank, a federal or state association (as defined by Section 5102 of the Financial Code), or a brokerage firm designated as a Primary Government Dealer by the Federal Reserve Bank.

PLAN requires each firm that will be used for the purchase or sale of securities to be evaluated by the Treasurer prior to any investments. The firms shall submit current financial statements, and annual audited financial statements each year thereafter, which are to be evaluated by the Treasurer. At a minimum, the firm must be financially sound and have been in business a minimum of three years. In addition, the firms must provide: proof of the licensing or membership described above, trading resolutions, proof of state registration or exemption, and certificate of having read PLAN's Investment Policy.

If PLAN has retained the services of an investment advisor, the investment advisor may use its own

list of authorized broker/dealers to conduct transactions on behalf of PLAN.

#### 9.0 Authorized and Suitable Investments

PLAN is governed by Government Code, Sections 53600 et seq. Within the investments permitted by the Government Code, PLAN seeks to further restrict eligible investment to the investments listed below. In the event an apparent discrepancy is found between this Policy and the Government Code, the more restrictive parameters will take precedence. The maturity and sector allocation limits are applied at the time of purchase.

Credit criteria listed in this section refers to the credit quality of the issuing organization at the time the security is purchased. In the event of a downgrade below the minimum credit rating requirements listed below, the Treasurer or the investment advisor, if so designated, must notify PLAN of such downgrade within 15 days of the downgrade and will use their best professional judgment to determine the appropriate course of action.

The portfolio shall be diversified by security type and institution to avoid incurring unreasonable and avoidable risks regarding specific security types or individual financial institutions.

- 1. United States Treasury Issues.\*\* United States Treasury notes, bonds, bills, or certificates of indebtedness, or those for which the faith and credit of the United States are pledged for the payment of principal and interest. United States Treasury Issues cannot exceed a maturity of 5 years. There is no limitation as to the percentage of the portfolio that may be invested in this category.
- 2. Federal Agency Obligations.\*\* Federal agency or United States government-sponsored enterprise obligations, participations, or other instruments, including those issued by or fully guaranteed as to principal and interest by federal agencies or United States government-sponsored enterprises. Federal Agency Obligations cannot exceed a maturity of 5 years. There is no limitation as to the percentage of the portfolio that may be invested in this category. In addition, purchases of Federal Agency mortgage-backed securities issued by or fully guaranteed as to principal and interest by government agencies are limited to a maximum of 20 percent of the portfolio.
- 3. Medium-term notes.\*\* Medium-term notes are defined as all corporate and depository institution debt securities with a maximum remaining maturity of five years or less, issued by corporations organized and operating within the United States or by depository institutions licensed by the United States or any state and operating within the United States. Purchases are limited to securities rated in a rating category of "A" or its equivalent or better by a nationally recognized rating service (NRSRO). A maximum of 30 percent of the portfolio may be invested in this category. The amount invested in the medium-term notes of any one issuer in combination with any other securities from that issuer shall not exceed 5 percent of the portfolio.
- 4. Bankers' Acceptances. Bankers' acceptances, otherwise known as bills of exchange or time drafts that are drawn on and accepted by a commercial bank. Purchasers are limited to issuers whose short-term debt is rated A-1/P-1 or its equivalent or better by an NRSRO. Bankers' acceptances cannot exceed a maturity of 180 days. A maximum of 25 percent of the portfolio may be invested in this category. The amount invested in bankers' acceptances with any one financial institution in combination with any other securities from that financial institution shall not exceed 5 percent of the portfolio.

- 5. Commercial Paper. Commercial paper of "prime" quality of the highest ranking or of the highest letter and number rating as provided for by a nationally recognized statistical-rating organization. The entity that issues the commercial paper shall meet all of the following conditions in either paragraph (A) or paragraph (B):
  - a) The entity meets the following criteria: (i) Is organized and operating in the United States as a general corporation. (ii) Has total assets in excess of five hundred million dollars (\$500,000,000). (iii) Has debt other than commercial paper, if any, that is rated in a rating category of "A" or its equivalent or higher by a nationally recognized statistical-rating organization.
  - b) The entity meets the following criteria: (i) Is organized within the United States as a special purpose corporation, trust, or limited liability company. (ii) Has program wide credit enhancements including, but not limited to, over collateralization, letters of credit, or surety bond. (iii) Has commercial paper that is rated "A-1" or higher, or the equivalent, by an NRSRO.

Eligible commercial paper shall have a maximum maturity of 270 days or less. A maximum of 25 percent of the portfolio may be invested in this category. The amount invested in commercial paper of any one issuer in combination with any other securities from that issuer shall not exceed 5 percent of the portfolio.

- 6. Negotiable Certificates of Deposit.\*\* Negotiable certificates of deposit (NCDs) issued by a nationally or state-chartered bank, a savings association or a federal association, a state or federal credit union, or by a state-licensed branch of a foreign bank. Purchases are limited to NCDs rated in a rating category of "A" or its equivalent or better for long-term obligations, and "A-1" or its equivalent or better for short-term obligations. NCDs may not exceed 5 years in maturity. A maximum of 30 percent of the portfolio may be invested in this category. The amount invested in NCDs with any one financial institution in combination with any other securities from that financial institution shall not exceed 5 percent of the portfolio.
- 7. Time Certificates of Deposit. Time Certificates of Deposit (TCDs) placed with commercial banks and savings and loans. The purchase of TCDs from out-of-state banks or savings and loans is prohibited. The amount on deposit shall not exceed the shareholder's equity in the financial institution. To be eligible for purchase, the financial institution must have received a minimum overall satisfactory rating for meeting the credit needs of California Communities in its most recent evaluation, as provided in Government Code Section 53635.2. TCDs are required to be collateralized as specified under Government Code Section 53630 et. seq. The Treasurer, at the Treasurer's discretion, may waive the collateralization requirements for any portion that is covered by federal insurance. PLAN shall have a signed agreement with the depository per Government Code Section 53649. TCDs may not exceed 5 year in maturity. A maximum of 10 percent of the portfolio may be invested in this category. The amount invested in TCDs with any one financial institution in combination with any other securities from that financial institution shall not exceed 10 percent of the portfolio.
- 8. Money Market Funds. Shares of beneficial interest issued by diversified management companies that are money market funds registered with the Securities and Exchange Commission under the Investment Company Act of 1940 (15 U.S.C. Sec. 80a-1 and following). The company shall have met either of the following criteria: (A) Attained the highest ranking or the highest letter and numerical rating provided by not less than two NRSROs. (B) Retained an investment adviser registered or exempt from registration with the Securities and Exchange Commission

with not less than five years of experience managing money market mutual funds with assets under management in excess of five hundred million dollars (\$500,000,000). A maximum of 10 percent of the portfolio may be invested in this category.

9. State of California Local Agency Investment Fund (LAIF). There is no limitation as to the percentage of the portfolio that may be invested in this category. However, the amount invested may not exceed the maximum allowed by LAIF. For due diligence, a copy of LAIF's current investment policy and its requirements for participation, including limitations on deposits or withdrawals shall be maintained on file.

Under the California Government Code, LAIF is allowed greater investment flexibility than PLAN is permitted. As such, LAIF's investment portfolio may contain investments not otherwise permitted under this policy. For funds invested with LAIF, LAIF's investment policy overrides PLAN's investment policy.

- 10. Municipal Obligations.\*\* Municipal obligations shall be permissible as described in either paragraph (A), (B), or (C) below:
  - a) Registered state warrants or treasury notes or bonds of this state, including bonds payable solely out of the revenues form a revenue-producing property owned, controlled, or operated by the state or by a department, board, agency, or authority of the state.
  - b) Registered treasury notes or bonds of any of the other 49 states in addition to California, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by a state or by a department, board, agency, or authority of any of the other 49 states, in addition to California.
  - c) Bonds, notes, warrants, or other evidences of indebtedness of a local agency within this state, including bonds payable solely out of the revenues from a revenue-producing property owned, controlled, or operated by the local agency, or by a department, board, agency, or authority of the local agency.

A maximum of 30 percent of the portfolio may be invested in any combination of the municipal obligations as described in paragraphs (A), (B), or (C) above. Purchases are limited to municipal obligations rated in a rating category of "A" or its equivalent or better. Further, the amount invested in any one municipal issuer may not exceed 5 percent of the portfolio.

11. Asset Backed Securities (ABS). A mortgage passthrough security, collateralized mortgage obligation, mortgage-backed or other pay-through bond, equipment lease-backed certificate, consumer receivable passthrough certificate, or consumer receivable-backed bond.

Securities eligible for investment under this subdivision <u>and not issued or guaranteed by an agency</u> or issuer identified in subdivision (1) or (2), the following limitations apply:

- a) shall be rated in a rating category of "AAA" or its equivalent by an NRSRO, and
- b) have a maximum remaining maturity of five years or less.
- c) . Purchase of securities authorized by this subdivision shall not exceed 20 percent of the portfolio, and

. Further, the amount invested in any one ABS issuer in combination with any other securities from that issuer shall not exceed 5 percent.

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- 12. Local Government Investment Pools. Shares of beneficial interest issued by a joint powers authority organized pursuant to California Government Code Section 6509.7 that invests in the securities and obligations authorized in subdivisions (a) to (r), inclusive. Each share shall represent an equal proportional interest in the underlying pool of securities owned by the joint powers authority. To be eligible under this section, the joint powers authority issuing the shares shall have retained an investment adviser that meets all of the following criteria:
  - The adviser is registered or exempt from registration with the Securities and Exchange Commission.
  - (2) The adviser has not less than five years of experience investing in the securities and obligations authorized in subdivisions (a) to (q), inclusive.
  - (3) The adviser has assets under management in excess of five hundred million dollars (\$500,000,000).

Further, the shares of beneficial interest shall be rated in a rating category of AAA or its equivalent by an NRSORO.

- 13. Supranational Obligations.\*\*\* United States dollar denominated senior unsecured unsubordinated obligations issued or unconditionally guaranteed by the International Bank for Reconstruction and Development, International Finance Corporation, or Inter-American Development Bank, with a maximum remaining maturity of five years or less, and eligible for purchase and sale within the United States. Investments under this subdivision shall be rated in a rating category of "AA" or its equivalent or better by an NRSRO and shall not exceed 30 percent of the portfolio.
- \*\* The aggregate total of investments in callable notes in is limited to 25.0% of the portfolio.

Please see Appendix A for a summary of authorized and suitable investments.

### 10.0 Prohibited Investment Practices and Instruments

Any investment in a security not specifically listed in Section 9.0 above, but otherwise permitted by the Government Code, is prohibited without the prior approval of the Board. Section 53601.6 of the Government Code specifically disallows investments in inverse floaters, range notes, or interest-only strips that are derived from a pool of mortgages. In addition to the limitations in Government Code Section 53601.6, this Policy further restricts investments as follows: (1) PLAN shall not engage in leveraged investing, such as in margin accounts or any form of borrowing for the purpose of investment, (2) PLAN shall not invest in securities with floating coupon interest rates, and (3) no investment will be made that has either (a) an embedded option or characteristic which could result in a loss of principal if the investment is held to maturity, or (b) an embedded option or characteristic which could seriously limit accrual rates or which could result in zero accrual periods, except that, in the event of, and for the duration of, a period of negative market interest rates, PLAN may invest in securities issued by, or backed by, the United States government that could result in zero- or negative-interest accrual if held to maturity. Before the initial investment in such zero- or negative-interest accrual securities, the investment advisor, if so retained, shall inform PLAN of its intent to purchase such securities along with a rationale. At which point, PLAN may approve or reject such purchases.

### 11.0 Duration and Maximum Maturity

It is the objective of this Policy to provide a system which will accurately monitor and forecast revenues and expenditures so that PLAN can invest funds to the fullest extent possible. PLAN's funds will be invested in accordance with sound treasury management principles.

Assets in the Operating Fund (projected administration expenses and claim payments for a fiscal year) will be invested in pooled funds, LAIF, or other highly liquid securities.

Assets in the Claims Liability Fund and the Long-Term Fund will be invested in an individual portfolio of securities. Claims Liability Fund (assets needed to fully fund the Pool as determined by the actuary) will be invested to achieve an average duration that closely matches the duration of Claims Liability as calculated by the actuary. Assets in the Long-term Fund represent assets in excess of full funding requirements of the Pool. Assets in this category can be invested in securities with durations and yields that are higher than those in the Claims Liability Fund.

The maximum maturity of individual investments shall not exceed the limits set forth in Section 9.0. The Board has approved the investment in U.S. Treasury and Federal Agency obligations with a maximum maturity of up to five years. No investment shall exceed a maturity of five years from the date of purchase unless the Board has granted express authority to make that investment either specifically or as a part of an investment program approved by the Board no less than three months prior to the investment.

### 12.0 Safekeeping and Custody

All security transactions entered into by PLAN shall be conducted on a delivery-versus-payment (DVP) basis. All cash and securities in PLAN's portfolio shall be held in safekeeping in PLAN's name by a third party bank trust department, acting as agent for PLAN under the terms of a custody agreement executed by the bank and PLAN. The only exception to the foregoing shall be depository accounts and securities purchases made with: (i) local government investment pools; (ii) time certificates of deposit, and, (iii) money market mutual funds, since the purchased securities are not deliverable. Evidence of each these investments will be held by PLAN.

### 13.0 Performance Benchmark

PLAN seeks to attain market rates of return on its investments throughout economic cycles, consistent with constraints imposed by its safety objectives and cash flow consideration. The Treasurer shall continually monitor and evaluate the portfolio's performance. A comparison of the portfolio's performance against a performance benchmark shall be included in the Treasurer's quarterly report. The Treasurer shall recommend an appropriate, readily available market index to use as a performance benchmark.

### 14.0 Reporting

The Treasurer shall submit a quarterly investment report to the Executive Committee in advance of the Executive Committee's next scheduled meeting. The report shall include the following information for each individual investment: Description of investment instrument, issuer name, maturity date, credit rating, coupon rate, yield, purchase price, par value, book value, current market value and the source of the valuation. The quarterly report shall also state compliance of the portfolio to the statement of investment policy, or manner in which the portfolio is not in compliance, and include a statement denoting PLAN's ability to meet its expenditure requirements for the next six months, or provide an explanation as to why sufficient money may or may not be available. The report shall also include a list of monthly investment transactions.

### 15.0 Policy Adoption

The policy shall be reviewed annually by the Finance Committee. The policy shall be adopted

annually by the Board at a public meeting. Any change in the policy shall also be reviewed and approved by the Board at a public meeting.

# Appendix A Summary of Authorized and Suitable Investments

This table is for general reference only. Please see the body of the Policy for a listing of all requirements.

Security Type**	Maturity Lin	mits Maximum Portfolio Percentage Holdings	Rating Requirements
United State Treasury Securities	5 years	100%	None
Federal Agency Obligations	5 years	100% 20% limit on mortgage-backed securities.	None
Medium-Term Corporate Notes	5 years	30% 5% limit per issuer (applies across security types)	A
Bankers' Acceptances	180 days	25% 5% limit per issuer (applies across security types)	Issuers with a short-term rating of A-1/P-1
Commercial Paper	270 days	25% 5% limit per issuer (applies across security types)	A-1/P-1/F-1
Negotiable Certificates of Deposit	5 years	30% 5% limit per issuer (applies across security types)	A / A-1
Time Certificates of Deposit	5 year	10% 10% limit per issuer (applies across security types)	Must have CRA rating "satisfactory"
Money Market Funds	N.A.	10%	AAA rated fund or manager with a minimum 5 years' experience and \$500 million under management
State of California Local Agency Investment Fund	N.A.	100% (may not exceed the \$75 million maximum allowed by LAIF)	None (LAIF is unrated)
Municipal Obligations	5 years	30% 5% limit per issuer (applies across security types)	A / A-1
Asset-Backed Securities	5 years	20%_ (limit applies to securities not issued or guaranteed by an agency or issuer identified in Subdivision 9.1 or 9.2) 5% limit per issuer (applies across security types)	AA
Local Government Investment	N.A.	100%	AAA
Supranational Obligations	5 years	30%	AA

<sup>\*\*</sup> The aggregate total of investments in callable notes is limited to 25.0% of the portfolio.

March 20, 2024

Agenda Item 6.B.

#### **FINANCIAL MATTERS**

**SUBJECT:** Liability Program Updates and Preliminary Actuarial Data

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

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 and estimated payroll data as of December 31, 2023. 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.



March 20, 2024

Agenda Item 6.B. 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. 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 claims development, the increase in the primary funding layer is also due to the 2024/25 estimated payroll increasing by 8.8%, or \$43M.

Becky Richard, Bickmore Actuarial, will be present to provide a thorough overview of the Draft General Liability Program Actuarial Report to the Committee.

#### **STAFF RECOMMENDATION:**

None.

#### **REFERENCE MATERIALS ATTACHED:**

• Draft General Liability 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.

# Loss and ALAE Funding Guidelines

_	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

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% 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**

David Kim, MA Actuarial Consultant

# **TABLE OF CONTENTS**

I. BACKGROUND	6
II. CONCLUSIONS AND RECOMMENDATIONS	8
A. LIABILITY FOR OUTSTANDING CLAIMS AS OF JUNE 30, 2024	8
B. COSTS OF 2024-25 CLAIMS	12
C. PROGRAM FUNDING: GOALS AND OBJECTIVES	13
D. OTHER RESULTS	18
E. COMPARISON WITH OUR PREVIOUS RESULTS	22
F. DATA ISSUES	27
III. ASSUMPTIONS AND LIMITATIONS	28
IV. GLOSSARY OF ACTUARIAL TERMS	30
V. RATE EXHIBITS AND APPENDICES	32
VI. RESERVE EXHIBITS AND APPENDICES	100

## 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	<u>Reinsurer</u>
\$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**

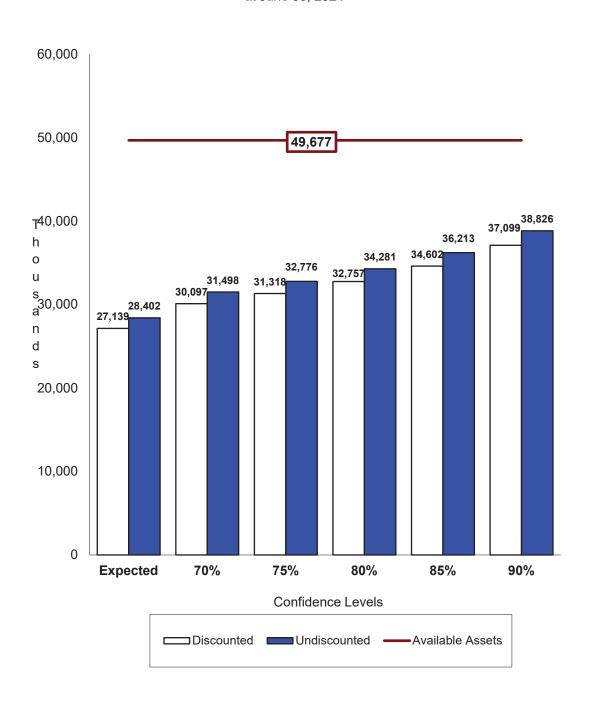
# A. LIABILITY FOR OUTSTANDING CLAIMS AS OF JUNE 30, 2024

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.

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.

