



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

FINANCE COMMITTEE MEETING AGENDA

**Thursday, March 10, 2022
10:30 a.m.**

Zoom

Please Contact Katie Sullivan for Videoconference Information

All portions of this meeting will be conducted via teleconference in accordance with Government Code Section 54953.

Members of the public may observe and listen to the meeting via teleconference. No physical location will be available from which members of the public may observe the meeting and offer public comment. Public comments may be submitted in advance of the meeting by emailing Katie Sullivan at katie.sullivan@sedgwick.com. Emails can also be sent to Ms. Sullivan during the meeting and, if timely received, Ms. Sullivan will read or summarize the email to the Finance Committee. Members of the public may also speak when public comment is requested at the beginning of the meeting.

In compliance with the Americans with Disabilities Act, if you need a disability-related modification or accommodation to participate in this meeting, please contact Ms. Sullivan. Requests must be made as early as possible, and preferably 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 Finance Committee will be available for public inspection.

Documents and materials relating to an open session agenda item that are provided to the Finance Committee less than 72 hours prior to a regular meeting will be available for public inspection.

- | | |
|--------------------|---|
| <u>Page</u> | 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. |

- Page** **5. AB361**
- 3 *A. Update on AB361 and Virtual Committee Meetings
 Recommendation: Staff recommends the Finance Committee adopt Resolution 2022-01 that, as a result of the COVID-19 emergency, meeting in person would present imminent risks to the health or safety of attendees, and the meeting should be held by teleconference as authorized by subdivision (e)(1)(C) of section 54943 of the Government Code.
6. **CONSENT CALENDAR**
 If a Committee member would like to discuss any item listed, it may be pulled from the Consent Calendar.
- 7 *A. Minutes from the March 9, 2021, Finance Committee Meeting
- 11 *B. Minutes from the March 17, 2021, Special Finance Committee Meeting
- 13 *C. Memo from PFM Asset Management
- 14 *D. PLAN JPA Investment Policy – Approved 6.18.21
 Recommendation: Staff recommends the Committee approve the Consent Calendar
7. **FINANCIAL MATTERS**
- 23 *A. Liability Program Updates and Draft Actuarial Report
 Recommendation: None. Information only.
- 161 *B. Property Program Updates and Draft Actuarial Report
 Recommendation: None. Information only.
- 207 *C. Review of the Preliminary 2022/23 Operating Budget
 Recommendation: None. Information only.
8. **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
9. **ADJOURNMENT**

NOTICES:

- The next Board of Directors Meeting will be held on March 22, 2022 via teleconference.
- The next Executive Committee Meeting will be held on May 17, 2022. Format TBD.

March 10, 2022

Agenda Items 5.A.

AB361 UPDATE

SUBJECT: Update on AB361 and Virtual Committee Meetings

BACKGROUND AND HISTORY:

PLAN JPA staff consulted with Board Counsel regarding recently passed legislation, AB361, pertaining to teleconference and virtual meetings. Under AB361, local agency boards may conduct meetings by teleconference subject to modified rules during a State-proclaimed state of emergency when either (1) social distancing measures are required or recommended by state or local officials, or (2) the governing board determines meeting in person would present imminent risks to the health or safety of attendees.

To continue to meet virtually we are recommending PLAN JPA's Finance Committee adopt a resolution to continue remote meetings based on the findings made in the resolution attached. To continue with remote meetings, reauthorization must occur at each meeting or at least once a month.

STAFF RECOMMENDATION:

Staff recommends the Finance Committee adopt Resolution 2022-01 that, as a result of the COVID-19 emergency, meeting in person would present imminent risks to the health or safety of attendees, and the meeting should be held by teleconference as authorized by subdivision (e)(1)(C) of section 54943 of the Government Code.