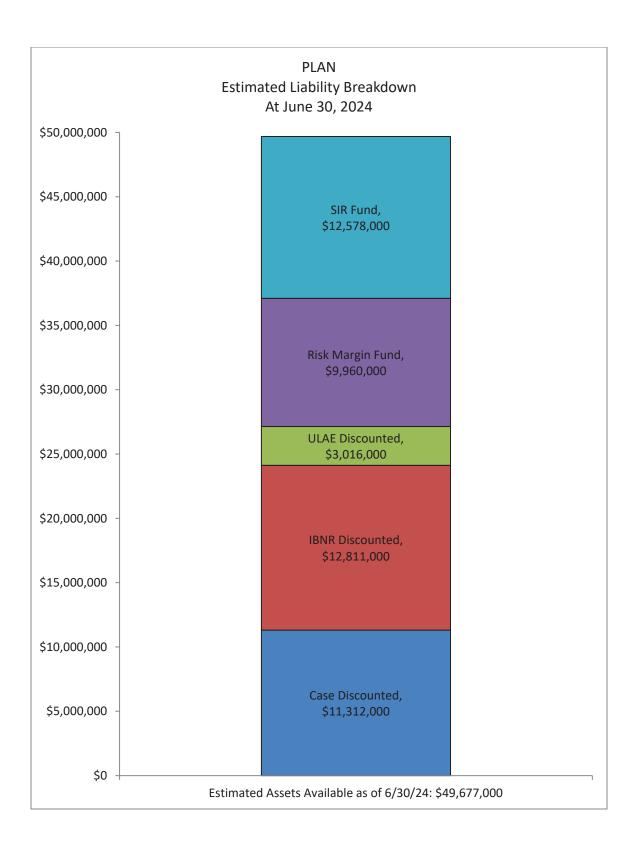
We estimate the program's expected discounted liability for outstanding claims to be \$27,139,000 again including ALAE and ULAE. With recognition of the investment income that can be earned on the assets held, the program is funded above the 90% confidence level. The information presented in Graph 1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

Confidence	Liability	y for Outstar	nding Claim	s 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.

# Loss and ALAE Funding Guidelines

_	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

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% 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	(SIR: \$1M)	<u>Target</u>	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	2023-24 \$1.0M/\$30M	2024-25 \$1.0M/\$30M		
	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%

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.

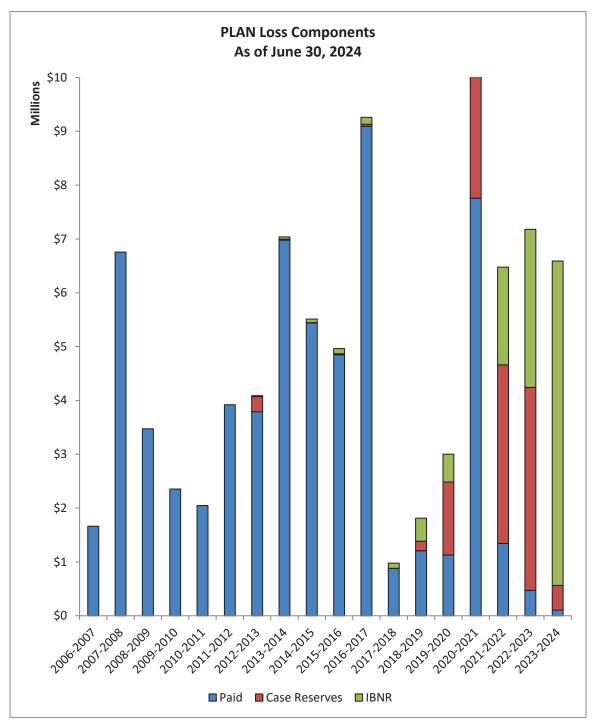
Total budgeted administrative costs for 2024-25 are \$2,537,000. Total PLAN administrative expenses of \$2,537,000 are split into \$2,029,600 for general liability and \$507,400 for property coverages then again split into fixed and variable portions. Thirty-three percent of these expenses are assumed 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.

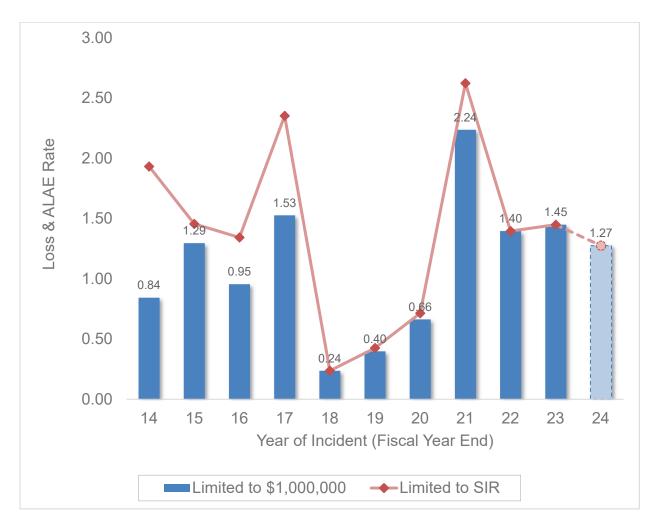
# **D. OTHER RESULTS**

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.

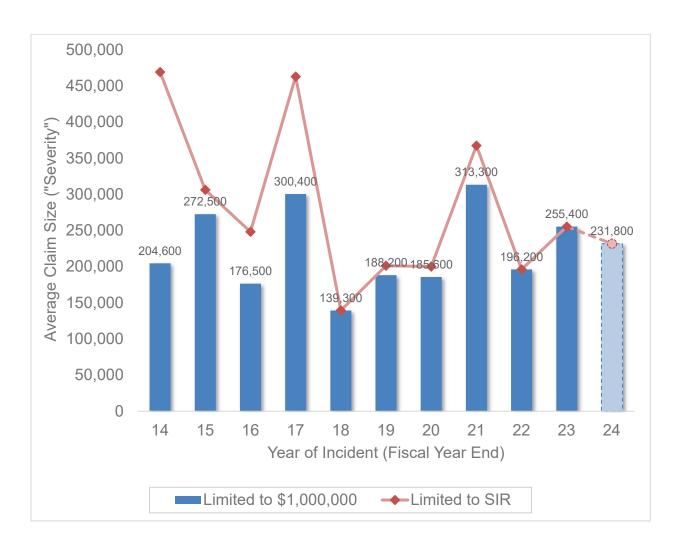
**Pool Layer** Loss & ALAE Rate Trend<sup>1</sup> Ultimate Loss & ALAE / Payroll (\$100s)



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

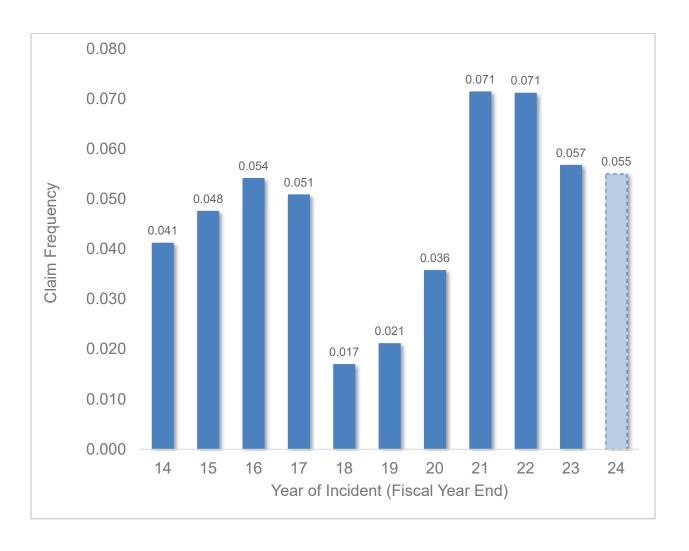
The program's cost per claim averaged \$245,000 per claim (limited to \$1M) during the period shown below. The projected severity for the 2023-24 program year of \$231,800 is based on this long-term trend.

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.

# **Actual Versus Expected Pool Incurred Loss and ALAE Development**

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

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.

# **Actual Versus Pool Expected Paid Loss and ALAE Development**

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

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.

# **Change in Pool Loss and ALAE Ultimate Losses**

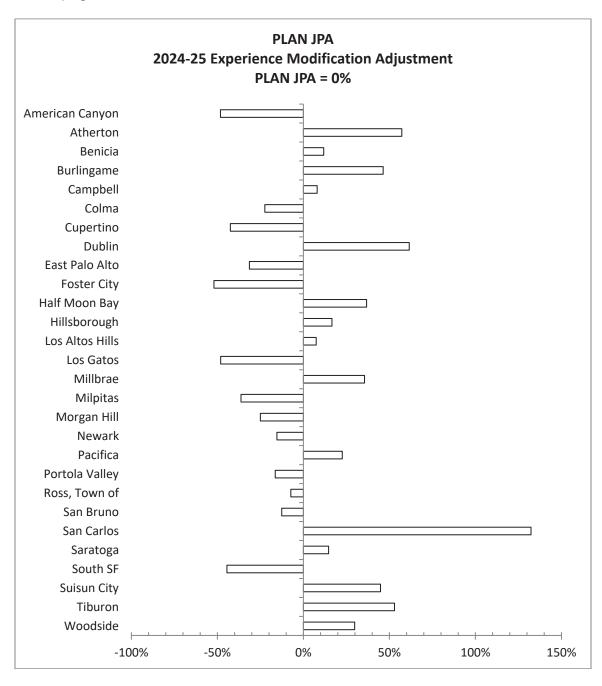
Accident			
Year	Prior Report	Current Report	Change
1986-03	\$43,442,000	\$43,442,000	\$0
2003-04	2,574,000	2,574,000	0
2004-05	1,874,000	1,874,000	0
2005-06	4,756,000	4,756,000	0
2006-07	1,662,000	1,662,000	0
2007-08	6,756,000	6,756,000	0
2008-09	3,473,000	3,473,000	0
2009-10	2,353,000	2,353,000	0
2010-11	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
Total	\$127,359,000	\$134,555,000	\$7,196,000

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.

Manakan	2023-24 Actual	2024-25 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%
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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%
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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 selfinsured 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.)

Exhibit 1 Page 1

PLAN JPA

#### Summary of 2024-25 Deposit by Retention Limit

		Total				
		Deposit				
		\$1 Million				
	2023-24	Retention	Indicated	Indicated		Total
	Premium	\$30 Million	Dollar	Percent	Total	Percent
Member	Deposit	Limit	Change	Change	Deposit	Change
(A)	(B)	(C)	(D)	(E)	(F)	(G)
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%

<sup>(</sup>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

Exhibit 1 Page 2a

PLAN JPA

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

<sup>(</sup>B) From Exhibit 1, Page 2b. (C) From Exhibit 1, Page 2b. (D) From Exhibit 1, Page 2b. (E) (B) + (C) + (D)

#### PLAN JPA

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

Member (A)	Deductible (B)	Deductible Factor (C)	Adjusted Experience Modification Factor (D)	2024-25 Payroll (00) (E)	PLAN JPA Loss Fund Contribution (F)	Balanced PLAN JPA Loss Fund Contribution (G)	Excess Insurance (H)	Adjusted Admin. Expenses (I)	Indicated Total Deposit (J)
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

<sup>(</sup>B) Provided by PLAN

<sup>(</sup>C) From Exhibit 2, Page 2.

<sup>(</sup>D) From Exhibit 1, Page 6.

<sup>(</sup>E) From Exhibit 2, Page 1.

<sup>(</sup>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).

<sup>(</sup>H) From Exhibit 1, page 3.

 <sup>[1] [</sup>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.

<sup>(</sup>J) (G) + (H) + (I)

Exhibit 1 page 3

PLAN JPA

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	21,338	2.56%	467,124
Atherton	6,678	0.80%	146,193
Benicia	26,180	3.14%	573,124
Burlingame	30,136	3.62%	659,727
Campbell	42,713	5.12%	935,059
Colma	1,359	0.16%	29,751
Cupertino	59,154	7.10%	1,294,979
Dublin	71,750	8.61%	1,570,727
East Palo Alto	28,586	3.43%	625,795
Foster City	32,703	3.92%	715,923
Half Moon Bay	11,226	1.35%	245,756
Hillsborough	10,962	1.32%	239,976
Los Altos Hills	8,380	1.01%	183,452
Los Gatos	33,102	3.97%	724,658
Millbrae	22,487	2.70%	492,278
Milpitas	81,067	9.72%	1,774,691
Morgan Hill	45,892	5.51%	1,004,652
Newark	47,459	5.69%	1,038,956
Pacifica	37,082	4.45%	811,787
Portola Valley	4,247	0.51%	92,974
Ross, Town of	2,267	0.27%	49,628
San Bruno	42,054	5.04%	920,632
San Carlos	29,496	3.54%	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

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

PLAN JPA 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

<sup>(</sup>B) (C) (D)

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

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.

<sup>(</sup>B) / Total (B)

<sup>(</sup>E)

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

<sup>(</sup>G) x Total of (H) (H)

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	0	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.

(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.

<sup>(</sup>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)  $\times$  (1/3) + (E)  $\times$  (2/3)

<sup>(</sup>D)

<sup>(</sup>E)

<sup>(</sup>G)

<sup>(</sup>H)

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%	-13.6%
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%	10.5%
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%	-22.4%
Cupertino	580,006	1,210,319	2.5%	5.4%	0.469	80%	58%	56.8%	57.5%	1.2%
Dublin	1,046,311	505,709	4.5%	2.2%	2.025	60%	162%	141.6%	161.5%	14.1%
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%	30.0%
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%	-9.8%
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%	-20.0%
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%	-30.0%
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%	

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

<sup>(</sup>C) Based on payroll for 2018-19 to 2022-23 from ,
(D) (B) / Total (B)
(E) (C) / Total (C)

<sup>(</sup>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.

<sup>(</sup>J) Indicated x-mod capped at +/- 30%.

<sup>(</sup>K) (J) / (I) - 1

Exhibit 1 Page 7

PLAN JPA

## Limited Incurred Losses

Member (A)	2018-19 (B)	2019-20 (C)	2020-21 (D)	2021-22 (E)	2022-23 (F)
(^)	(D)	(0)	(D)	(L)	(1 )
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

<sup>(</sup>A) From,.

<sup>(</sup>B) Based on , .

<sup>(</sup>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) (F) (G) (H) (I)	From , . Based on , . From Exhibit 2, Page 2. (A) $\times$ (B) $\times$ (C) Based on \$100K to \$1M Rate Analysis Appendix F Provided by PLAN JPA. Provided by PLAN JPA. (D) $\times$ (E) + (F) + (G) Based on \$100K to \$1M Rate Analysis Appendix G (H) + (I)	

Exhibit 2 Page 2

#### 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 1.485 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)

<sup>(</sup>D) x (E).

Exhibit 2 Page 1

		ļ		X-MOD E	X-MOD Experience Period	riod						Historic	Historical Payroll By Member	/lember												
Member	2024-25	2023-24	2022-23	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13 2	2011-12 2	2010-11 2	2009-10 2	2008-09 20	2007-08 20	2006-07 200	2005-06 20	2004-05 200	2003-04 200	2002-03 20	2001-02 20	2000-01 199	00-666
American Canyon	91,653	88,984	82,469	75,657	67,674	76,546	71,504	73,529	69,561	64,947	62,832	59,261														0,203
Atherton	81,126	78,763	68,522	65,711	51,210	48,404	48,829	45,445	43,565	41,078	38,491	34,000														0,492
Benicia	270,766	262,879	243,130	233,973	220,431	204,187	195,449	190,907	174,580	173,400	168,219	161,532	•					.,	•	•		_	_	•		2,153
Burlingame	293,919	285,358	274,237	263,815	259,984	251,855	244,121	226,049	196,142	211,620	204,811	226,244						.,				.,	_	•		6,875
Campbell	273,522	265,555	254,685	247,731	238,045	255,640	241,923	232,507	224,565	219,292	202,300	186,236	182,094	174,092	169,237	182,687 1	179,241	173,961 16	165,454 16	162,011 16	163,179 16	162,967 15	155,318 14	42,395 13	130,119 120	120,874
Colma	70,214	68,168	54,098	46,184	46,434	44,486	44,629	40,153	39,739	36,261	32,798	34,461													_	6,198
Cupertino	253,305	245,927	275,162	248,562	236,636	231,368	218,591	210,161	195,661	173,727	161,102	151,388	•					_	•			_				0,186
Dublin	122,342	118,779	115,131	103,779	93,603	97,221	95,973	93,851	92,564	81,926	78,962	78,640													_	6,570
East Palo Alto	119,102	115,633	126,517	117,596	107,001	93,099	105,529	87,442	81,680	80,370	82,125	96,655						_	•							0
Foster City	295,919	287,300	246,378	231,985	220,415	226,687	263,534	275,599	263,920	245,194	234,067	197,640	.,		•			.4				.4	(A	•		7,968
Half Moon Bay	55,525	53,908	49,536	46,287	42,032	50,635	44,685	41,399	30,328	25,309	19,966	23,164														6,128
Hillsborough	137,466	133,463	126,549	122,349	116,374	109,048	102,940	101,065	94,966	85,298	78,341	84,635														0,339
Los Altos Hills	37,045	35,966	32,431	29,685	29,198	27,922	24,483	20,742	19,424	18,097	17,831	17,747														0,538
Los Gatos	234,642	227,808	225,474	203,594	204,277	191,197	182,860	167,907	160,411	156,997	152,590	153,503	•					_	•			_	_	•		4,685
Millbrae	100,737	97,803	91,436	80,937	70,605	78,661	84,069	78,738	67,563	63,586	76,638	73,789														5,384
Milpitas	678,970	659,195	647,802	621,777	621,624	573,193	525,414	467,593	448,655	419,722	381,307	356,375	4					4,	٠,			7	4	.,		0,828
Morgan Hill	358,385	347,947	340,013	295,746	272,857	274,915	273,262	267,465	251,938	239,627	202,443	183,195	•		•			_	•			_	_	•		2,561
Newark	272,092	264,167	256,131	214,646	199,877	211,197	213,924	207,069	193,612	179,059	175,394	172,576	•					(-)	.,			.4	CA			8,202
Pacifica	245,795	238,636	220,301	206,612	198,237	186,500	187,895	176,823	184,874	168,836	164,792	163,285	•					_	•			_	_	•		4,410
Portola Valley	24,046	23,346	21,732	20,621	17,163	16,549	16,001	16,637	14,979	12,541	13,637	12,265													_	5,936
Ross, Town of	25,266	24,530	23,914	24,525	21,610	23,395	22,187	22,304	20,655	18,705	17,852	13,324													_	2,988
San Bruno	395,094	383,586	352,006	315,419	295,367	306,329	299,858	286,052	285,710	269,032	253,278	242,461	.,		•								_	•		6,259
San Carlos	148,959	144,620	116,702	101,577	90,744	92,075	84,072	79,879	80,196	69,256	65,545	62,150						_		•		_	_			6,508
Saratoga	86,742	84,215	79,845	81,287	74,247	71,248	68,692	65,333	63,691	61,993	57,618	56,508													_	6,608
SouthSF	453,601	440,389	463,925	493,276	465,097	471,026	486,223	548,505	530,076	481,353	509,905	492,016	4		•			7	4	,		7	(7)	.,		1,372
Suisun City	131,395	127,568	104,808	86,073	75,233	71,140	64,867	58,784	55,650	56,250	53,967	54,988														0,541
Tiburon	44,283	42,993	41,056	38,150	39,549	41,159	35,379	34,840	32,874	23,351	22,110	21,997														9,276
Woodside	21,838	21,202	21,651	23,082	21,284	20,468	18,755	18,618	18,785	20,385	21,603	19,994														0,144
Total	5.323.749	5.168.687	5.168.687 4.955.641 4.640.638 4.396.808 4.346.148 4.265.647 4.135.396	4.640.638	4.396.808	4.346,148	4.265.647	4.135.396	3.936.364 3	3.697.212	3.550.523 3.	3.430.028 3.	3.480.180 3.4	3.457.490 3.534.443		3.940.725 4.0	4.049.436 3.90	3.909.370 3.70	3.705.140 3.55	3.557.514 3.50	3.500.006 3.40	3.401.137 3.25	3.255.273 2.98	2.986.375 2.69	2.694.385 2.454.227	4.227

# **DRAFT**

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

#### PLAN JPA

# 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

	Expected	60%	70%	80%	90%
	Confidence	Confidence	Confidence	Confidence	Confidence
Investment Rate	Level	Level	Level	Level	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	4,646,965	2.281	10,599,727	5,465,603	1.939
2003-2004	3,509,537	2.193	7,696,415	5,571,062	1.381
2004-2005	2,444,607	2.108	5,153,232	5,593,010	0.921
2005-2006	2,947,359	2.028	5,977,244	5,546,164	1.078
2006-2007	3,128,868	1.949	6,098,164	5,635,518	1.082
2007-2008	3,147,259	1.875	5,901,111	5,801,505	1.017
2008-2009	2,711,703	1.803	4,889,201	5,863,583	0.834
2009-2010	2,538,522	1.733	4,399,259	5,568,244	0.790
2010-2011 2011-2012	2,013,526	1.667 1.603	3,356,548	4,873,997	0.689
2011-2012	2,824,647 3,309,000	1.541	4,527,909 5,099,169	4,650,324 4,565,996	0.974 1.117
2012-2013	2,229,780	1.482	3,304,534	4,390,436	0.753
2013-2014	2,938,392	1.402	4,187,209	4,434,603	0.733
2015-2016	3,126,000	1.370	4,282,620	4,506,901	0.950
2016-2017	2,886,000	1.317	3,800,862	4,680,337	0.812
2017-2018	1,853,000	1.267	2,347,751	4,797,059	0.489
2018-2019	1,600,000	1.218	1,948,800	4,828,712	0.404
2019-2020	2,592,000	1.171	3,035,232	4,798,147	0.633
2020-2021	3,327,000	1.125	3,742,875	4,735,362	0.790
2021-2022	3,657,000	1.082	3,956,874	4,877,311	0.811
2022-2023	6,403,000	1.040	6,659,120	5,079,532	1.311
Totals	\$63,834,165		\$100,963,856	106,263,406	\$0.950
19/20-22/23	15,979,000		17,394,101	19,490,352	0.892
20/21-22/23	13,387,000		14,358,869	14,692,205	0.977
20/21-22/23	13,307,000		14,550,009	14,092,203	0.911
			(F) Selecte	d Limited Rate:	\$0.814
			5.	Prior \$100K:	\$0.735
			Prior	\$100K to \$1M:	\$0.994
			\$1,000,000	\$100,000	\$1,000,000
Program Year:			2023-2024	2024-2025	2024-2025
(G) Factor to S	IR:		2.496	1.000	2.553
(H) Trend Fact			1.000	1.040	1.040
(I) Program Ra			\$2.031	\$0.846	\$2.160
(J) Trended Pay			5,168,687	5,168,687	5,323,749
	rogram Losses:		10,498,000	4,373,000	11,499,000
(L) Projected U			0	0	0
(M) Projected L	oss and ULAE:		\$10,498,000	\$4,373,000	\$11,499,000

Notes appear on the next page.

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

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	\$4,646,965	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.

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

Reported Loss Development											
		Limited Loss			<b>5</b> 4	00	70	00	400	444	400
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
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			2,866,155
2005-2006	584,388	2,569,384	3,328,173	3,524,433	3,669,875	3,689,497			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	3,297,534		3,394,986	, ,	3,394,936	3,394,936
2007-2008	1,054,492	2,921,920	3,743,710	4,332,780	4,420,360				4,259,284		
2008-2009	543,401	2,839,064	3,484,984	3,288,639	3,398,037		3,345,621				3,336,906
2009-2010	763,697	3,371,740	3,848,137	3,115,304	3,131,959	3,127,921		3,127,921		3,127,921	
2010-2011	510,509	2,770,955	2,742,484	2,650,741	2,519,762	2,455,668	2,409,001	2,409,001		2,396,051	2,396,051
2011-2012	602,255	3,518,281	3,631,019	3,415,805	3,302,356	3,237,194					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	
2013-2014	842,948	2,251,578	2,694,553	2,631,490	2,671,389	2,539,618	2,539,618	2,539,618	2,539,618	2,529,575	2,529,575
2014-2015	325,035	2,666,242	3,946,907	3,795,367	3,350,810	3,291,420	3,281,784	3,281,784	3,281,784	3,281,784	
2015-2016	371,511	2,328,347	3,291,200	3,149,726	3,155,562	3,143,331	3,135,461	3,125,745	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	415,421	2,085,409	3,421,687								
2022-2023	113,903	5,526,799									
2023-2024	738,344	-,,									
		Reported Lo	ss Developn	nent 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	2.855	1.121	1.073	1.029	1.017	0.998	1.019	1.013	1.009	0.993	1.000
2003-2004	3.200	1.274	1.128	1.042	1.048	1.009	0.972	1.029	1.000	1.000	1.000
2003-2004	2.390	1.429	0.906	1.072	0.946	1.011	0.988	1.023	1.000	1.000	1.000
2005-2006	4.397	1.295	1.059	1.041	1.005	1.021	1.001	1.003	0.998	1.000	1.000
2005-2000	3.097	1.293	1.039	1.041	1.003	1.021	1.001	1.007	1.000	1.000	1.000
			1.157	1.040		0.995	0.977	1.000	1.000	1.000	0.977
2007-2008	2.771	1.281			0.991						
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	8.203	1.480	0.962	0.883	0.982	0.997	1.000	1.000	1.000		
2015-2016	6.267	1.414	0.957	1.002	0.996	0.997	0.997	1.000			
2016-2017	6.642	1.427	1.021	1.014	1.028	0.998	0.986				
2017-2018	6.851	1.367	1.020	0.982	0.988	0.999					
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											
Factors	3.166	1.361	1.046	1.006	1.004	1.004	1.004	1.004	1.004	1.004	1.003
Prior	6.750	1.545	1.060	1.010	1.003	1.002	1.001	1.001	1.000	1.000	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

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

	1 : : t 1	D		Reported	d Loss Devel	opment					
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	Limited Loss 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 3,559,906	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 3,127,725	162 Months 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284	2,867,654 3,788,958 3,425,837	3,560,542 2,867,654 3,788,958 3,408,506 4,259,284	3,560,542 2,867,654 3,788,958 3,408,506	2,867,654 3,788,958	222 Months 4,977,421 3,560,542 2,867,654 3,788,958			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 Developn 150-162 Months 1.000 1.000 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 1.007 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 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 1.000	1.003 1.000	1.002 1.000	1.002 1.000	1.002 1.000	1.002 1.000	1.002 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.005 1.000
Selected	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

Accident Year (A)	Limited Paid Losses as of 12/31/23 (B)	Paid Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Paid Losses of 12/31/23 (E)	Paid Loss Development Factor (F)	Ultimate Program Losses (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.

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

		Limited Loss	oo Doid oo d	.f.	Paid L	oss Develop	ment				
Accident	6	18	30	<u>42</u>	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		4,820,255	4,893,323	4,930,307	4,962,508
2002-2003	173,413	1,278,587	2,112,645	2,806,518	3,216,963	3,398,305	3,452,557		3,560,542		
2003-2004	92,583		2,112,045					, ,	2,866,154		
2004-2005	92,363	1,099,067	1,733,718		3,599,286		3,764,224		3,780,292		3,789,394
2005-2007	178,735	1,234,100	2,253,938	2,920,430		3,253,555				3,394,936	3,394,936
2007-2008	149,993	1,300,794	2,635,467	3,650,448		4,208,833			4,259,284		
2008-2009	161,539	1,020,079	2,186,680			3,338,980			3,346,029		
2009-2010	301,727	1,046,459	2,274,617			3,072,132			3,127,921	3,127,921	
2010-2011	106,645	872,432	1,692,195		2,319,013				2,396,051		
2011-2012	114,916	832,713	2,112,380			3,118,744			3,127,725		3,127,725
2012-2013	98,607	934,308	2,290,004	3,124,392					3,559,906		
2013-2014	130,461	888,140		2,316,155					2,539,618		, ,
2014-2015	91,368	1,387,749	2,717,926	3,379,346					3,281,784		2,020,070
2015-2016	98,110	679,755	1,782,598		2,999,838					0,201,704	
2016-2017	30,679	920,995	1,975,490		2,773,661				0,120,110		
2017-2018	31,268	758,485	1,188,193		1,800,791			2,000, 12 1			
2018-2019	16,322	417,918	867,701		1,545,763		.,0.0,0.0				
2019-2020	65,521	413,661	1,128,779	1,716,520		.,0.2,					
2020-2021	54,421	793,126	1,741,631	2,473,160	2,0.0,000						
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	8.672	2.026	1.385	1.124	1.026	1.005	1.007	1.001	1.000	1.000	0.977
2008-2009	6.315	2.144	1.277	1.114	1.073	1.002	1.001	0.999	1.001	0.997	1.003
2009-2010	3.468	2.174	1.238	1.064	1.025	1.014	1.004	1.000	1.000	1.000	1.000
2010-2011	8.181	1.940	1.352	1.014	1.033	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	24.258	1.567	1.442	1.051	1.027	1.000					
2018-2019	25.605	2.076	1.541	1.156	1.017						
2019-2020	6.313	2.729	1.521	1.208							
2020-2021	14.574	2.196	1.420								
2021-2022	14.597	2.613									
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	10.100	۷.۱۱۶	1.011	1.080	1.023	1.010	1.001	1.000	1.001	1.000	0.555
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	1.479	1.140	1.022	1.004	0.999	1.008	0.999	1.000	1.000
Comparative	10.000	2.000	1.770	1.170	1.000	1.004	0.000	1.000	0.000	1.000	1.000
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	1.049	1.013	1.008	1.004	1.003	1.002	1.007
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

# **DRAFT**

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

	Line it and Line a	D.::1		Falu L	oss Develop	mem					
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	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 2,396,051 3,127,725	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 3,403,249 4,259,284 3,347,708 3,127,921	2,867,654 3,788,958 3,408,506 4,259,284	3,560,542 2,867,654	3,788,958	3,560,542 2,867,654	3,560,542	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	Paid Loss D 138-150 Months 1.000 1.000 1.000 1.002 1.024 1.000 1.000 1.000 1.000	evelopment 150-162 Months 1.000 1.000 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	174-186 Months 1.000 1.000 1.000 1.002 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 1.000	234-246 Months 1.000 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted	138-150 Months 1.003	150-162 Months 1.000	162-174 Months 1.000	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
Averages 3-yr 4-yr Comparative	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			
Factors	1.006	1.005	1.004	1.004	1.003	1.002	1.002	1.002	1.002	1.001	1.003
Prior	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	1.001	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

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	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

				Percentage			
	Trended	Paid	Loss	of Losses		Incurred	Ultimate
Accident	Payroll	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)
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	ed Limited Rate:	\$0.800			
					4			

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.

\$0.725

Prior:

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

## Frequency and Severity Method

	Ultimate	Adjusted	Ultimate
Accident	Program	Ultimate	Program
Year	Severity	Claims	Losses
	(A)	(B)	(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.

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

#### Frequency and Severity Method

	Ultimate	Adjusted	Ultimate		Trended			
Accident	Limited	Ultimate	Limited	Trend	Limited	Limited	Factor to	Program
Year	Losses	Claims	Severity	Factor	Severity	Severity	SIR	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	cted Frequency:	0.900
						Prior:	0.850
	Program Year:			2023-2024	2024-2025		
(1)	Trend Factor:			1.000	0.995		
(J)	Selected Frequency:			0.900	0.896		
(K)	Est. Payroll (\$000,00	00):		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:

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.

<sup>(</sup>A) Provided by the Authority.

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

<sup>(</sup>C) (A) x (B).

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

#### 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.

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

				Rep	orted Clai	m Count	Developm	ent	,					
		Claims Re	eported 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	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	0_0		
2014-2015	161	489	510	514	502	503	504	512	492	499	101			
2015-2016	170	487	502	490	492	492	497	460	486	400				
2016-2017	108	501	508	511	512	512	488	511	400					
2017-2018	152	473	481	483	489	469	488	311						
2017-2018	123	394	421	430	412	409	400							
2019-2020	144	413	431	412	428	421								
					420									
2020-2021	124	353	346	380										
2021-2022	151	370	422											
2022-2023	116	615												
2023-2024	165													
		D	01-1 0			.4								
	0.40	Reported					70.00	00.400	100 111	444 400	100 100	100 150	450 400	100 171
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102					150-162	
	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	1.043	1.008	0.977	1.002	1.002	1.016	0.961	1.014					
2015-2016	2.865	1.031	0.976	1.004	1.000	1.010	0.926	1.057						
2016-2017	4.639	1.014	1.006	1.002	1.000	0.953	1.047							
2017-2018	3.112	1.017	1.004	1.012	0.959	1.041								
2018-2019	3.203	1.069	1.021	0.958	1.036									
2019-2020	2.868	1.044	0.956	1.039										
2020-2021	2.847	0.980	1.098											
2021-2022	2.450	1.141												
2022-2023	5.302													
	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		1.043	1.000	1.002	1.000	1.002	1.001	1.002	1.000	0.555	1.002	1.001	1.000	1.000
Averages	•													
•	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
3-yr 4-yr	3.422	1.055	1.020	1.003	0.996	1.000	0.996	1.005	1.000	1.001	1.001	1.000	1.000	1.000
•	3.213	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	2 650	1 1 1 1	1.040	1 000	1 005	1.004	1 000	1 000	1 000	1 000	1 000	1 000	1 000	1 002
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
· = -= =-	200													
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
								555						

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

		01-:			Closed C	laim Deve	elopment							
Assidant		Claims Cl 18	osed as o	<u>1:</u> 42	54	66	78	00	100	111	106	138	150	162
Accident	6 Months				54 Months	66	78 Months	90 Months	102 Months	114	126 Months	Months		16∠ Months
Year		Months	Months	Months		Months				Months			Months	
2002-2003 2003-2004	44 36	536 465	734 585	766 636	783 648	789 649	791 662	805 663	805 666	805 666	806 667	806 667	806 667	806 667
2004-2005	54	414	668	706	712	726	727	730	730	730	730	731	731	731
2005-2006	50	487	637	672	692	701	707	707	707	710	711	711	711	711
2006-2007	83	518	632	681	687	692	699	701	702	702	702	702	703	702
2007-2008	94	480	742	786	800	808	811	813	814	814	814	810	814	814
2008-2009	89	509	664	704	712	718	723	724	724	724	709	724	724	724
2009-2010	45	464	599	631	643	644	645	645	647	647	647	647	647	647
2010-2011	46	331	470	497	503	507	509	509	510	510	513	514	514	514
2011-2012	27	285	421	451	459	467	470	469	469	469	469	469	470	
2012-2013	36	332	471	506	515	518	524	526	527	527	525	525		
2013-2014	28	304	430	456	467	464	465	466	467	460	461			
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													
		Closed Cl	aim 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	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	9.740	1.308	1.055	1.030	1.013	1.009	1.000	1.000	1.004	1.001	1.000	1.000	1.000	1.000
2006-2007	6.241	1.220	1.078	1.009	1.007	1.010	1.003	1.001	1.000	1.000	1.000	1.001	0.999	1.001
2007-2008	5.106	1.546	1.059	1.018	1.010	1.004	1.002	1.001	1.000	1.000	0.995	1.005	1.000	1.000
2008-2009	5.719	1.305	1.060	1.011	1.008	1.007	1.001	1.000	1.000	0.979	1.021	1.000	1.000	1.000
2009-2010	10.311	1.291	1.053	1.019	1.002	1.002	1.000	1.003	1.000	1.000	1.000	1.000	1.000	1.002
2010-2011	7.196	1.420	1.057	1.012	1.008	1.004	1.000	1.002	1.000	1.006	1.002	1.000	1.000	
2011-2012	10.556	1.477	1.071	1.018	1.017	1.006	0.998	1.000	1.000	1.000	1.000	1.002	1.000	
2012-2013	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	1.002	1.016	0.961	1.014	1.002				
2015-2016	7.814	1.339	1.044	1.023	1.015	1.016	0.925	1.057	1.014					
2016-2017	16.632	1.472	1.056	1.016	1.014	0.957	1.052	1.007						
2017-2018	14.091	1.435	1.063	1.027	0.963	1.041	1.002							
2018-2019	12.316	1.564	1.123	0.990	1.042	1.041								
2019-2020	6.306	1.599	1.055	1.078	1.042									
2020-2021	11.611	1.431	1.194	1.070										
2021-2022	4.610	1.958	1.104											
2022-2023	18.217	1.550												
2022-2023	10.217													
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	QN_1N2	102-11/	11/-126	126-138	138_150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Averege	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
Average		1.437	1.072	1.019	1.009	1.000	1.002	1.002	1.000	0.999	1.002	1.001	1.000	1.000
Claim-Weighted Averages														
•	0.060	1 654	1 100	1.031	1.004	1 000	0.997	1 005	1 000	0.999	1.004	1 004	1.000	1.000
3-yr	9.963	1.651	1.120			1.003		1.005	1.000		1.001	1.001		
4-yr	8.847	1.627	1.103	1.027	1.007	1.004	0.998	1.004	1.000	1.001	1.000	1.000	1.000	1.001
Comparative	0.000	4 500	4.004	4 000	4 0 4 =	4 000	4 00-	4 000	4 005	4 005	4 005	4 005	4 005	4 005
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	1.071	1.015	1.007	1.005	1.004	1.003	1.002	1.001	1.001	1.001	1.001	1.001
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
	0.500													
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
J I GIGLOG	. 0.0-1	0	1.140	1.540	1.520	1.010	1.517	1.510	1.507	1.500	1.50-7	1.500	1.502	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)

(B) - (E)

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

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

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

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

#### Residual Trend Factors

Initial					
Estimate of					
Ultimate	Ultimate		Adjusted	Trended	
Limited	Reported		Limited	Payroll	Ultimate
Losses	Claims	BLF	Severity	(\$00)	Frequency
(A)	(B)	(C)	(D)	(E)	(F)
<b>#4.040.005</b>	755	4.000	0.455	F 40F 000	4 004
, ,,			-,	, ,	1.381
-,,			,	, ,	1.125
, ,					1.012
, ,			- ,	, ,	1.013
-, -,			,	-,,-	1.024
3,147,259	662	1.000	4,754	5,801,505	1.141
2,711,703	590	1.000	4,596	5,863,583	1.006
2,538,522	519	1.000	4,891	5,568,244	0.932
2,013,526	418	1.000	4,817	4,873,997	0.858
2,824,647	433	1.000	6,523	4,650,324	0.931
3,309,000	494	1.000	6,698	4,565,996	1.082
2,229,780	440	1.000	5,068	4,390,436	1.002
2,938,392	473	1.000	6,212	4,434,603	1.067
3,126,000	486	1.000	6,432	4,506,901	1.078
2,886,000	511	1.000	5,648	4,680,337	1.092
1,853,000	488	1.000	3,797	4,797,059	1.017
1,600,000	428	1.000	3,738	4,828,712	0.886
2,587,000	431	1.000	6,002	4,798,147	0.898
3,326,000	384	1.000	8,661	4,735,362	0.811
3,709,000	431	1.000	8,606	4,877,311	0.884
6,354,000	659	1.000	9,642	5,079,532	1.297
	Estimate of Ultimate Limited Losses (A)  \$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 2,587,000 3,326,000 3,709,000	Estimate of Ultimate Limited Losses (A)  \$4,646,965 3,509,537 627 2,444,607 566 2,947,359 562 3,128,868 577 3,147,259 662 2,711,703 590 2,538,522 519 2,013,526 418 2,824,647 433 3,309,000 494 2,229,780 440 2,938,392 473 3,126,000 486 2,886,000 511 1,853,000 488 1,600,000 428 2,587,000 431 3,326,000 384 3,709,000 431	Estimate of Ultimate Limited Losses Claims (A) (B) (C)  \$4,646,965 755 1.000 3,509,537 627 1.000 2,444,607 566 1.000 2,947,359 562 3,128,868 577 1.000 3,147,259 662 1.000 2,711,703 590 1.000 2,538,522 519 1.000 2,013,526 418 1.000 2,824,647 433 1.000 2,824,647 433 1.000 2,824,647 433 3,309,000 494 1.000 2,229,780 440 1.000 2,938,392 473 3,1000 3,126,000 486 1.000 2,886,000 511 1.000 1,853,000 488 1.000 1,600,000 428 1.000 2,587,000 431 1.000 3,326,000 3,709,000 431 1.000	Estimate of Ultimate Limited Reported Losses Claims (A) (B) (C) (C) (D)  \$4,646,965 755 1.000 5,597 2,444,607 566 1.000 4,319 2,947,359 562 1.000 5,244 3,128,868 577 1.000 5,423 3,147,259 662 1.000 4,754 2,711,703 590 1.000 4,596 2,538,522 519 1.000 4,891 2,013,526 418 1.000 4,817 2,824,647 433 1.000 6,523 3,309,000 494 1.000 5,068 2,229,780 440 1.000 5,068 2,938,392 473 1.000 6,698 2,229,780 440 1.000 5,688 2,938,392 473 1.000 6,432 2,886,000 511 1.000 5,648 1,853,000 488 1.000 3,797 1,600,000 428 1.000 8,661 3,709,000 431 1.000 8,606	Estimate of Ultimate Limited Reported Limited Reported Limited Payroll Losses Claims BLF Severity (\$00) (E)  \$4,646,965 755 1.000 6,155 5,465,603 3,509,537 627 1.000 5,597 5,571,062 2,444,607 566 1.000 4,319 5,593,010 2,947,359 562 1.000 5,244 5,546,164 3,128,868 577 1.000 5,423 5,635,518 3,147,259 662 1.000 4,754 5,801,505 2,711,703 590 1.000 4,596 5,863,583 2,538,522 519 1.000 4,891 5,568,244 2,013,526 418 1.000 4,817 4,873,997 2,824,647 433 1.000 6,523 4,650,324 3,309,000 494 1.000 6,698 4,565,996 2,229,780 440 1.000 5,068 4,390,436 2,938,392 473 1.000 6,432 4,506,901 2,886,000 511 1.000 5,648 4,680,337 1,853,000 488 1.000 3,797 4,797,059 1,600,000 428 1.000 3,738 4,828,712 2,587,000 431 1.000 8,661 4,775,316 3,709,000 431 1.000 8,661 4,775,311

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	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
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	0.944
			•	2024-2025	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.