REFERENCE MATERIALS ATTACHED:

- Resolution 2022-01: AB361

RESOLUTION NO. 2022--01

A RESOLUTION OF THE FINANCE COMMITTEE OF THE POOLED LIABILITY ASSURANCE NETWORK JOINT POWERS AUTHORITY (PLAN JPA) ADOPTING A RESOLUTION REGARDING THE RALPH M BROWN ACT AND FINDING OF IMMINENT RISK TO HEALTH AND SAFETY OF IN PERSON MEETINGS AS A RESULT OF THE CONTINUING COVID-19 PANDEMIC STATE OF EMERGENCY DECLARED BY GOVERNOR NEWSOM.

WHEREAS, on March 4, 2020, Governor Newsom issued a Proclamation of State of Emergency in response to the COVID-19 pandemic; and,

WHEREAS, the proclaimed state of emergency remains in effect; and,

WHEREAS, on March 17, 2020, Governor Newsom issued Finance Order N-29-20 that suspended the teleconferencing rules set forth in the California Open Meeting law, Government code Section 54950 et seq. (the “Brown Act”), provided certain requirements were met and followed; and,

WHEREAS, on June 11, 2021, Governor Newsom issued Finance Order N-08-21 that clarified the suspension of the teleconferencing rules set forth in the Brown Act, and further provided that those provisions would remain suspended through September 30, 2021; and,

WHEREAS, on September 16, 2021, Governor Newsom signed AB 361 that provides that a legislative body subject to the Brown Act may continue to meet without fully complying with the teleconferencing rules in the Brown Act provided the legislative body determines that meeting in person would present imminent risks to the health or safety of attendees, and further requires that certain findings be made by the legislative body every thirty (30) days; and,

WHEREAS, the California Department of Public Health (“CDPH”) and the federal Centers for Disease Control and Prevention (“CDC”) caution that the Delta variant of COVID-19, currently the dominant strain of COVID-19 in the country, is more transmissible than prior variants of the virus, may cause more severe illness, and that even fully vaccinated individuals can spread the virus to others resulting in rapid and alarming rates of COVID-19 cases and hospitalizations; and,

WHEREAS, other variants of COVID-19 exist, and it is unknown at this time whether other variants may result in a new surge in COVID-19 cases; and,

WHEREAS, the CDC has established a “Community Transmission” metric with 4 tiers designed to reflect a community’s COVID-19 case rate and percent positivity; and,

WHEREAS, various PLAN JPA member counties currently have a Community Transmission metric of “high” which is the most serious of the tiers; and,

WHEREAS, due to the seriousness of the current pandemic situation, the CDPH has required that all unvaccinated persons wear facial coverings indoors, and the CDC and CDPH recommend that all persons, regardless of vaccination status, wear facial coverings indoors; and,

WHEREAS, the Finance Committee of PLAN JPA is empowered to take actions necessary to protect public, health, welfare, and safety within the region; and,

WHEREAS, PLAN JPA has an important governmental interest in protecting the health, safety, and welfare of those who participate in meetings of PLAN JPA's various legislative bodies subject to the Brown Act; and,

WHEREAS, in the interest of public health and safety, as affected by the emergency caused by the spread of COVID-19, the PLAN JPA Finance Committee deems it necessary to find that meeting in person for meetings of all PLAN JPA related legislative bodies as well as subcommittees of the Board of Directors subject to the Ralph M. Brown Act, would present imminent risks to the health or safety of attendees, and thus intends to invoke the provisions of AB 361 related to teleconferencing as provided in subdivision (e) of Government Code section 54953; and

WHEREAS, all teleconferenced meetings of the PLAN JPA Board of Directors, PLAN JPA Finance Committee, as well as all subcommittees of the Board of Directors shall comply with the requirements to provide the public with access to meetings as prescribed in paragraph (2) of subdivision (e) of Government Code section 54953;

NOW, THEREFORE, BE IT RESOLVED that the Finance Committee of PLAN JPA does hereby approve as follows:

1. The Finance Committee finds that meeting in person for meetings of all PLAN JPA related legislative bodies subject to the Ralph M. Brown Act would present imminent risks to the health or safety of attendees.
2. This finding applies to all PLAN JPA related legislative bodies subject to the Brown Act, including but not limited to, the PLAN JPA Board of Directors meeting; the PLAN JPA Finance Committee; and any other standing subcommittees (Claims, Finance, Risk Management).
3. Staff is directed to return to the Board of Directors no later than thirty (30) days after the adoption of this resolution, or by the next Board of Directors meeting (whichever comes first), with an item for the Board to consider making the findings required by AB 361 in order to continue meeting under its provisions.
4. The PLAN JPA General Manager and PLAN JPA Board Counsel are directed to take such other necessary or appropriate actions to implement the intent and purposes of this resolution.