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

## Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	1.791	1.551
90%	1.559	1.373
85%	1.418	1.278
80%	1.311	1.210
75%	1.225	1.156
70%	1.152	1.112
65%	1.088	1.072
60%	1.030	1.037
55%	0.977	1.004
50%	0.926	0.974
45%	0.878	0.944
40%	0.831	0.916
35%	0.784	0.887
30%	0.737	0.859
25%	0.688	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)	(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	7,108,017	0	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	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	8,386,266	0	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

Accident Year         Unlimited Paid Losses         to         from Losses         Adjusted Losses         Paid Down SIR         Ver SIR         \$100,000         \$100,000         to SIR Layer to SIR Layer (K)         SIR Aggregate (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         5,715,419         0         2,205,881         3,509,537         2,205,881         5,715,419         5,715,419         0         2,205,881         3,509,537         2,205,881         5,715,419         5,715,419         5,715,419         0         2,205,881         3,509,537         2,205,881         5,715,419         5,715,419         0         2,205,881         3,509,537         2,205,881         5,715,419         5,715,419         0         2,205,881         3,509,537         2,205,881         5,715,419         5,715,419         0         2,205,881         3,509,537         3,369,337         3,369,337         3,369,337         3,369,337         3,369,337         2,205,881         5,715,419											Paid
Year (A)         Paid (B)         Losses (C)         Losses (D)         Paid (E)         Over SIR (F)         \$100,000 (G)         \$100,000 (H)         to SIR Layer (I)         SIR Aggregate (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			Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
(A) (B) (C) (D) (E) (F) (G) (H) (I) (J) (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	Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$100,000	Capped at	SIR &
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         \$8,884,42           2003-2004         5,715,419         0         0         5,715,419         0         2,205,881         3,509,537         2,205,881         5,715,419         0         2,205,881         3,509,537         2,205,881         3,509,537         2,205,881         3,680,337         3,869,337         3,869,337         3,869,337         3,869,337         3,869,337         3,869,337         3,869,337         3,869,337         3,869,337         3,869,337         3,861,362         2,007,208         4,247,318         4,247,318         4,247,318	Year	Paid	Losses	Losses	Paid	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
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	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)
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											
2004-2005         3,909,704         0         0         3,909,704         40,367         1,465,098         2,444,607         1,424,731         3,869,337         3,669,337         3,669,337         3,669,337         3,669,337         3,669,337         3,669,337         3,669,337         3,669,200         2,000,200         5,982,106         183,478         2,834,846         3,147,259         2,651,369         5,798,628         5,798,62         2,098,200         2,000,200         3,874,500         0         3,874,500         0         3,571,075         0         0         3,571,075         0         1,557,549         2,013,526         1,557,549         3,571,075         3,571,075         0         0         6,357,185         22,224         3,532,539         2,824,647         3,510,315         6,334,961         6,334,961         6,334,961 <t< td=""><td></td><td>. , ,</td><td>\$0</td><td>\$0</td><td>, ,,-</td><td>\$3,575,194</td><td>. , ,</td><td>. , ,</td><td>. , ,</td><td>. , ,</td><td>\$8,884,428</td></t<>		. , ,	\$0	\$0	, ,,-	\$3,575,194	. , ,	. , ,	. , ,	. , ,	\$8,884,428
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         5,365,08           2009-2010         3,874,500         0         0         3,571,075         0         1,557,549         2,013,526         1,557,549         3,571,075         3,571,075         0         1,557,549         2,013,526         1,557,549         3,571,075         3,571,075         0         6,613,044         0         6,613,044         0         0         6,613,044         0         0         6,613,044         0         3,304,442         3,308,601         3,304,442         6,613,044         6,613,044         6,613,044         0	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
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         5,798,62           2008-2009         5,485,923         0         0         5,485,923         120,835         2,774,220         2,711,703         2,653,385         5,365,088         5,365,08           2009-2010         3,874,500         0         0         3,874,500         0         1,355,978         2,538,522         1,335,978         3,874,500         3,874,500         0         3,571,075         0         0         3,571,075         0         1,557,549         2,013,526         1,557,549         3,571,075         3,571,075         0         0         6,357,185         22,224         3,532,539         2,824,647         3,510,315         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,334,942         6,613,044         0         <	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
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         0         5,485,923         120,835         2,774,220         2,711,703         2,653,385         5,365,088         5,365,08           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         3,874,500         3,571,075         0         0         3,571,075         0         1,557,549         2,013,526         1,557,549         3,571,075         3,571,075         3,571,075         0         0         6,357,185         22,224         3,532,539         2,824,647         3,510,315         6,334,961         6,	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
2008-2009         5,485,923         0         0         5,485,923         120,835         2,774,220         2,711,703         2,653,385         5,365,088         5,365,08           2009-2010         3,874,500         0         0         3,874,500         0         1,335,978         2,538,522         1,335,978         3,874,500	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
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         3,074,401         3,304,442         3,504,442         6,613,044	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
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         6,334,961         6,334,961         6,334,961         6,334,961         6,334,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         6,34,961         3,304,442         6,613,044         6,613,044         6,613,044         6,613,044         6,613,044         6,613,044         6,613,044         6,613,044         6,613,044         4,318,084         4,318,084         4,318,084         4,318,084         2,229,780         2,088,304         4,318,084         4,318,084         2,418,065         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         3,0	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
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         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	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
2012-2013         6,613,044         0         0         6,613,044         0         3,304,442         3,308,601         3,304,442         6,613,044         4,318,084	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
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       2,589,280       0       515,377       2,073,903       515,377       2,589,280       2,242,650         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	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
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         6,130,78           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         2,222,65         2,002,002         2,589,280         0         0         2,589,280         0         515,377         2,073,903         515,377         2,589,280         2,589,280         2,589,280         2,589,280         2,422,650         3,582,392         2,473,160         4,283,217         6,756,376         6,756,37         6,756,37         6,756,37         6,7	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
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         2,589,2	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
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       70,221       0       70,221       0       70,221       0       70,221       70,221	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
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       2,589,28         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	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
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       2,589,28         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	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
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       921,281       0       921,281       0       921,281       921,281       0       70,221       70,221       70,221	2017-2018	2,623,375	0	0	2,623,375	0	774,401	1,848,975	774,401	2,623,375	2,623,375
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       921,281       0       921,281       0       921,281       0       70,221       0       70,221 <t< td=""><td>2018-2019</td><td>2,422,650</td><td>0</td><td>0</td><td>2,422,650</td><td>0</td><td>850,476</td><td>1,572,174</td><td>850,476</td><td>2,422,650</td><td>2,422,650</td></t<>	2018-2019	2,422,650	0	0	2,422,650	0	850,476	1,572,174	850,476	2,422,650	2,422,650
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       921,281         2023-2024       70,221       0       0       70,221       0       70,221       0       70,221       70,221	2019-2020	2,589,280	0	0	2,589,280	0	515,377	2,073,903	515,377	2,589,280	2,589,280
2022-2023     921,281     0     0     921,281     0     0     921,281     0     921,281       2023-2024     70,221     0     0     70,221     0     0     70,221     0     70,221	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
2023-2024 70,221 0 0 70,221 0 0 70,221 0 70,221 70,22	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		921,281	921,281
Total \$181 284 987 \$0 \$0 \$1.81 284 987 \$78 419 263 \$126 366 138 \$54 918 849 \$47 946 875 \$102 865 724 \$102 865 72	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

Accident Year (A)	Unlimited Reserves (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Reserves (E)	Reserves Over SIR (F)	Reserves Over \$100,000 (G)	Reserves Capped at \$100,000 (H)	Reserves \$100,000 to SIR Layer (I)	Reserves Capped at SIR (J)	Reserves Capped at SIR & Aggregate (K)
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

- (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

- (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).

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

## 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	3,457,490	1.345	4,650,324
2012-2013	3,480,180	1.312	4,565,996
2013-2014	3,430,028	1.280	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	4,828,712
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

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

PLAN JPA - Liability Program (\$100K to \$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 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 Totals 13/14-18/19 20/21-22/23	4,237,463 2,205,881 1,424,731 2,684,321 1,419,184 2,651,368 2,653,385 1,335,978 1,557,549 3,510,315 3,722,000 2,088,304 3,799,380 3,095,000 5,545,000 774,401 1,156,000 2,311,000 7,765,000 5,959,000 6,202,000 \$66,097,260 16,458,085	1.679 1.638 1.598 1.559 1.521 1.484 1.448 1.412 1.378 1.344 1.312 1.280 1.249 1.218 1.188 1.160 1.132 1.104 1.077 1.051 1.025	7,114,700 3,613,233 2,276,720 4,184,856 2,158,579 3,934,630 3,842,101 1,886,401 2,146,303 4,717,863 4,883,264 2,673,029 4,745,426 3,769,710 6,587,460 898,305 1,308,592 2,551,344 8,362,905 6,262,909 6,357,050  \$84,275,380 19,982,522 20,982,864	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 4,798,147 4,735,362 4,877,311 5,079,532	1.302 0.649 0.407 0.755 0.383 0.678 0.655 0.339 0.440 1.015 1.069 0.609 1.070 0.836 1.407 0.187 0.271 0.532 1.766 1.284 1.252 \$0.793 0.723 1.428
13/14-18/19 20/21-22/23	16,458,085 19,926,000		20,982,864	27,638,048 14,692,205 ad Limited Rate: Prior:	0.723 1.428 \$1.193 \$0.970
Program Year: (G) Factor to S (H) Trend Factor (I) Program Ra (J) Trended Pay (K) Projected Pay (L) Projected U (M) Projected L	or: te: /roll (\$00): /rogram Losses: LAE:	2023-2024 1.000 1.000 \$1.193 5,168,687 6,166,000 0 \$6,166,000	2024-2025 1.000 1.025 \$1.223 5,323,749 6,511,000 0 \$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 (.I)
- (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.

## PLAN JPA - Liability Program (\$100K to \$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	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		4,437,327
2002-2003	303,343	66,478	363,636	398,884	890,862	986,705			2,427,012		
2003-2004		586.598	1,140,449	1,700,075	1,700,074		1,675,074	, ,	1,675,074	, ,	, ,
2004-2005	25,000	331,278	1,741,278		2,728,549	2,867,756			3,206,757	, ,	, ,
2005-2007	200,000	292,450	332,811	374,101		1,013,370			1,413,623		
2007-2008	100,000	633,000		2,796,222					4,203,645		
2008-2009	100,000	267,405	1,881,941	3,667,001		3,032,463			2,751,812		
2009-2010	588,210		3,579,153	3,176,666		2,823,031			2,036,496		
2010-2011	300,210	1,983,751	4,432,358	2,267,822	1,756,558	1,759,837			1,709,837		
2011-2012		5,467,351	5,436,904	4,482,628	3,623,434				3,672,332		
2012-2013		4,426,268	2,923,860	1,852,321		2,223,502					
2013-2014	307 000	1,025,000	1,218,912			2,720,508			2,609,434		
2014-2015	007,000	2,287,736		3,811,606		4,271,609					2,010,111
2015-2016		575,005	2,175,661	2,839,484		3,254,877				1,270,020	
2016-2017	10 002	1,597,500		4,486,306					0,010,010		
2017-2018	10,002	145,002	597,690	818,662	773,258	775,051	774,401	0,001,100			
2018-2019			391,223		1,028,207	995,732	,				
2019-2020			66,812	456,550		000,: 02					
2020-2021	905,000	2,019,771	3,272,283		_,,						
2021-2022	50,000	569.442	3,905,384	-,- :-,: -:							
2022-2023	,	3,072,909	-,,								
2023-2024	120,000										
		Reported Lo	ss Developn	nent Factors	<u>:</u>						
	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	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		1.944	1.491	1.000	0.985	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006	13.251	5.256	1.357	1.155	1.051	1.039	1.051	1.024	0.950	0.988	1.000
2006-2007	1.462	1.138	1.124	1.919	1.412	1.455	0.959	1.000	1.000	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	0.955
2008-2009		7.038	1.949	0.951	0.870	0.922	0.984	1.000	1.000	1.000	1.000
2009-2010	4.827	1.261	0.888	0.893	0.995	0.736	0.990	0.989	1.000	1.000	1.000
2010-2011		2.234	0.512	0.775	1.002	0.972	1.000	1.000	1.000	1.000	1.000
2011-2012		0.994	0.824	0.808	0.954	1.043	1.019	1.000	1.000	1.000	1.000
2012-2013		0.661	0.634	0.942	1.274	0.965	1.060	1.567	1.000	1.049	1.000
2013-2014	3.339	1.189	1.671	1.252	1.067	0.991	0.968	1.000	1.004	1.000	
2014-2015		1.293	1.288	1.126	0.995	1.000	1.000	1.000	1.000		
2015-2016	450 740	3.784	1.305	1.147	1.000	0.960	1.003	0.963			
2016-2017	159.718	1.833	1.532	1.158	0.994	1.030	1.002				
2017-2018		4.122	1.370	0.945	1.002	0.999					
2018-2019			1.833	1.434	0.968						
2019-2020 2020-2021	2 222	1 600	6.833	4.456							
2020-2021	2.232 11.389	1.620 6.858	2.112								
2022-2023	11.309	0.030									
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	22.954	2.881	1.606	1.382	1.043	1.023	1.017	1.083	0.989	1.002	0.997
Dollar-Weighted	001		1.000	1.002	1.010	1.020	1.017	1.000	3.000	1.002	3.007
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	37.802	6.873	2.056	1.588	1 000	1 056	1 047	1.040	1 005	1 D1E	1.010
Cumulated	31.002	0.073	2.956	1.000	1.082	1.056	1.047	1.040	1.025	1.015	1.010

## **DRAFT**

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

Reported Loss Development <u>Limited Losses Reported as of:</u>											
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 4,512,327 2,205,881 1,675,074 3,008,029 1,413,623 4,015,369 2,751,812 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 2,036,496 1,709,837 3,714,138	162 Months 4,509,756 2,205,881 1,675,074 3,008,029 1,436,261 4,203,645	174 Months 4,509,756 2,205,881 1,675,074 3,008,029 1,419,184 4,203,645 2,751,812 2,036,496		198 Months 4,478,397 2,205,881 1,675,074 3,008,029 1,419,184 4,203,645	210 Months 4,478,397 2,205,881 1,675,074 3,008,029 1,419,184	222 Months 4,478,397 2,205,881 1,675,074 3,008,029	2,205,881	246 Months 4,478,397 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 1.000 1.047 1.000 1.000 1.011	ss Developn 150-162 Months 1.000 1.000 1.000 1.016 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 1.000	234-246 Months 1.000 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted Averages	138-150 Months 1.006	150-162 Months 1.002	162-174 Months 0.999	174-186 Months 1.000	186-198 Months 0.999	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	1.006 1.004	1.000 1.000	1.000 0.998	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000			
Factors Prior	1.000 1.003	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
Selected	1.003	1.002	1.001	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

Accident Year (A)	Limited Paid Losses as of 12/31/23 (B)	Paid Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Paid Losses of 12/31/23 (E)	Paid 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	2,651,369	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										
			ses Paid as d								
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	75,543	903,527	2,226,102	3,446,317	3,946,802	3,910,106	4,427,910	4,439,396	4,439,396	4,432,327	4,432,327
2003-2004		15,692	363,636	379,734	682,512	766,935	1,013,004	1,283,354	2,244,553	2,205,001	2,205,881
2004-2005		6,598	310,953	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075	1,675,075
2005-2006		208,642	211,412	862,224	2,089,131	2,710,478	2,891,138	2,950,433	2,986,634	2,989,043	3,008,028
2006-2007	6,182	15,240	69,317	308,983	521,929	942,901	1,426,352	1,413,623	1,413,623	1,413,623	1,413,623
2007-2008		54,284	602,929		2,571,860	3,424,876				4,203,646	4,203,646
2008-2009		19,904	228,676	1,724,990	2,057,605	2,253,588	2,717,684		2,751,812		
2009-2010	219,495	285,835	559,909	1,786,817	1,978,733	1,997,847			2,036,496	2,036,496	2,036,496
2010-2011	210,400	244,011	492,996	847,767	1,631,751	1,709,837			1,709,837	1,709,837	1,709,837
2011-2012		183,567	1,126,697		3,464,935	3,421,881	3,558,192		3,592,130	3,606,084	3,608,407
2012-2013		325,184	714,607	1,364,385	1,590,037	1,843,015	2,095,870		3,128,107		3,262,762
2012-2013		45,594	562,912	1,541,662		2,372,509	2,583,001		2,609,433		
											2,619,477
2014-2015		1,560,730	1,844,263	2,180,858	4,183,215	4,271,609	4,273,028			4,273,028	
2015-2016			155,478	1,714,285	2,562,714		2,991,237		3,005,041		
2016-2017			1,417,546	2,996,157	3,400,847		4,690,666	5,294,657			
2017-2018		56,752	356,919	681,757	719,295	775,051	774,401				
2018-2019			73,233	515,432	791,792	850,476					
2019-2020				19,385	515,377						
2020-2021		947,057	1,939,012	4,283,217							
2021-2022			351,404								
2022-2023											
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	11.960	2.464	1.548	1.145	0.991	1.132	1.003	1.000	0.998	1.000	1.005
2003-2004		23.173	1.044	1.797	1.124	1.321	1.267	1.749	0.982	1.000	1.000
2004-2005		47.128	5.387	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006		1.013	4.078	2.423	1.297	1.067	1.000	1.012	1.000	1.006	1.000
	2.465										
2006-2007	2.465	4.548	4.458	1.689	1.807	1.513	0.991	1.000	1.000	1.000	1.000
2007-2008		11.107	2.324	1.835	1.332	1.227	1.000	1.000	1.000	1.000	0.955
2008-2009	4 000	11.489	7.543	1.193	1.095	1.206	1.013	1.000	1.000	1.000	1.000
2009-2010	1.302	1.959	3.191	1.107	1.010	1.016	1.002	1.001	1.000	1.000	1.000
2010-2011		2.020	1.720	1.925	1.048	1.000	1.000	1.000	1.000	1.000	1.000
2011-2012		6.138	2.507	1.227	0.988	1.040	1.007	1.003	1.004	1.001	1.002
2012-2013		2.198	1.909	1.165	1.159	1.137	1.039	1.437	1.006	1.037	1.025
2013-2014		12.346	2.739	1.516	1.015	1.089	1.010	1.000	1.004	1.000	
2014-2015		1.182	1.183	1.918	1.021	1.000	1.000	1.000	1.000		
2015-2016			11.026	1.495	1.088	1.073	1.003	1.001			
2016-2017			2.114	1.135	1.313	1.050	1.129				
2017-2018		6.289	1.910	1.055	1.078	0.999					
2018-2019			7.038	1.536	1.074						
2019-2020				26.586							
2020-2021		2.047	2.209								
2021-2022											
2022-2023											
<b></b>											
	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	5.242	9.007	3.552	2.875	1.144	1.117	1.032	1.086	1.000	1.004	0.999
Dollar-Weighted	0.272	5.007	0.002	2.073	1.177	1.117	1.002	1.000	1.000	1.004	0.000
Averages											
•				1.666	1.240	1.053	1.051	1.000	1.003	1.013	1.010
3-yr											
4-yr				1.288	1.188	1.035	1.044	1.079	1.003	1.011	1.008
Comparative	4.040	0.11-	4 440	4 454	4.055	4 000	4 0 4 5	4.040	4 000	4 000	4 000
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
23.23.04	0.100	1.000	2.002	02	1.17-7		1.0-0	1.002	1.000	1.000	1.501
Cumulated	261.998	28.791	6.398	2.557	1.435	1.254	1.121	1.072	1.019	1.013	1.008