PASSED AND ADOPTED this 21st day of October 2021

ayes:
noes:
absent:
abstain:

March 10, 2022

Agenda Items 6.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, 2021, Finance Committee Meeting
- B. Minutes from the March 17, 2021, Special Finance Committee Meeting
- C. Memo from PFM Asset Management
- D. PLAN JPA Investment Policy – Approved 6.18.21

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

**MINUTES OF THE FINANCE COMMITTEE
MEETING OF MARCH 9, 2021**

A regular meeting of the Finance Committee was held on March 9, 2021, via videoconference.

MEMBERS PRESENT: Pak Lin, Chair, Colma
Jan Cooke, Hillsborough
Cindy Safe, Woodside

MEMBERS ABSENT: None

OTHERS PRESENT: Jon Paulsen, General Manager
Katie Sullivan, Assistant General Manager
Daria Hoffmann, Analyst
Ritesh Sharma, Finance Manager
Becky Richard, Bickmore Actuarial
Rob Kramer, California Affiliated Risk Management Authorities
(left after Agenda Item 6.A)

1. CALL TO ORDER:

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

2. INTRODUCTIONS:

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

3. APPROVAL OF THE AGENDA AS POSTED (OR AMENDED):

Jan Cooke 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 April 16, 2020, 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. Liability Program Updates

The preliminary actuarial report provides funding information for the upcoming 2021/22 program year. Ritesh Sharma, PLAN JPA Finance Manager, reviewed the layers of the General Liability Program from the member's self-insured retention (SIR) through the top excess layer of \$5 million excess \$25 million.

Mr. Sharma introduced Becky Richard, Bickmore Actuarial, who compiled the actuarial report using loss run and estimated payroll data as of December 31, 2020. In the past year, PLAN JPA has funded slightly above the 60% confidence level. Ms. Richard indicated the decrease in the primary funding layer is due to favorable development of claims in prior years. She also noted estimated payroll decreased by 2.5% from prior year due to the change in payroll reporting method.

The General Liability actuarial report includes changes to the contribution calculation method for the 2021/22 program year. In previous years, the contributions from one year to the next were capped at 30%. For the 2021/22 year, the 30% cap to the contributions has been moved to experience modification (ex-mod) where the change of ex-mod is capped at 30% from year to year.

Mr. Sharma and Jon Paulsen, PLAN JPA General Manager, introduced Rob Kramer, Executive Director for the California Affiliated Risk Management Authority (CARMA) who provided a quick presentation of CARMA and the possibility of PLAN JPA joining CARMA for the 2021/22 program year for excess coverages.

B. Property Program Update

Mr. Sharma reviewed the current Property Program structure for PLAN JPA. In previous years, the Property Program has been funded at the 70% confidence level. The preliminary actuarial report provides funding analysis for the 2021/22 program year.

Ms. Richard reviewed the actuarial report for the Property Program, noting the increase in funding from prior year is related to proposed changes to the coverage with AIP: the \$225,000 per occurrence is changing to \$500,000 per occurrence, and the pool aggregate deductible of \$1M is being changed to zero aggregate deductible. She stated there is a slight increase of 3.4% of total insured values; however, the insured value information is still being collected by Alliant.

C. Review of the 2021/22 Preliminary Operating Budget

Mr. Sharma reviewed the 2021/22 Preliminary Operating Budget with the Committee. He noted the funding model is similar to what PLAN JPA has approved in the past; however, employment practices liability (EPL) coverage has been added for those members who joined the Employment Risk Management Authority (ERMA). Mr. Sharma detailed the budget, as follows:

- For the Liability Program, member contributions are presented at the 60% confidence level (CL) with a 2% discount factor. PLAN JPA's self-insured retention (SIR) is up to \$2.5 million above each individual member's SIR. Reinsurance of \$2.5 million is purchased above the pool's SIR and excess coverage is purchased from \$5 million to \$30 million. These coverage layers are the same as prior year.
- For the Property Program, member contributions are presented at the 70% CL with a 2% discount factor. The proposed coverage is losses pooled from member's SIR up to \$500,000 (prior year SIR was \$225,000) per occurrence with zero aggregate deductible and excess coverage purchased up to \$1 billion.

Mr. Sharma reviewed the major components of the budget, stating contributions are projected to increase from \$16.2 million to \$19.8 million; an increase of 22% over the prior year. Decreases in estimated payroll of 2.5% and the primary funding layer for the Liability Program were offset by significant increases in reinsurance and excess premiums for both the Liability and Property programs.

Discussion ensued around payroll collection of actual versus budgeted versus projected as there were many members who had substantial increases and decreases in payroll. The

Committee directed staff to reach out to these members for additional information and bring back to the Finance Committee at a special meeting.

7. CLOSING COMMENTS:

A. Finance Committee


Pak Lin, Chair, called a Special Finance Committee meeting on March 17, 2021, at 3:30pm.

B. Staff

None.

8. ADJOURNMENT

The Regular Meeting of the PLAN JPA Finance Committee was adjourned at 12:02 p.m.

A handwritten signature in cursive script, reading "Katie Sullivan", written over a horizontal line.

Katie Sullivan, Assistant Board Secretary

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

**MINUTES OF THE FINANCE COMMITTEE
MEETING OF MARCH 17, 2021**

A special meeting of the Finance Committee was held on March 17, 2021, via videoconference.

MEMBERS PRESENT: Pak Lin, Chair, Colma
Jan Cooke, Hillsborough
Cindy Safe, Woodside

MEMBERS ABSENT: None

OTHERS PRESENT: Jon Paulsen, General Manager
Katie Sullivan, Assistant General Manager
Daria Hoffmann, Analyst
Ritesh Sharma, Finance Manager
Becky Richard, Bickmore Actuarial

1. CALL TO ORDER:

The Regular Meeting of the PLAN JPA Finance Committee meeting was called to order at 3:30 p.m.

2. INTRODUCTIONS:

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

3. APPROVAL OF THE AGENDA AS POSTED (OR AMENDED):

Jan Cooke moved to approve the agenda as posted. Cindy Safe 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. FINANCIAL MATTERS:

A. PLAN JPA Liability Program Member Allocations

At the March 9, 2021, Finance Committee meeting, staff was directed to contact specific PLAN JPA members who had substantial increases or decreases in payroll from prior year.

Ritesh Sharma, PLAN JPA Finance Manager, discussed his findings with the Committee, along with the following updates:

- Minor changes to the preliminary operating budget;
- Phase in period for liability contributions; and
- Property program member self-insured retention (SIR) option.

A brief discussion ensued around the idea of increasing the Confidence Level (CL) versus the SIR option. The Committee thanked staff for bringing this option forward; however, did not feel it was appropriate at this time.

6. CLOSING COMMENTS:

A. Finance Committee

None.

B. Staff

None.

7. ADJOURNMENT

The Special Meeting of the PLAN JPA Finance Committee was adjourned at 4:35 p.m.



Katie Sullivan, Assistant Board Secretary

Memorandum

To: Ritesh Sharma, Finance Manager
Pooled Liability Assurance Network JPA

From: Lesley Murphy, Senior Managing Consultant
PFM Asset Management LLC

RE: Annual Investment Policy Review

We have completed our review of the Investment Policy ("Policy") for the Pooled Liability Assurance Network JPA ("PLAN") dated June 18, 2021. The Policy is in compliance with the sections of California Government Code ("Code") that govern the investment of public funds. There have been no recent changes made to the sections of Code that govern the investment of public funds. Thus, we are not recommending any changes to the Policy this year.

Please let me know if you have any questions.