## **DRAFT**

# PLAN JPA - Liability Program (\$100K to \$1M Analysis) 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	162 Months 4,477,671 2,205,881 1,675,075 3,008,028 1,413,623 4,203,646	174 Months 4,478,398 2,205,881 1,675,075 3,008,028 1,419,184 4,203,646 2,751,812 2,036,496		198 Months 4,478,398 2,205,881 1,675,075 3,008,028 1,419,184 4,203,646	210 Months 4,478,398 2,205,881 1,675,075 3,008,028 1,419,184	222 Months 4,478,398 2,205,881 1,675,075 3,008,028			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 1.000	Factors: 162-174 Months 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 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 1.000	234-246 Months 1.000 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted	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
Averages 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	1.004	1.002	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

				Percentage			
	Trended	Paid	Loss	of Losses		Incurred	Ultimate
Accident	Payroll	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)
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.

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

## **Exposure and Development Method**

2002-2003 5,465,603 4,237,463 1	.679 7,114,70				(H)
2002-2000 J.40J.00J 4.2J/.40J I		00 1.302	0.775	1.000	0.775
2003-2004 5,571,062 2,205,881 1	.638 3,613,23	33 0.649	0.396	1.000	0.396
2004-2005 5,593,010 1,424,731 1	.598 2,276,72	20 0.407	0.255	1.000	0.255
	.559 4,184,85	0.755	0.484	1.000	0.484
2006-2007 5,635,518 1,419,184 1	.521 2,158,57	79 0.383	0.252	1.000	0.252
2007-2008 5,801,505 2,651,368 1	.484 3,934,63	30 0.678	0.457	1.000	0.457
2008-2009 5,863,583 2,653,385 1	.448 3,842,10	0.655	0.453	1.000	0.453
2009-2010 5,568,244 1,335,978 1	.412 1,886,40	0.339	0.240	1.000	0.240
2010-2011 4,873,997 1,557,549 1	.378 2,146,30	0.440	0.320	1.000	0.320
2011-2012 4,650,324 3,510,315 1	.344 4,717,86	3 1.015	0.755	1.000	0.755
2012-2013 4,565,996 3,722,000 1	.312 4,883,26	1.069	0.815	1.000	0.815
2013-2014 4,390,436 2,088,304 1	.280 2,673,02	0.609	0.476	1.000	0.476
2014-2015 4,434,603 3,799,380 1	.249 4,745,42	26 1.070	0.857	1.000	0.857
2015-2016 4,506,901 3,095,000 1	.218 3,769,71	10 0.836	0.687	1.000	0.687
2016-2017 4,680,337 5,545,000 1	.188 6,587,46	1.407	1.185	1.000	1.185
2017-2018 4,797,059 774,401 1	.160 898,30	0.187	0.161	1.000	0.161
2018-2019 4,828,712 1,051,000 1	.132 1,189,73	32 0.246	1.034	1.000	1.034
2019-2020 4,798,147 2,201,000 1	.104 2,429,90	0.506	1.060	1.000	1.060
2020-2021 4,735,362 7,838,000 1	.077 8,441,52	26 1.783	1.086	1.000	1.086
2021-2022 4,877,311 5,967,000 1	.051 6,271,31	17 1.286	1.113	1.000	1.113
2022-2023 5,079,532 6,336,000 1	.025 6,494,40	00 1.279	1.141	1.000	1.141
Total/Avg 106,263,406 \$66,097,260	\$84,259,45	59 \$0.793			
18/19-21/22 19,239,532 17,057,000	18,332,47	79 0.953			
21/22-22/23 9,956,843 12,303,000	12,765,71	1.282			

Selected Limited Rate:

Prior:

\$1.170

\$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.

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

## 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

	Ultimate	Adjusted	Ultimate		Trended			
Accident	Limited	Ultimate	Limited	Trend	Limited	Limited	Factor to	Program
Year	Losses	Claims	Severity	Factor	Severity	Severity	SIR	Severity
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(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
2002-2003	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
	Program Year:			2023-2024	2024-2025		
. ,	Trend Factor:			1.000	0.995		
(J)	Selected Frequenc	,		0.050	0.050		
(K)	Est. Payroll (\$000,0	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 [

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.

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

Reported Claim Count Development														
		Claims Re												
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					0	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	4	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	2	6	21 19	14	13 17	12 16	11 16	11 16	11 16	11	11 17	11	11 11	16
2011-2012 2012-2013	3	11 22	22	17 15	17	16	15	15	15	16 16	16	16 16	11	
2013-2014	3	4	8	10	11	11	11	11	11	11	16	10		
2014-2015	3	8	15	12	12	12	12	12	12	11	10			
2015-2016	3	4	10	15	16	16	16	16	12	" "				
2016-2017		4	11	12	16	15	14	16	12					
2010-2017		2	4	12	6	6	14	10						
2018-2019			4	5	7	6	17							
2019-2020			4	7	7	U								
2020-2021		12	12	7	,									
2021-2022	1	7	12	•										
2022-2023	•	7												
2023-2024														
		Reported	Claim Co	unt Devel	opment Fa	ctors:								
	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						1.000	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 2016-2017		2.500 2.750	1.500 1.091	1.067 1.333	1.000 0.938	1.000 0.933	1.000 1.143	0.750						
2017-2018		2.730	3.000	0.500	1.000	2.333	1.143							
2018-2019		2.000	1.250	1.400	0.857	2.333								
2019-2020			1.750	1.000	0.001									
2020-2021		1.000	0.583	1.000										
2021-2022	7.000	1.714	0.000											
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	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
-:	2.3 10		00		525									
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

				_	Closed C	laim Deve	elopment							
		Claims Cl												
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
		4												
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	10		
		0									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														
		01101	0	4 D										
	0.40	Closed Cl					=	00.400			400 400	400 450	4=0 400	
	6-18	18-30	30-42	42-54	54-66	66-78	78-90			114-126				
	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
		1.000	6.000			2.250						1.059		
2007-2008		0.000		1.333	1.000		1.000	1.000	1.000	1.000	0.944		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			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		500	3.000	1.667	1.500	1.000	1.000	0.800	0.017					
2016-2017			5.000	2.000	0.900	1.222	1.364	0.000						
2017-2018				0.800	1.500	1.833	1.504							
			5.000			1.033								
2018-2019			1.000	4.000	1.500									
2019-2020														
2020-2021														
2021-2022														
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
•		2.300	0.001	1.020	1.173	1.500	1.000	1.070	1.043	1.044	1.000	0.313	1.042	0.911
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
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)
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.

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)
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 Tr	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
Coloated Decidual Trans	1.020	0.005
Selected Residual Trend	1.030	0.995

- (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	Payment Pattern	Return on Investment	Discounted Reserves	Undiscounted Reserves	Discount Factor
Year					
(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	0.3%	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	0.931
		, ,	· ·	2024-2025	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.

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

## 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
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	7,108,017	0	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	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	8,386,266	0	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

- (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)
	. , ,		•	, , , -			. , ,		. , ,	\$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
	, ,	0	0		0	,	, ,	,		2,589,280
2020-2021	, ,	0	0		34.299.175	,		,		6,756,376
	, ,	0	0	, ,	0	, ,	, ,	, ,		1,911,606
	, ,	0	0	, ,	0	0	, ,	0		921,281
	,			,	0	0	,	0	,	70,221
	. 0,== .	ū	· ·	. 0,22	· ·	· ·	. 0,22	· ·	. 0,22	. 0,22
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
	(A) 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2008-2009 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	Year (A) (B)  2002-2003 \$12,459,622 2003-2004 5,715,419 2005-2006 7,274,863 2006-2007 4,548,052 2007-2008 5,982,106 2008-2009 5,485,923 2009-2010 3,874,500 2010-2011 3,571,075 2011-2012 6,357,185 2012-2013 6,613,044 2013-2014 9,703,564 2014-2015 7,286,913 2015-2016 8,371,359 2016-2017 38,537,696 2017-2018 2,623,375 2018-2019 2,589,280 2019-2020 41,055,551 2021-2021 1,911,606 2022-2023 921,281 2023-2024 70,221	Accident Year Paid Losses (A) (B) (C)  2002-2003 \$12,459,622 \$0 2003-2004 5,715,419 0 2004-2005 3,909,704 0 2005-2006 7,274,863 0 2006-2007 4,548,052 0 2007-2008 5,982,106 0 2008-2009 5,485,923 0 2009-2010 3,874,500 0 2010-2011 3,571,075 0 2011-2012 6,357,185 0 2012-2013 6,613,044 0 2013-2014 9,703,564 0 2014-2015 7,286,913 0 2015-2016 8,371,359 0 2016-2017 38,537,696 0 2017-2018 2,623,375 0 2018-2019 2,422,650 0 2019-2020 2,589,280 0 2020-2021 41,055,551 0 2021-2022 1,911,606 0 2022-2023 921,281 0 2023-2024 70,221 0	Accident Year Paid Losses (D)  2002-2003 \$12,459,622 \$0 \$0 2003-2004 5,715,419 0 0 2004-2005 3,909,704 0 0 2006-2007 4,548,052 0 0 2007-2008 5,982,106 0 0 2008-2009 5,485,923 0 0 2009-2010 3,874,500 0 0 2010-2011 3,571,075 0 0 2011-2012 6,357,185 0 0 2012-2013 6,613,044 0 0 2014-2015 7,286,913 0 0 2014-2015 7,286,913 0 0 2016-2017 38,537,696 0 0 2017-2018 2,623,375 0 0 2018-2019 2,422,650 0 0 2019-2020 2,589,280 0 0 2020-2021 41,055,551 0 0 2022-2023 921,281 0 0 2022-2023 921,281 0 0 2022-2023 921,281 0 0 2022-2023 921,281 0 0 2022-2023 921,281 0 0 2022-2023 921,281 0 0 2022-2023 921,281 0 0 2022-2023 921,281 0 0 2022-2023 921,281 0 0 2022-2023 921,281 0 0 2022-2023 921,281 0 0	Accident Year Paid Losses (C) (D) (E)  2002-2003 \$12,459,622 \$0 \$0 \$12,459,622 \$2003-2004 \$7,715,419 \$0 \$0 \$7,274,863 \$0 \$0 \$7,274,863 \$0 \$0 \$4548,052 \$0 \$0 \$4548,052 \$0 \$0 \$4548,052 \$0 \$0 \$3,874,500 \$0 \$0 \$3,874,500 \$0 \$0 \$3,874,500 \$0 \$0 \$3,571,075 \$0 \$0 \$0 \$3,571,075 \$0 \$0 \$0,571,075 \$0 \$0 \$0,571,075 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,075 \$0 \$0 \$0 \$0,571,	Accident Year Paid Losses Losses Paid Over SIR (A) (B) (C) (D) (E) (F) (F) (P) (P) (E) (P) (P) (E) (P) (P) (E) (P) (E) (P) (E) (P) (E) (E) (E) (E) (E) (E) (E) (E) (E) (E	Accident Year Paid Losses Losses Paid Over SIR \$100,000 (A) (B) (C) (D) (E) (F) (G) \$100,000 (E) (F) (G) (G) \$2002-2003 \$12,459,622 \$0 \$0 \$12,459,622 \$3,575,194 \$7,812,657 (2003-2004 5,715,419 0 0 5,715,419 0 2,205,881 (2004-2005 3,909,704 0 0 3,909,704 40,367 1,465,098 (2005-2006 7,274,863 0 0 7,274,863 1,643,182 4,327,503 (2006-2007 4,548,052 0 0 4,548,052 0 1,419,184 (2007-2008 5,982,106 0 0 5,982,106 183,478 2,834,846 (2008-2009 5,485,923 0 0 5,485,923 120,835 2,774,220 (2009-2010 3,874,500 0 0 3,874,500 0 1,335,978 (2011-2011 3,571,075 0 0 3,571,075 0 1,557,549 (2011-2012 6,357,185 0 0 6,357,185 22,224 3,532,539 (2012-2013 6,613,044 0 0 6,613,044 0 3,304,442 (2013-2014 9,703,564 0 0 9,703,564 5,385,480 7,473,784 (2014-2015 7,286,913 0 0 7,286,913 549,140 4,348,520 (2015-2016 8,371,359 0 0 8,371,359 2,240,574 5,245,615 (2016-2017 38,537,696 0 0 0,2623,375 0 774,401 (2018-2019 2,422,650 0 0 2,422,650 0 850,476 (2019-2020 2,589,280 0 0 2,589,280 0 515,377 (2022-2023 921,281 0 0 921,281 0 0 0 0 0,2023-2024 70,221 0 0 0 70,221 0 0 0	Accident Year (A)	Accident Year (A)   Unlimited Paid Losses (C)   (D)   (E)   (F)   (F)   (G)   (H)   (I)   (I)	Accident Year Paid Losses Losses Paid Over SIR \$100,000 \$

- (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

Accident Year	Unlimited Reserves	Additions to Losses	Subtractions from Losses	Adjusted Reserves	Reserves Over SIR	Reserves Over \$100,000	Reserves Capped at to SIR Layer	Reserves \$100,000 to SIR Layer	Reserves Capped at SIR	Reserves Capped at SIR & Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
(八)	(D)	(0)	(D)	(L)	(1)	(0)	(11)	(1)	(3)	(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	-	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

- (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

- (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).

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

## 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	3,457,490	1.345	4,650,324
2012-2013	3,480,180	1.312	4,565,996
2013-2014	3,430,028	1.280	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	4,828,712
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

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

## DRAFT

## PLAN JPA - Liability

## 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 Discour (Reserve Appendix H, Page 1, (H))	nt Rate of 2.0%.):		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
(1)	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

PLAN JPA - Liability

## 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.

PLAN JPA - Liability

## 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
		Projected Losses fo	or the Year 2023-20	)24 (G)		\$6,590,000
		Projected Losses for		` '		\$6,915,000

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.

PLAN JPA - Liability
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 2003-2004	\$31,422,743 2,574,481	\$31,422,743 2,574,481	2,574,481	2,574,481	\$31,422,820 2,574,480	\$31,422,743 2,574,481
2003-2004	2,574,461 1,874,487	2,574,461 1,874,487	2,574,461 1,874,487	2,574,461 1,874,487	2,574,480 1,874,484	1,874,487
2004-2005	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 fo Projected Losses fo		\ /		\$6,590,000 \$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.

## PLAN JPA - Liability

## 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.

## **DRAFT**

## PLAN JPA - Liability Reported Loss Development

		Program Lo	sses Reporte	ad as of	керопес	Loss Devel	iopment				
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					8,850,963	
2003-2004	4,001	184,321	558,456	670,955	1,173,162		1,591,251	1,881,919		2,568,802	
2004-2005	,	671,598	1,275,449	1,852,243		1,876,140	1,884,486		1,876,140	, ,	
2005-2006	25,000	422,143	1,922,276	2,886,625	3,514,764	4,881,587				4,812,387	
2006-2007	250,000	429,839	388,247	544,541		, ,			1,656,563		
2007-2008	228,140	748,802	1,944,679	3,425,750			6,805,660			6,755,660	
2008-2009	40,000	593,853	2,272,388	4,424,148			3,573,895			, ,	3,528,864
2009-2010		3,130,545		3,616,630	3,528,002		2,483,987		2,441,417		
2010-2011	,		13,599,043	6,660,508			2,046,846		2,076,846		
2011-2012	25,000		10,300,736	3,657,810	3,711,615				3,878,185		
2012-2013	25,000	4,721,268	2,820,517	2,142,134	2,006,231	2,383,230	2,320,228	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	7,070,156	7,046,618	6,959,081	6,959,081	3,069,125	3,069,125
2014-2015		2,581,639	3,391,765	4,496,980	5,649,691	5,428,532	5,429,951	5,429,951	4,905,812	4,905,812	
2015-2016		816,550	4,031,962	4,652,451	5,078,739	5,077,844	4,948,195	3,557,912	3,442,914		
2016-2017	10,002	1,838,105	4,617,897	6,101,188	7,084,535						
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	1.183	1.483	0.920	1.000	1.000
2004-2005	10.000	1.899	1.452	1.028	0.985	1.004	0.996	1.000	1.000	1.000	1.000
2005-2006	16.886	4.554	1.502	1.218	1.389	1.023	1.021	1.015	0.931	0.992	1.000
2006-2007	1.719	0.903	1.403	1.627	1.334	1.454	0.965	1.000	1.000	1.000	1.000
2007-2008	3.282	2.597	1.762	1.385	1.482	0.968	0.993 0.987	1.000	1.000	1.000	0.965
2008-2009 2009-2010	14.846 5.322	3.827 1.230	1.947 0.939	1.263 0.975	1.042 1.000	0.614 0.704	0.992	1.000 0.991	1.000 1.000	1.000 1.000	1.000 1.000
2010-2011	5.322	4.203	0.490	0.975	1.069	0.704	1.000	1.015	1.000	1.000	1.000
2010-2011	245.457	1.679	0.490	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	1.000
2014-2015	0.040	1.314	1.326	1.256	0.961	1.000	1.000	0.903	1.000	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	0.000			
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	Months	Months	Months	Months	Months	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											
Averages		4 000	4 000	4 70 1	4.070	0.040	0.04-	0.000	0.751	4 000	4 000
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	1.021	1.000
Comparative	2.045	4.054	4.000	0.005	0.070	4.000	4 000	4.000	4 000	4.000	4.000
Factors Prior	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

# PLAN JPA - Liability Reported Loss Development

	Dragram I as	ooo Donarta	d oo of:	керопес	Loss Devel	opment					
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 2,046,846 3,919,990	162 Months 8,864,200 2,569,681 1,876,140 4,775,006 1,679,200 6,755,660	6,755,660 3,433,029	2,569,681 1,876,140 4,775,006 1,662,124 4,919,885	2,569,681 1,876,140 4,775,006 1,662,124	1,876,140 3,256,823		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 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 1.000 1.037 1.000 1.000 0.986 1.011	ss Developn 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 1.000	234-246 Months 0.618 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted Averages	138-150 Months 1.003	150-162 Months 1.002	162-174 Months 0.995	174-186 Months 0.961	186-198 Months 0.999	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	1.001 1.001	1.000 1.000	0.993 0.992	0.845 0.890	1.000 1.000	0.817 0.860	1.000 1.000	1.000			
Factors Prior	1.000 1.003	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
Selected	1.003	1.002	1.001	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

Accident Year (A)	Program Paid Losses as of 12/31/23 (B)	Paid Loss Development Factor (C)	Ultimate Program Losses (D)	Program Paid Losses of 12/31/23 (E)	Paid 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	1.002	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 Los	sses Paid as	of·	raiu L	oss Develop	niiciii				
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	150,543	1,228,821	1,665,669	6,933,745	8,246,287	8,190,377					8,772,745
2002-2003	4,000	77,051	495,103	608,305	921,312	1,087,642		1,647,154		2,568,802	
2004-2005	4,000	81,598	417.717	1,814,469	1,878,960	1,876,140	1,876,140		1,876,140		1,876,140
2004-2005		247,187	294,551	1,141,504		3,122,718			4,753,612		
2005-2000	6,182	16,629	124,634	476,923	689,869	1,110,840	1,669,292	, ,		, ,	1,656,563
	0,102		,	,	,						
2007-2008	20,022	73,131	687,414	1,833,480	3,126,455	5,793,113				6,755,660	
2008-2009	20,033	75,913		2,267,616	2,681,095	3,030,640				3,528,864	
2009-2010	219,495	304,644		2,093,891		2,372,163				2,441,417	
2010-2011	44.000	249,199	684,682	1,176,359	1,846,866		2,046,846	, ,		2,076,846	
2011-2012	14,083	197,650	1,183,434	2,859,227	3,523,538		3,764,045		3,797,983		
2012-2013		550,184	901,080	1,725,493		2,017,440			3,352,812		
2013-2014		128,965	746,799	5,850,808					6,959,081		3,069,125
2014-2015		1,676,100	2,183,993	2,667,604			5,429,951			4,905,812	
2015-2016		16,532	226,123	3,422,237	4,335,681		4,814,203		3,428,007		
2016-2017		900	1,406,078	4,536,037		6,678,653		5,738,952			
2017-2018		56,752	356,919	777,179	814,717	870,473	869,823				
2018-2019			167,664	707,921	1,055,231	1,113,914					
2019-2020			56,239	108,746	750,865						
2020-2021		2,431,166	2,522,774	5,139,922							
2021-2022			514,833								
2022-2023		18,759									
2023-2024											
		Paid Loss D	-								
	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
2003-2004	19.263	6.426	1.229	1.515	1.181	1.266	1.196	1.584	0.985	1.000	1.000
2004-2005		5.119	4.344	1.036	0.998	1.000	1.000	1.000	1.000	1.000	1.000
2005-2006		1.192	3.875	2.203	1.242	1.511	1.004	1.004	1.001	1.004	1.000
2006-2007	2.690	7.495	3.827	1.446	1.610	1.503	0.992	1.000	1.000	1.000	1.000
2007-2008		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	2.891	1.124	1.008	1.021	1.007	1.001	1.000	1.000	1.000
2010-2011		2.748	1.718	1.570	1.108	1.000	1.000	1.015	1.000	1.000	1.000
2011-2012	14.035	5.988	2.416	1.232	1.027	1.040	1.006	1.003	1.004	1.001	1.002
2012-2013		1.638	1.915	1.055	1.109	1.125	1.036	1.426	1.005	1.035	1.023
2013-2014		5.791	7.835	1.149	1.000	1.031	1.004	1.000	0.441	1.000	
2014-2015		1.303	1.221	2.001	1.017	1.000	1.000	0.903	1.000		
2015-2016		13.678	15.134	1.267	1.063	1.044	0.711	1.001			
2016-2017		1,562.309	3.226	1.096	1.344	0.754	1.140				
2017-2018		6.289	2.177	1.048	1.068	0.999					
2018-2019			4.222	1.491	1.056						
2019-2020			1.934	6.905							
2020-2021		1.038	2.037								
2021-2022											
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	J 1	55.000	Ų., I <u>L</u>		00	00			5.001		2.555
Averages											
3-yr			2.169	1.644	1.267	0.882	0.955	0.967	0.746	1.012	1.010
4-yr			2.170	1.238	1.188	0.918	0.933	1.026	0.740	1.012	1.008
Comparative			2.170	1.200	1.100	0.010	0.010	1.020	0.101	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	9.100	4.500	2.502	1.418	1.144	1.119	1.051	1.040	1.008	1.005	1.000
. 1101		-₹.500		1.710	1.177	1.113	1.001	1.040	1.000	1.000	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

# PLAN JPA - Liability Paid Loss Development

				raiu L	.055 Develop	illellt					
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		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	4,775,006 1,662,124 4,919,885	2,569,681 1,876,140 4,775,006 1,662,124	2,569,681 1,876,140 3,256,823		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 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 1.002 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 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 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 1.000	234-246 Months 0.618 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted	138-150 Months 1.005	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
Averages 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

PLAN JPA - Liability

# 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.

PLAN JPA - Liability

# 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.

PLAN JPA - Liability

# Exposure and Development Method

Year	(A)	Losses (B)	Trend Factor (C)	Program Losses (D)	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 11	10,515,262	\$76,891,210		\$84,036,034	\$0.760			
19/20-21/22 1	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.

PLAN JPA - Liability

# Frequency and Severity Method

	Ultimate	Adjusted	Ultimate
Accident	Program	Ultimate	Program
Year	Severity	Claims	Losses
	(A)	(B)	(C)
4000 0000	4450.000		****
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:	0.055
					, ,	Prior:	0.045
	Program Year	:		2023-2024	2024-2025		
(1)	Trend Factor:			1.000	1.000		
(J)	Selected Freq	uency:		0.055	0.055		

# 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.

(K) Est. Payroll (\$000,000):

(L) Ultimate Claims:

- (E) (C)/(D).
- (F) From Reserve Appendix E, Page 1, Column (H).

(G) (E) x (F).

516.9

28

(H) The selected frequency of 0.055 is based on (G).

532.4

29

- (I) From Reserve Appendix E, Page 1, Column (H).
- (J) (H) x (I).
- (K) From Reserve Appendix M, 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.

PLAN JPA - Liability

# 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.

PLAN JPA - Liability

# 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.

# PLAN JPA - Liability Reported Claim Count Development

Reported Claim Count Development														
		Claims R												
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			4.4	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	4	15	18	16	14	14	13	13	13	13	13	13	13	13
2011-2012	1	19	19	20 22	20	20 21	20 20	20	20 21	20 21	20 21	20 21	20	
2012-2013 2013-2014	1	23 7	23 14	15	22 16	15	15	20 15	15	15	15	21		
	3	11	21	21	18		18	18	18	18	13			
2014-2015 2015-2016		10	18	20	20	18 20	20	20	20	10				
2016-2017	1	6	19	19	21	21	20	20	20					
2017-2018	'	4	8	7	7	7	7	20						
2017-2018		1	5	8	10	9	,							
2019-2019		2	9	12	14	9								
2020-2021	2	21	20	26	14									
2021-2022	2	11	23	20										
2022-2023	2	32	25											
2023-2024	3	02												
2020 2024	O													
		Reported	Claim Co	unt Devel	opment Fa	actors:								
	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				0.962	1.080	1.000	1.000	1.074	1.000	0.966	1.000	1.000	1.000	1.000
2003-2004			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		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		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														
	0.40	40.00	00.40	40.54	F4.00	00.70	70.00	00.400	100 111	444 400	400 400	400 450	450 400	400 474
	6-18	18-30	30-42	42-54	54-66	66-78	78-90						150-162	
A.,	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average Claim-Weighted	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
_														
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
3-yr 4-yr		1.629	1.262	1.140	0.974	0.979	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Comparative		1.029	1.202	1.100	0.503	0.505	1.000	1.014	1.000	1.000	1.000	1.000	1.000	1.000
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	1.005	1.004	1.004	1.002	1.002	1.001	1.000	1.000	1.000	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
		<u> </u>												
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

# PLAN JPA - Liability Closed Claim Development

Closed Claim Development Claims Closed as of:														
Accident	6	18	osed as o	<u>1:</u> 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
2002-2003	MOHINS	Months	WOTHING	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	10
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 Cl	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			4 057	2.500										
2020-2021			1.857											
2021-2022 2022-2023														
2022-2023														
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	Q0_102	102-114	11/-126	126_138	138_150	150_162	162-17/
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	WOITHIS	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
Claim-Weighted		4.040	2.001	1.771	1.100	1.000	1.001	1.010	1.014	1.000	0.550	1.010	0.002	1.010
Averages														
3-yr				2.429	1.261	1.103	1.019	1.000	1.000	1.000	1.000	1.019	1.000	1.000
4-yr				1.647	1.243	1.070	1.029	1.014	1.000	1.000	1.000	1.013	1.000	1.014
Comparative							020							
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
Ourselete !	74 700	47.000	F 000	4 700	4.070	4 404	4 000	4 00-	4 000	4 005	4.004	4 000	4 000	4.004
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

PLAN JPA - Liability

# 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:

No benefit level adjustment applied. (A)

(B) - (E)

(A) adjusted for a 1.0% annual loss rate trend.(A) adjusted for a 0.0% annual frequency trend. (F) - (I)

(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			Adjusted Limited		Ultimate
Year	Losses	Reported Claims	BLF	Severity	Payroll (\$00)	Frequency
i eai	(A)	(B)	(C)	(D)	(\$00)	(F)
	(A)	(B)	(0)	(D)	(L)	(1")
1986-2003	\$31,422,743	220	1.000	142,831		
2003-2004	2,574,481	20	1.000	128,724	5,890,921	0.034
2004-2005	1,874,487	9	1.000	208,276	6,726,086	0.013
2005-2006	3,237,840	16	1.000	202,365	6,701,609	0.024
2006-2007	1,662,124	14	1.000	118,723	6,850,981	0.020
2007-2008	4,919,885	24	1.000	204,995	7,078,282	0.034
2008-2009	3,376,845	17	1.000	198,638	7,137,215	0.024
2009-2010	2,352,952	20	1.000	117,648	6,726,322	0.030
2010-2011	2,046,846	13	1.000	157,450	6,057,964	0.021
2011-2012	3,919,990	20	1.000	196,000	5,049,644	0.040
2012-2013	4,088,000	21	1.000	194,667	4,813,124	0.044
2013-2014	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	7	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	<u>nd Factors</u>	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

- (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

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

Calendar	Period

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

# PLAN JPA - Liability

# Short- and Long-Term Liabilities

<u>Liabiliti</u>	es as of 12/31/23: Current (Short Term)	Loss and ALAE:		Expected \$6,601,438		<u>Discounted</u> \$6,536,397	
	Short	ULAE: -Term Loss and LAE:		\$6,601,438		\$6,536,397	
	Non-Current (Long Term)	Loss and ALAE:		\$18,725,395		\$17,628,626	
	Long	ULAE: -Term Loss and LAE:		3,165,854 \$21,891,249		3,020,628 \$20,649,254	
	Total Liability	Loss and ALAE:		\$25,326,832		\$24,165,023	
		ULAE: Total Loss and LAE:		3,165,854 \$28,492,686		3,020,628 \$27,185,651	
Liabiliti	es as of 6/30/24:						
	Current (Short Term)	Loss and ALAE: ULAE:		\$6,810,447 0		\$6,743,347 0	
	Short	-Term Loss and LAE:		\$6,810,447		\$6,743,347	
	Non-Current (Long Term)	Loss and ALAE: ULAE:		\$18,436,002 3,155,806		\$17,380,164 3,015,439	
	Long	-Term Loss and LAE:		\$21,591,808		\$20,395,603	
	Total Liability	Loss and ALAE:		\$25,246,449		\$24,123,511	
		ULAE: Total Loss and LAE:		3,155,806 \$28,402,255		3,015,439 \$27,138,950	
				Discounted v	with a Margin for Co	ntingencies	
		-	70%	75%	80%	85%	90%
				1070	0070	0070	0070
Liabiliti	on on of 12/21/22:		Confidence	Confidence	Confidence	Confidence	Confidence
<u>Liabiliti</u>	es as of 12/31/23: Current (Short Term)	Loss and ALAE:	<u>Confidence</u> \$7,248,864	<u>Confidence</u> \$7,543,002	<u>Confidence</u> \$7,889,431	<u>Confidence</u> \$8,333,906	<u>Confidence</u> \$8,935,255
<u>Liabiliti</u>	Current (Short Term)	ULAE:	<u>Confidence</u> \$7,248,864 0	<u>Confidence</u> \$7,543,002 0	<u>Confidence</u> \$7,889,431 0	<u>Confidence</u> \$8,333,906 0	<u>Confidence</u> \$8,935,255 0
<u>Liabiliti</u>	Current (Short Term)		<u>Confidence</u> \$7,248,864	<u>Confidence</u> \$7,543,002	<u>Confidence</u> \$7,889,431	<u>Confidence</u> \$8,333,906	<u>Confidence</u> \$8,935,255
<u>Liabiliti</u>	Current (Short Term)	ULAE: -Term Loss and LAE:	\$7,248,864 0 \$7,248,864 \$19,550,147	\$7,543,002 0 \$7,543,002 \$20,343,435	Confidence \$7,889,431 0 \$7,889,431 \$21,277,752	Confidence \$8,333,906 0 \$8,333,906 \$22,476,498	Confidence \$8,935,255 0 \$8,935,255 \$24,098,331
<u>Liabiliti</u>	Current (Short Term) Short Non-Current (Long Term)	ULAE: _ -Term Loss and LAE: _	\$7,248,864 0 \$7,248,864	\$7,543,002 0 \$7,543,002	Confidence \$7,889,431 0 \$7,889,431	Confidence \$8,333,906 0 \$8,333,906	Confidence \$8,935,255 0 \$8,935,255
<u>Liabiliti</u>	Current (Short Term) Short Non-Current (Long Term)	ULAE: -Term Loss and LAE:  Loss and ALAE: ULAE: -Term Loss and LAE:  Loss and ALAE:	\$7,248,864 0 \$7,248,864 \$19,550,147 3,349,876 \$22,900,023 \$26,799,011	\$7,543,002 0 \$7,543,002 \$20,343,435 3,485,804 \$23,829,239 \$27,886,437	\$7,889,431 0 \$7,889,431 \$21,277,752 3,645,898 \$24,923,650 \$29,167,183	\$8,333,906 0 \$8,333,906 \$22,476,498 3,851,301 \$26,327,799 \$30,810,404	Confidence \$8,935,255 0 \$8,935,255 \$24,098,331 4,129,199 \$28,227,530 \$33,033,586
<u>Liabiliti</u>	Current (Short Term) Short Non-Current (Long Term) Long	ULAE: -Term Loss and LAE:  Loss and ALAE:  ULAE: -Term Loss and LAE:	\$7,248,864 0 \$7,248,864 \$19,550,147 3,349,876 \$22,900,023 \$26,799,011 3,349,876	\$7,543,002 0 \$7,543,002 \$20,343,435 3,485,804 \$23,829,239	\$7,889,431 0 \$7,889,431 \$21,277,752 3,645,898 \$24,923,650	Confidence \$8,333,906 0 \$8,333,906 \$22,476,498 3,851,301 \$26,327,799	\$8,935,255 0 \$8,935,255 \$24,098,331 4,129,199 \$28,227,530
	Current (Short Term)  Short  Non-Current (Long Term)  Long  Total Liability	ULAE:Term Loss and LAE: _ Loss and ALAE: _ ULAE:Term Loss and LAE: _ Loss and ALAE: _ ULAE: _	\$7,248,864 0 \$7,248,864 \$19,550,147 3,349,876 \$22,900,023 \$26,799,011 3,349,876	\$7,543,002 0 \$7,543,002 \$20,343,435 3,485,804 \$23,829,239 \$27,886,437 3,485,804	Confidence \$7,889,431 0 \$7,889,431 \$21,277,752 3,645,898 \$24,923,650 \$29,167,183 3,645,898	\$8,333,906 0 \$8,333,906 \$22,476,498 3,851,301 \$26,327,799 \$30,810,404 3,851,301	Confidence \$8,935,255 0 \$8,935,255 \$24,098,331 4,129,199 \$28,227,530 \$33,033,586 4,129,199
	Current (Short Term)  Short  Non-Current (Long Term)  Long  Total Liability  es as of 6/30/24:	ULAE: -Term Loss and ALAE:	\$7,248,864 0 \$7,248,864 \$19,550,147 3,349,876 \$22,900,023 \$26,799,011 3,349,876 \$30,148,887	Confidence \$7,543,002 0 \$7,543,002 \$20,343,435 3,485,804 \$23,829,239 \$27,886,437 3,485,804 \$31,372,241	Confidence \$7,889,431 0 \$7,889,431 \$21,277,752 3,645,898 \$24,923,650 \$29,167,183 3,645,898 \$32,813,081	Confidence \$8,333,906 0 \$8,333,906 \$22,476,498 3,851,301 \$26,327,799 \$30,810,404 3,851,301 \$34,661,705	Confidence \$8,935,255 0 \$8,935,255 \$24,098,331 4,129,199 \$28,227,530 \$33,033,586 4,129,199 \$37,162,785
	Current (Short Term)  Short  Non-Current (Long Term)  Long  Total Liability	ULAE:Term Loss and LAE: _ Loss and ALAE: _ ULAE:Term Loss and LAE: _ Loss and ALAE: _ ULAE: _	\$7,248,864 0 \$7,248,864 \$19,550,147 3,349,876 \$22,900,023 \$26,799,011 3,349,876	\$7,543,002 0 \$7,543,002 \$20,343,435 3,485,804 \$23,829,239 \$27,886,437 3,485,804	Confidence \$7,889,431 0 \$7,889,431 \$21,277,752 3,645,898 \$24,923,650 \$29,167,183 3,645,898	\$8,333,906 0 \$8,333,906 \$22,476,498 3,851,301 \$26,327,799 \$30,810,404 3,851,301	Confidence \$8,935,255 0 \$8,935,255 \$24,098,331 4,129,199 \$28,227,530 \$33,033,586 4,129,199 \$37,162,785 \$9,218,155 0
	Current (Short Term) Short Non-Current (Long Term) Long Total Liability  es as of 6/30/24: Current (Short Term)	ULAE: -Term Loss and ALAE: ULAE: -Term Loss and LAE: Loss and ALAE: ULAE: Loss and ALAE: ULAE: Total Loss and LAE: Loss and LAE:	Confidence \$7,248,864 0 \$7,248,864 \$19,550,147 3,349,876 \$22,900,023 \$26,799,011 3,349,876 \$30,148,887 \$7,478,372	Confidence \$7,543,002 0 \$7,543,002 \$20,343,435 3,485,804 \$23,829,239 \$27,886,437 3,485,804 \$31,372,241 \$7,781,822	Confidence \$7,889,431 0 \$7,889,431 \$21,277,752 3,645,898 \$24,923,650 \$29,167,183 3,645,898 \$32,813,081 \$8,139,220	Confidence \$8,333,906 0 \$8,333,906 \$22,476,498 3,851,301 \$26,327,799 \$30,810,404 3,851,301 \$34,661,705	Confidence \$8,935,255 0 \$8,935,255 \$24,098,331 4,129,199 \$28,227,530 \$33,033,586 4,129,199 \$37,162,785
	Current (Short Term) Short Non-Current (Long Term) Long Total Liability  es as of 6/30/24: Current (Short Term)	ULAE: -Term Loss and ALAE: ULAE: -Term Loss and LAE: Loss and ALAE: ULAE: Total Loss and LAE: ULAE: Loss and ALAE: ULAE: Loss and ALAE: ULAE: Loss and ALAE: ULAE: Loss and LAE:	\$7,248,864 0 \$7,248,864 \$19,550,147 3,349,876 \$22,900,023 \$26,799,011 3,349,876 \$30,148,887 \$7,478,372 0 \$7,478,372 \$19,274,602	Confidence \$7,543,002 0 \$7,543,002 \$20,343,435 3,485,804 \$23,829,239 \$27,886,437 3,485,804 \$31,372,241  \$7,781,822 0 \$7,781,822 \$20,056,710	Confidence \$7,889,431 0 \$7,889,431 \$21,277,752 3,645,898 \$24,923,650 \$29,167,183 3,645,898 \$32,813,081  \$8,139,220 0 \$8,139,220 \$20,977,858	Confidence \$8,333,906 0 \$8,333,906 \$22,476,498 3,851,301 \$26,327,799 \$30,810,404 3,851,301 \$34,661,705  \$8,597,767 0 \$8,597,767 \$22,159,710	Confidence \$8,935,255 0 \$8,935,255 \$24,098,331 4,129,199 \$28,227,530 \$33,033,586 4,129,199 \$37,162,785 \$9,218,155 0 \$9,218,155 \$23,758,685
	Current (Short Term) Short Non-Current (Long Term) Long Total Liability  es as of 6/30/24: Current (Short Term) Short Non-Current (Long Term)	ULAE: -Term Loss and ALAE: ULAE: -Term Loss and ALAE: Loss and ALAE: ULAE: Total Loss and LAE: ULAE: Loss and ALAE: ULAE: -Term Loss and ALAE: ULAE: -Term Loss and LAE:	\$7,248,864 0 \$7,248,864 \$19,550,147 3,349,876 \$22,900,023 \$26,799,011 3,349,876 \$30,148,887 \$7,478,372 0 \$7,478,372	Confidence \$7,543,002 0 \$7,543,002 \$20,343,435 3,485,804 \$23,829,239 \$27,886,437 3,485,804 \$31,372,241  \$7,781,822 0 \$7,781,822	Confidence \$7,889,431 0 \$7,889,431 \$21,277,752 3,645,898 \$24,923,650 \$29,167,183 3,645,898 \$32,813,081  \$8,139,220 0 \$8,139,220	Confidence \$8,333,906 0 \$8,333,906 \$22,476,498 3,851,301 \$26,327,799 \$30,810,404 3,851,301 \$34,661,705 \$8,597,767 0 \$8,597,767	Confidence \$8,935,255 0 \$8,935,255 \$24,098,331 4,129,199 \$28,227,530 \$33,033,586 4,129,199 \$37,162,785 \$9,218,155 0 \$9,218,155
	Current (Short Term) Short Non-Current (Long Term) Long Total Liability  es as of 6/30/24: Current (Short Term) Short Non-Current (Long Term)	ULAE: -Term Loss and ALAE: ULAE: -Term Loss and ALAE: ULAE: -Term Loss and ALAE: ULAE: -Total Loss and ALAE: ULAE: -Term Loss and ALAE:	\$7,248,864 0 \$7,248,864 \$19,550,147 3,349,876 \$22,900,023 \$26,799,011 3,349,876 \$30,148,887 \$7,478,372 0 \$7,478,372 \$19,274,602 3,344,122 \$22,618,724 \$26,752,974	Confidence \$7,543,002 0 \$7,543,002 \$20,343,435 3,485,804 \$23,829,239 \$27,886,437 3,485,804 \$31,372,241  \$7,781,822 0 \$7,781,822 \$20,056,710 3,479,816 \$23,536,526 \$27,838,532	Confidence \$7,889,431 0 \$7,889,431 \$21,277,752 3,645,898 \$24,923,650 \$29,167,183 3,645,898 \$32,813,081  \$8,139,220 0 \$8,139,220 \$20,977,858 3,639,635 \$24,617,493 \$29,117,078	Confidence \$8,333,906 0 \$8,333,906 \$22,476,498 3,851,301 \$26,327,799 \$30,810,404 3,851,301 \$34,661,705  \$8,597,767 0 \$8,597,767 \$22,159,710 3,844,684 \$26,004,394 \$30,757,477	Confidence \$8,935,255 0 \$8,935,255 \$24,098,331 4,129,199 \$28,227,530 \$33,033,586 4,129,199 \$37,162,785  \$9,218,155 0 \$9,218,155 \$23,758,685 4,122,105 \$27,880,790 \$32,976,840
	Current (Short Term) Short Non-Current (Long Term) Long Total Liability  es as of 6/30/24: Current (Short Term) Short Non-Current (Long Term) Long	ULAE: -Term Loss and ALAE: ULAE: -Term Loss and ALAE: ULAE: -Torm Loss and ALAE: ULAE: -Total Loss and ALAE: ULAE: -Term Loss and LAE: ULAE: -Term Loss and ALAE: ULAE: -Term Loss and ALAE: ULAE: -Term Loss and ALAE: -Term Loss and ALAE: -Term Loss and ALAE: -Term Loss and LAE:	\$7,248,864 0 \$7,248,864 \$19,550,147 3,349,876 \$22,900,023 \$26,799,011 3,349,876 \$30,148,887 \$7,478,372 0 \$7,478,372 \$19,274,602 3,344,122 \$22,618,724	Confidence \$7,543,002 0 \$7,543,002 \$20,343,435 3,485,804 \$23,829,239 \$27,886,437 3,485,804 \$31,372,241  \$7,781,822 0 \$7,781,822 \$20,056,710 3,479,816 \$23,536,526	Confidence \$7,889,431 0 \$7,889,431 \$21,277,752 3,645,898 \$24,923,650 \$29,167,183 3,645,898 \$32,813,081  \$8,139,220 0 \$8,139,220 \$20,977,858 3,639,635 \$24,617,493	Confidence \$8,333,906 0 \$8,333,906 \$22,476,498 3,851,301 \$26,327,799 \$30,810,404 3,851,301 \$34,661,705  \$8,597,767 0 \$8,597,767 \$22,159,710 3,844,684 \$26,004,394	Confidence \$8,935,255 0 \$8,935,255 \$24,098,331 4,129,199 \$28,227,530 \$33,033,586 4,129,199 \$37,162,785 \$9,218,155 0 \$9,218,155 \$23,758,685 4,122,105 \$27,880,790

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.

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:

0.954

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

0.956

### 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.

PLAN JPA - Liability

# 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.

PLAN JPA - Liability

# 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 Door					
	Third Party Claims		Dogin	End		
	Administrator		Begin Date	End Date		
	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) Total Income to Fund during 2023-2024	
Premiums:	\$23,156,868
Interest:	0
Total Income:	\$23,156,868
(C) Total Payments from Fund during 2023-2024	<b>AF 570 700</b>
Loss Payments:	\$5,578,793
Excess Insurance:	14,598,687
Other:	2,435,780
Total Payments:	\$22,613,260
(D) Estimated Total Assets as of 6/30/24:	\$49,677,483

- (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

										Incurred
		Additions	Subtractions			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)	(1)	(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

- (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)	(1)	(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

- (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.
- (H) (E) (G). (I) (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

		Additions	Subtractions			Reserves	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)	(1)	(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	-	3,632,749	0	0	3,632,749	0	3,632,749	3,632,749
2022-2023	3,849,263	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

- (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.

PLAN JPA - Liability

#### 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

- (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)

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

PLAN JPA - Liability

# Exposure Measures

Accident	Total Payroll	Inflation Trend	Trended Payroll
Year	(\$00) (A)	Factor (B)	(\$00) (C)
1986-2003			
2003-2004	3,596,411	1.638	5,890,921
2004-2005	4,209,065	1.598	6,726,086
2005-2006	4,298,659	1.559	6,701,609
2006-2007	4,504,261	1.521	6,850,981
2007-2008	4,769,732	1.484	7,078,282
2008-2009	4,929,016	1.448	7,137,215
2009-2010	4,760,313	1.413	6,726,322
2010-2011	4,393,012	1.379	6,057,964
2011-2012	3,754,382	1.345	5,049,644
2012-2013	3,668,540	1.312	4,813,124
2013-2014	3,643,764	1.280	4,664,018
2014-2015	3,788,358	1.249	4,731,659
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	4,828,712
2019-2020	4,202,976	1.104	4,640,086
2020-2021	4,343,082	1.077	4,677,499
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

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

March 20, 2024

Agenda Item 6.C.

# **FINANCIAL MATTERS**

**SUBJECT: Property Program Updates and Preliminary Actuarial Data** 

# **BACKGROUND AND HISTORY:**

PLAN JPA's current Property Program structure is:



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%	

March 20, 2024

Agenda Item 6.C. Page 2

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 process, 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 is experiencing an increase of \$361,000, or 18.8%, over 2023/24, at the 80% confidence level. 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, Bickmore Actuarial, will be present to provide a thorough overview of the Draft Property Program Actuarial Report to the Committee.

# **STAFF RECOMMENDATION:**

None.

# **REFERENCE MATERIALS ATTACHED:**

• Draft Property Program Actuarial Report as of March 11, 2024



# Actuarial Review of the Self-Insured Property Program

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 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	Reco	Recommended Range			
	Expected	Acceptable	Low	Target	High	Conservative	
		70% CL	75% CL	80% CL	85% CL	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	

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

# **DRAFT**

Mike Harrington, FCAS, MAAA President and Managing Partner

# **DRAFT**

David Kim, MA Actuarial Consultant

# **TABLE OF CONTENTS**

I. BACKGROUND	4
II. CONCLUSIONS AND RECOMMENDATIONS	5
A. COSTS OF 2024-25 CLAIMS	5
B. PROGRAM FUNDING: GOALS AND OBJECTIVES	6
C. HISTORICAL TRENDS	7
D. COMPARISON WITH OUR PREVIOUS RESULTS	10
E. DATA ISSUES	15
III. ASSUMPTIONS AND LIMITATIONS	16
IV. GLOSSARY OF ACTUARIAL TERMS	18
V. EXHIBITS	20
VI. APPENDICES	25

# 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	ommended Ra	inge	
	Expected	Acceptable	Low	Target	High	Conservative
		70% CL	75% CL	80% CL	85% CL	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.

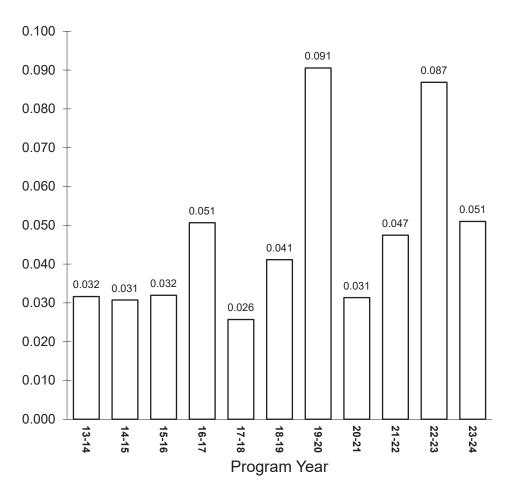
We generally recommend that risk pools <u>maintain assets for historical liabilities</u> at no less than the <u>90% confidence level</u>, after recognition of investment income. The resulting risk margin is reasonably high that resulting funding should be sufficient to meet claim liabilities, yet the 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% 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.

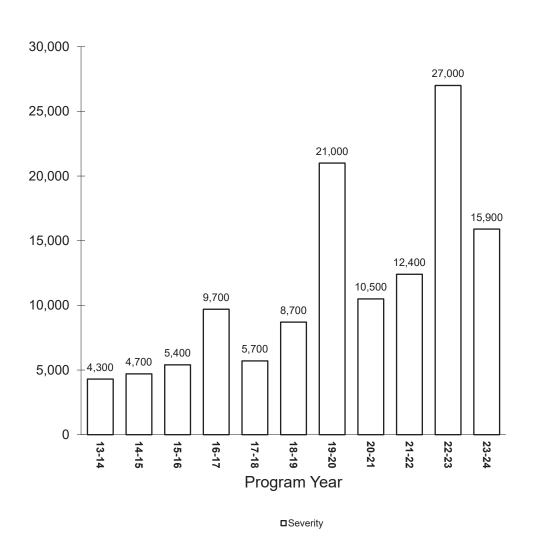
PLAN JPA
Property Program
Dollars of Loss per
\$100 of TIV



□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.

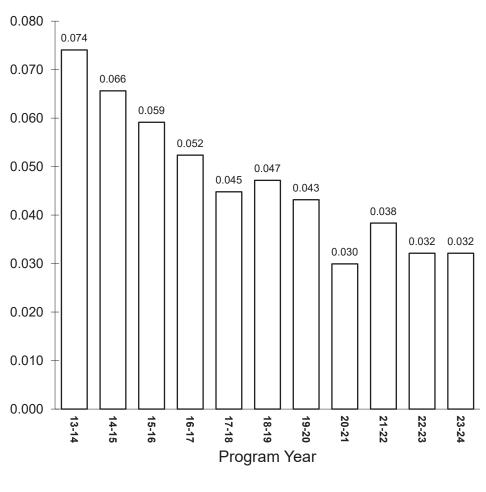
PLAN JPA Property Program Dollars of Loss per Claim



8

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.

# **Actual Versus Expected Incurred Loss and ALAE Development**

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

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.

# **Actual Versus Expected Paid Loss and ALAE Development**

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

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.

# **Change in Loss and ALAE Ultimate Losses**

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

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.

	2023-24 \$500K Actual	2024-25 \$500K Proposed	Dollar	Percent
Member	Funding	Funding	Change	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)	(D) Loss Discount Factor (Based on a Discount Rate of 2.0%.): (Appendix F, , (G))					
(E)	Discounted Total Claims Costs Incurred in Accident Year 2024-2025: ((C) x (D))			\$1,650,000	\$0.044	
		Marginally Acceptable		Recommended		Conservative
<b>(-</b> )	0.51	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
(1)	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.

### 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
Projected Losses for the Year 2023-2024 (G) \$1,829 Projected Losses for the Year 2024-2025 (H) \$1,97						

#### 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) \$1,544,00 Projected Losses for the Year 2024-2025 (H) \$1,659,00						

### 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.

PLAN JPA - Property

# 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	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	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 0.029 0.037 0.025 0.039 0.063 0.027 0.044
Totals 17/18-21/22 18/19-22/23	\$12,010,285 5,430,019 7,037,136	1.017	\$13,130,320 5,787,771 7,367,039 (F) Selecte	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.

### 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)
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

Accident Year (A)	Limited Paid Losses as of 12/31/23 (B)	Paid Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Paid Losses of 12/31/23 (E)	Paid Loss Development Factor (F)	Ultimate Program Losses (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 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

Accident Year	Trended TIV (\$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)
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.

PLAN JPA - Property

### **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.

PLAN JPA - Property

# 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 2013-2014	157 180	159 182	157 180	2,857.4 3,111.1	0.055 0.058	0.569 0.599	0.031 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:	0.032
					( )	Prior:	0.035
(I) (J) (K)	Program Year: Trend Factor: Selected Frequ Est. TIV (\$000	uency: ,000):		2023-2024 1.000 0.032 3,578.5	2024-2025 0.950 0.030 3,790.6		
(L)	Ultimate Claim	is:		115	114		

### Notes:

- (A) From Appendix 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.

PLAN JPA - Property

### 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.

PLAN JPA - Property

### 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)

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.

<sup>(</sup>B) - (E)

<sup>(</sup>A) adjusted for a 1.7% annual loss rate trend.(A) adjusted for a -5.0% annual frequency trend. (F) - (I)

<sup>(</sup>A) adjusted for a 7.0% annual severity trend.

### Calculation of Discount Factors

Payment	Payment	Return on	Discounted	Undiscounted	Discount
Year	Pattern	Investment	Reserves	Reserves	Factor
(A)	(B)	(C)	(D)	(E)	(F)
00	0.00/	0.00/	0.000	0.000	4.000
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	0.1%	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
•	32.170	2.070	0.001		2.001
		(G) Discount Factor	for Future Fundina:	2023-2024	0.974
		,	9.	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.

PLAN JPA - Property

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.

### PLAN JPA - Property

### 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.

### PLAN JPA - Property

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

Accident Year (A)	Unlimited Paid (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Paid (E)	Paid Over SIR (F)	Paid Over \$225,000 (G)	Paid Capped at \$225,000 (H)	Paid \$225,000 to SIR Layer (I)	Paid Capped at SIR (J)	Paid Capped at SIR & Aggregate (K)
(* ')	(2)	(3)	(3)	(-)	(. )	(3)	(. ')	(-)	(0)	()
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.

## **DRAFT**

### PLAN JPA - Property

### 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.

### PLAN JPA - Property

### 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).

PLAN JPA - Property

# Exposure Measures

	Total	Inflation	Trended
Accident	TIV	Trend	TIV
Year	(\$00)	Factor	(\$00)
	(A)	(B)	(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).

Agenda Item 6.D.

### FINANCIAL MATTERS

**SUBJECT:** Review of the 2024/25 Draft Preliminary Operating Budget

## **BACKGROUND AND HISTORY:**

Enclosed is 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.
- For the Property Program, member contributions are presented at the <u>increased 80%</u> <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 discussed in Agenda Item 6.B, 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:

### 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 \$39.9M 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 sixteen members of the twenty-eight, experiencing a 27% average increase. The 2024/25 estimated payroll

Agenda Item 6.D. Page 2

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.
  - o CARMA is projected to increase by 27%.
  - o Reinsurance and Excess are projected to increase by 15%.
- *Administrative Expenses* budgeted to increase by 3.8%. 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.

# 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 2023/214 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.

Agenda Item 6.D. Page 3

# 2. Claims Expense

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. Insurance Expense

Total insurance expense is projected to increase by 21.2% 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 105.5% due to new members joining. These are conservative estimates and will be revised once staff receives more information from Alliant.

# 4. Risk Management Grants

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 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.

### 5. Administration Expenses

Administrative expenses are projected to increase by 3.8%, or \$93,343, 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 new 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 opinion.
- Risk Control Services: contractual 3% increase from prior year.
- Other Insurance: projected 10% increase, or \$6,109 for Deadly Weapon Response, E&O, and Crime coverages.
- Meetings & Conferences: in-person meetings for the 2024/25 program year, staff is proposing an increase of \$5k due to rising costs of meetings/conferences in Bay Area cities.
- Allowance for Contingencies: continue with \$10k for 2024/25, similar to the prior year.

Agenda Item 6.D. Page 4

# **STAFF RECOMMENDATION:**

None.

# **REFERENCE MATERIALS ATTACHED:**

• Draft Preliminary Operating Budget for 2024/25

# **2024/2025 Preliminary Operating Budget**Summary of Contributions by Program

					Prior Y	ear Compari	son	Payroll Comparison			Ex-m	od 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	\$ 614,798	\$ 300,000	\$ 46,810	\$ 961,608	\$ 848,839	\$ 112,769	13%	\$	9,165,300	\$ 8,431,800	9%	52%	60%	-13%
Atherton	423,160		43,559	681,992	509,422	172,570	34%		8,112,600	6,742,700	20%	157%	121%	30%
Benicia	1,232,386	926,397	-	2,158,783	1,879,367	279,416	15%		27,076,600	24,540,400	10%	112%	148%	-24%
Burlingame	1,260,970	776,044	133,832	2,170,845	1,681,636	489,209	29%		29,391,900	26,215,500	12%	146%	132%	11%
Campbell	1,416,443	395,800	-	1,812,242	1,432,948	379,294	26%		27,352,200	26,083,400	5%	108%	92%	17%
Colma	153,921	107,825	-	261,745	238,900	22,845	10%		7,021,400	6,113,600	15%	78%	100%	-22%
Cupertino	1,489,397	459,209	-	1,948,606	1,626,671	321,935	20%		25,330,500	26,692,400	-5%	58%	57%	2%
Dublin	2,000,429	1,000,168	-	3,000,597	2,450,121	550,476	22%		12,234,200	11,560,400	6%	162%	142%	14%
East Palo Alto	797,599	117,487	-	915,086	814,687	100,399	12%		11,910,200	12,825,000	-7%	69%	94%	-27%
Foster City	979,734	606,577	-	1,586,311	1,308,384	277,928	21%		29,591,900	23,744,600	25%	48%	51%	-6%
Half Moon Bay	410,875	125,689	-	536,563	413,022	123,542	30%		5,552,500	5,100,900	9%	137%	105%	30%
Hillsborough	583,998	313,361	-	897,359	663,989	233,370	35%		13,746,600	11,918,200	15%	117%	90%	30%
Los Altos Hills	290,166	68,979	22,622	381,768	304,440	77,328	25%		3,704,500	3,296,500	12%	107%	84%	27%
Los Gatos	987,399	272,731	-	1,260,130	997,484	262,646	26%		23,464,200	22,514,800	4%	52%	40%	30%
Millbrae	741,798	512,259	-	1,254,057	1,053,421	200,636	19%		10,073,700	9,527,200	6%	136%	160%	-15%
Milpitas	2,528,555	910,645	-	3,439,200	2,881,218	557,982	19%		67,897,000	61,670,900	10%	64%	80%	-20%
Morgan Hill	1,438,367	611,014	-	2,049,382	1,738,114	311,268	18%		35,838,500	34,313,500	4%	75%	83%	-10%
Newark	1,413,314	624,118	-	2,037,431	1,659,321	378,110	23%		27,209,200	25,484,300	7%	85%	80%	6%
Pacifica	1,460,404	909,343	-	2,369,748	2,011,935	357,813	18%		24,579,500	20,371,600	21%	123%	153%	-20%
Portola Valley	161,133	61,149	-	222,281	187,906	34,375	18%		2,404,600	2,324,800	3%	84%	81%	4%
Ross	123,095	30,263	-	153,358	120,458	32,899	27%		2,526,600	2,290,100	10%	93%	71%	31%
San Bruno	1,547,940	403,055	-	1,950,994	1,673,808	277,186	17%		39,509,400	32,417,400	22%	87%	125%	-30%
San Carlos	1,193,848	306,254	-	1,500,102	1,084,403	415,699	38%		14,895,900	10,945,800	36%	232%	205%	13%
Saratoga	907,966	187,354	-	1,095,320	933,302	162,018	17%		8,674,200	8,193,100	6%	115%	141%	-18%
South San Francisco	1,843,479	1,556,373	-	3,399,852	2,774,466	625,386	23%		45,360,100	49,221,500	-8%	56%	43%	30%
Suisun City	1,034,652	187,654	-	1,222,306	911,166	311,141	34%		13,139,500	10,109,000	30%	145%	123%	18%
Tiburon	345,766	63,074	-	408,840	327,320	81,520	25%		4,428,300	4,088,100	8%	153%	128%	20%
Woodside	206,181	44,048	13,814	264,043	216,315	47,728	22%		2,183,800	2,380,300	-8%	130%	100%	30%
Total	\$ 27,587,772	\$ 12,092,142	\$ 260,637	\$ 39,940,551	\$ 32,743,063	\$ 7,197,487	22%	\$	532,374,900	\$ 489,117,800	8.8%			
Prior Year Actuals	22,473,839		\$126,805	32,743,063										
\$ Incr./ (Decr.)	\$ 5,113,933	\$ 1,949,723	\$ 133,832	\$ 7,197,487										
% Change	22.8%	19.2%	105.5%	22.0%										

### Notes:

Payroll comparison was obtained from the actuarial study. The payroll numbers are estimates that were used at the time of funding. The ex-mod comparisons were obtained from actuarial reports.

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

										_						Bud
		Fι	unding for		Reins	urar	nce/Excess I	ารน	rance				2024/25			2023/24
	Member		Losses		CARMA	R	ein/Excess		Total	Α	dministration		60% CL			60% CL
Members	SIR		SIR-\$1M	•	\$9M x \$1M	\$2	25M x \$10M		Insurance		Expense	Lia	bility Budget		Lia	bility Budget
	Note 1		Note 2						Note 3		Note 4		Note 5			Note 6
American Canyon	\$25,000	\$	80,198	\$	279,876	\$	191,719	\$	471,595	\$	63,006	\$	614,798			530,737
Atherton	\$25,000		215,444		87,591		60,001		147,592		60,124		423,160			285,607
Benicia	\$25,000		511,439		343,385		235,224		578,609		142,338		1,232,386			1,109,128
Burlingame	\$250,000		347,383		395,273		270,768		666,041		247,546		1,260,970			1,042,150
Campbell	\$100,000		373,379		560,237		383,771		944,008		99,056		1,416,443			1,110,923
Colma	\$50,000		82,126		17,825		12,211		30,036		41,759		153,921			146,635
Cupertino	\$250,000		117,665		775,882		531,491		1,307,372		64,360		1,489,397			1,231,725
Dublin	\$50,000		297,894		941,095		644,664		1,585,759		116,776		2,000,429			1,609,914
East Palo Alto	\$100,000		103,254		374,943		256,841		631,784		62,561		797,599			714,359
Foster City	\$100,000		179,586		428,943		293,832		722,775		77,374		979,734			796,891
Half Moon Bay	\$50,000		114,471		147,244		100,864		248,108		48,296		410,875			309,245
Hillsborough	\$50,000		241,631		143,781		98,492		242,273		100,095		583,998			398,478
Los Altos Hills	\$25,000		67,242		109,915		75,293		185,208		37,716		290,166			222,350
Los Gatos	\$50,000		183,629		434,176		297,417		731,593		72,176		987,399			765,879
Millbrae	\$100,000		172,550		294,947		202,043		496,989		72,258		741,798			622,972
Milpitas	\$100,000		546,964		1,063,300		728,376		1,791,676		189,916		2,528,555			2,112,548
Morgan Hill	\$100,000		339,681		601,934		412,333		1,014,267		84,419		1,438,367			1,223,523
Newark	\$100,000		290,858		622,487		426,413		1,048,899		73,556		1,413,314			1,131,751
Pacifica	\$50,000		454,320		486,379		333,177		819,556		186,528		1,460,404			1,256,303
Portola Valley	\$25,000		33,969		55,705		38,159		93,864		33,300		161,133			135,350
Ross	\$25,000		39,583		29,734		20,369		50,103		33,409		123,095			93,737
San Bruno	\$100,000		436,460		551,593		377,850		929,443		182,037		1,547,940			1,333,296
San Carlos	\$100,000		437,325		386,879		265,018		651,897		104,626		1,193,848			850,969
Saratoga	\$25,000		168,005		400,926		274,640		675,566		64,395		907,966			773,769
South San Francisco	\$100,000		318,387		843,680		577,933		1,421,613		103,478		1,843,479			1,468,714
Suisun City	\$25,000		321,538		373,435		255,808		629,243		83,871		1,034,652			758,855
Tiburon	\$50,000		102,129		115,397		79,049		194,446		49,191		345,766			273,970
Woodside	\$25,000		47,890		67,260		46,074		113,334		44,957		206,181			164,061
Total		\$	6,625,000	\$	10,933,820	\$	7,489,829	\$	18,423,649	\$	2,539,123	\$	27,587,772		\$	22,473,839
Prior Year Actuals			4,888,000		8,627,164		6,512,895		15,140,059		2,445,780		22,473,839	1		
\$ Incr./ (Decr.)		\$	1,737,000	\$	2,306,656	\$	976,934	\$	3,283,590	\$	93,343	\$	5,113,933			
% Change		_	35.5%		26.7%		15.0%		21.7%		3.8%		22.8%			
		_														

Funding for the Pool Layer @ 2.0%

**Budget Comparison** 

Dollar

Increase /

(Decrease)

84,061

137,554

123.258

218.820

305,519

257.672

390,515

182,844

101,630

185,521

221,520

118,826

416,007

214,845

281,562

204,101

25,783

29,358

214,644

342,879

134,197

374,764

275,797

71,796

42,120

5,113,933

67,816

83,240

7,286

Percent

Increase /

(Decrease)

15.8%

48.2%

11.1%

21.0%

27.5%

5.0%

20.9%

24.3%

11.7%

22.9%

32.9%

46.6%

30.5%

28.9%

19.1%

19.7%

17.6%

24.9%

16.2%

19.0%

31.3%

16.1%

40.3%

17.3%

25.5%

36.3%

26.2%

25.7% 23%

22,473,839 \$

### NOTES:

Note 1: Member Selected Self-Insured Retention.

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.

Note 3: Preliminary estimates for CARMA and reinsurance/excess insurance from Alliant. Allocation based upon draft actuarial study dated March 11, 2024.

Note 4: Administrative Expense allocation: 33% allocated to the member equally. Of the remaining 67%,

one-third is allocated using reported claims and two-thirds using paid losses; these numbers were provided in the draft actuarial study.

Note 5: Total 2024/25 Liability Contributions by members.

Note 6: 2023/24 Liability Contributions by members.

	\$1M SIR	\$1M SIR
	23/24	24/25
Expected Undisc.	5,100,000	6,915,000
Expected Disc.	4,764,000	6,438,000
60% CL Disc.	4,888,000	6,625,000
70% CL Disc.	5,593,000	7,520,000
80% CL Disc.	6,517,000	8,698,000
90% CL Disc.	7,999,000	10,559,000

# 2024/2025 Preliminary Operating Budget

# **Property Program Contributions Schedule**

Pool Funding @ 80% Confidence Level, 2.0% Discount Factor

		Inques	l Values	 namy w	00,	, o Oomma	••••	JUU.U.	., 2.0,0 2.	-		400	·		
		2023/24	2024/25	Pool		Fyees		Flood	Fyees			D.			2024/25
					ъ	Excess			Excess		Resolute		payment		
Manakan	OID	Insured	Insured	Funding		p. Premium		Premium	Cyber		Guard	Te	ear 2 of 3	D	80% CL
Member	SIR	Values	Values	 SIR-\$500K	- 1	5500k-\$1B			Coverage					Pro	perty Budget
		Note 1	Note 2	Note 3		Note 4		Note 5	Note 6		Note 7		Note 8		Note 9
American Canyon	\$5,000	\$ 96,332,759	93,716,336	\$ 56,418	\$	206,952	\$	1,750	\$ 8,309	\$	4,500	\$	22,070	\$	300,000
Atherton	5,000	67,691,702	70,909,229	42,688		156,588		-	7,469		4,500		4,027		215,272
Benicia	5,000	274,652,385	293,515,972	176,700		648,167		4,377	22,591		5,650		68,912		926,397
Burlingame	5,000	226,684,224	244,677,489	147,299		540,317		2,387	24,438		5,650		55,953		776,044
Campbell	5,000	110,479,076	121,875,390	73,370		269,135		-	22,811		5,650		24,833		395,800
Colma	5,000	29,734,484	31,087,817	18,715		68,651		1,751	6,599		4,500		7,609		107,825
Cupertino	5,000	136,921,873	142,200,391	85,606		314,019		1,751	21,199		5,650		30,984		459,209
Dublin	5,000	312,405,016	328,303,343	197,642		724,987		1,751	10,756		4,500		60,532		1,000,168
East Palo Alto	5,000	31,755,720	33,938,605	20,431		74,946		-	10,497		4,500		7,112		117,487
Foster City	5,000	182,765,587	191,018,892	114,996		421,824		-	24,597		5,650		39,511		606,577
Half Moon Bay	5,000	35,774,409	38,759,497	23,334		85,592		-	5,428		4,500		6,836		125,689
Hillsborough	5,000	93,275,856	97,575,594	58,742		215,475		-	11,962		4,500		22,683		313,361
Los Altos Hills	5,000	19,097,521	19,864,108	11,958		43,866		-	3,954		4,500		4,701		68,979
Los Gatos	5,000	77,720,158	81,875,203	49,290		180,804		-	19,711		5,650		17,277		272,731
Millbrae	5,000	157,243,761	165,610,518	99,699		365,715		2,616	9,033		4,500		30,696		512,259
Milpitas	5,000	264,950,001	278,867,505	167,881		615,819		4,883	55,142		6,800		60,120		910,645
Morgan Hill	5,000	178,392,070	188,860,520	113,696		417,058		1,751	29,578		5,650		43,281		611,014
Newark	5,000	189,828,178	198,845,203	119,707		439,107		-	22,697		5,650		36,957		624,118
Pacifica	5,000	267,348,423	285,697,426	171,993		630,901		13,129	20,600		5,650		67,070		909,343
Portola Valley	5,000	16,830,091	17,661,627	10,633		39,002		-	2,917		4,500		4,097		61,149
Ross	5,000	6,584,981	6,884,778	4,145		15,204		1,751	3,015		4,500		1,649		30,263
San Bruno	5,000	114,675,265	119,855,753	72,155		264,676		-	32,506		5,650		28,069		403,055
San Carlos	5,000	81,835,578	95,887,373	57,725		211,747		1,751	12,878		4,500		17,654		306,254
Saratoga	5,000	54,457,911	57,062,665	34,352		126,011		1,751	7,917		4,500		12,823		187,354
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
Suisun City	5,000	50,543,816	55,566,553	33,452		122,707		4,377	11,478		4,500		11,141		187,654
Tiburon	5,000	15,605,016	16,892,799	10,170		37,304		1,751	4,531		4,500		4,818		63,074
Woodside	5,000	11,552,992	12,089,655	7,278		26,697		-	2,741		4,500		2,831		44,048
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
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	\$	1,392,492	\$	2,637	\$ 38,593	\$	-	\$	-	\$	1,949,723

	Budget Comparison								
	2023/24		Dollar	Percent					
	75% CL		Increase /	Increase /					
PI	roperty Budget		(Decrease)	(Decrease)					
	Note 10								
\$	271,292	\$	28,708	10.6%					
	180,256		35,017	19.4%					
	770,239		156,158	20.3%					
	639,486		136,558	21.4%					
	322,025		73,775	22.9%					
	92,265		15,559	16.9%					
	394,946		64,263	16.3%					
	840,207		159,962	19.0%					
	100,328		17,159	17.1%					
	511,493		95,084	18.6%					
	103,777		21,912	21.1%					
	265,511		47,850	18.0%					
	59,468		9,511	16.0%					
	231,605		41,126	17.8%					
	430,449		81,811	19.0%					
	768,670		141,975	18.5%					
	514,591		96,423	18.7%					
	527,570		96,548	18.3%					
	755,632		153,711	20.3%					
	52,556		8,592	16.3%					
	26,721		3,541	13.3%					
	340,512		62,542	18.4%					
	233,434		72,820	31.2%					
	159,533		27,821	17.4%					
	1,305,752		250,621	19.2%					
	152,311		35,344	23.2%					
	53,350		9,724	18.2%					
	38,440		5,608	14.6%					
\$	10,142,419	\$	1,949,723	19.2%					
_									

### Notes:

% Change

Note 1: 2023/24 Total Insured property values obtained from Alliant.

Note 2: 2024/25 Property Total Insured Values (TIV) as submitted by members, updated as of 1/8/24.

Note 3: Adjusted pool funding from draft Actuarial Report dated March 11, 2024, allocated using Note 2 TIVs.

Note 4: Estimate for Alliant Property Insurance Program (APIP) allocated using Note 2.

Note 5: Flood cost are based upon 2022/23 expiring premiums with a 4.5% increase.

Note 6: Excess Cyber coverage: minimum \$1K per member and remaining allocated based upon payroll.

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 member (Total Notes 3 through 8).

Note 10: 2023/24 Property Contributions.

### Funding for the Pooled Layer @ 2%

4.5%

20.0%

		23/24	23/24
Expected	Undiscounted	1,399,000	1,694,000
Expected	Discounted	1,373,000	1,650,000
70% CL	Discounted	1,635,000	1,955,000
75% CL	Discounted	1,766,000	2,105,000
80% CL	Discounted	1,921,000	2,282,000
85% CL	Discounted	2,116,000	2,505,000

0.0%

0.0%

19.2%

# 2024/2025 Preliminary Operating Budget

			2024/25		
	202	23/24	Final	Prior \	<i>Year</i>
	Approved	Projected	Operating	Increase/	Percent
	Budget	Actuals	Budget	(Decrease)	Incr./(Decr.)
Revenues:					
Contributions	\$ 32,743,063	\$ 32,743,063	\$ 39,940,551	\$ 7,197,487	
Funding from Equity	500,000			(500,000)	) 0.0% <b>c</b>
Investment Income	116,406	1,699,073	116,406	-	0.0%
Less: Investment Fees	(38,000)		(38,000)	-	0.0%
Total Revenues	33,321,469	34,405,176	40,018,956	6,697,487	20.1%
Expenses					
Claims Expense	6,137,000	6,709,042	8,088,000	1,951,000	31.8% <b>a</b>
Insurance Expense					
Insurance - Liability	15,140,059	15,140,059	18,423,649	3,283,590	
Insurance - Property	6,978,285	6,978,284	8,370,777	1,392,492	
Flood Insurance	58,018	58,018	60,655	2,637	
Excess Cyber Coverage	413,932	413,932	452,525	38,593	
Resolute Guard	142,100	97,100	142,100	-	0.0%
Employment Liability Coverage	126,805	126,805	260,637	133,832	
	22,859,199	22,814,199	27,710,343	4,851,144	21.2% b
Risk Management Grants					
Risk Management Fund	500,000	500,000		(500,000	) 0.0% <b>c</b>
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%
Meetings & Conferences:					
Meetings	55,000	43,073	60,000	5,000	
Training & Workshops	5,000	-	5,000	-	0.0%
Allowance for Contingencies	10,000	-	10,000	-	0.0%
Total Administration Expenses:	2,445,780	2,386,234	2,539,123	93,343	3.8% d
Total Expenses	31,941,979	32,409,475	38,337,467	6,395,487	20.0%
Budgeted Net Income (Loss)	1,379,490	1,995,701	1,681,490	302,000	21.9%

### Notes:

a Claims expenses are recorded at expected. The breakout of expenses by programs are:

	<u>2023/24</u>	<u>2024/25</u>	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.

Agenda Item 6.E.

## **FINANCIAL MATTERS**

**SUBJECT:** Report from PLAN JPA's Finance Manager

### **BACKGROUND AND HISTORY:**

Min Su, Finance Manager, will be in attendance to provide updates to the Finance Committee on the following topics:

- Captive Introduction
  - Many public entity self-insured pools in California have formed captive insurance companies over the last several years including PLAN's excess liability overage provider, the California Affiliated Risk Management Authorities (CARMA). A captive insurance company is a special purpose insurance organization owned by its member (s). The captive model is similar to self-insured pools, and one of the primary benefits of a captive is to provide economic benefits through enhanced investment opportunities. Captives are meant for long-term investing and can be a valuable tool for self-insured pools.
- Confidence Level Funding for Liability Program.
  - Since PLAN's inception in 2018, confidence level funding has remained at 60% through each year's budget cycle.
  - O As a reminder, 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 that the amount will be sufficient to pay the losses.
  - o If funded at the lower confidence levels, the chances are much greater that future events will prove that additional contributions should have been made for current claims
  - Per the California Association of Joint Powers Authorities (CAJPA) guidelines for Accreditation, the recommended funding level is 80%.
  - o Per Bickmore Actuarial, and the annual reports, recommended levels of risk pool funds for future costs between 75% and 85%.

### STAFF RECOMMENDATION:

Staff recommends the Finance Committee provide direction.

### REFERENCE MATERIALS ATTACHED:

None.