Pooled Liability Assurance Network JPA (PLAN)

Investment Policy

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

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 from 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 shall be rated in a rating category of "AAA" or its equivalent by an NRSRO and have a maximum remaining maturity of five years or less. Purchase of securities authorized by this subdivision shall not exceed 20 percent of the portfolio. Further, the amount invested in any one ABS issuer in combination with any other securities from that issuer shall not exceed 5 percent.
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:

- (1) 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 NRSRO.

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 Limits	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 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% 5% limit per issuer (applies across security types)	AAA
Local Government Investment Pools	N.A.	100%	AAA
Supranational Obligations	5 years	30%	AA

** The aggregate total of investments in callable notes is limited to 25.0% of the portfolio.

March 10, 2022

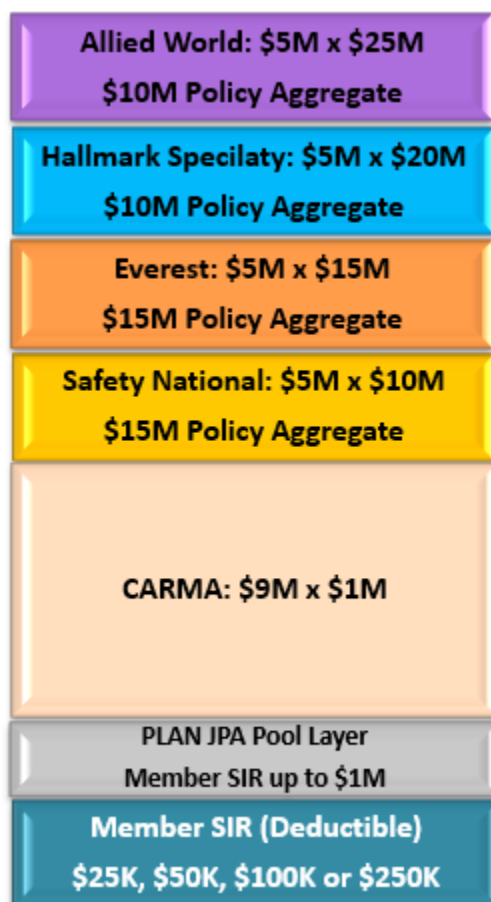
Agenda Item 7.A.

FINANCIAL MATTERS

SUBJECT: Liability Program Updates and Draft Actuarial Report

BACKGROUND AND HISTORY:

The preliminary actuarial report provides the funding information for the 2022/23 program year. The actuary was able to compile the report using loss run and estimated payroll data as of December 31, 2021. Below is PLAN JPA's current General Liability (GL) Program structure.



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

Liability Program	Discount Factor	Expected	60%	70%
2022/23	2.0%	\$ 4,972,000	\$ 5,102,000	\$ 5,828,000
2021/22	2.0%	4,613,000	4,729,000	5,411,000
	Change	359,000	373,000	417,000
	% Change	7.8%	7.9%	7.7%

Compared to prior years, PLAN JPA's SIR went from \$2.5M to \$1M in 2021/22 by way of joining CARMA, which resulted in funding decreases. In 2022/23, the Liability Program funding increased by \$373,000 or 7.9% over 2021/22 at the 60% confidence level. The increase in the primary funding layer is due to estimated payroll increasing by 6.4%.

With a change of methodology in the collection of actual payrolls from members based on DE9, this resulted in better consistency on the data and estimated payroll for 2022/23. However, members are experiencing greater year over year variances. This will be discussed in detail during the 2022/23 Preliminary Operating Budget agenda item.

This report also includes changes to the contribution calculation method implemented during the 2021/22 year and continues for the 2022/23 year. A 30% cap is placed on the ex-mod change year over year. Due to changes in the contribution calculation methodology, it was recommended that a phase-in period be utilized on contribution changes with a 40% cap in 2021/22, a 50% cap in 2022/23 and a 60% cap in 2023/24. The 2022/23 budget utilizes a 50% cap placed on contributions changes from prior year.

STAFF RECOMMENDATION:

None. Information only.

REFERENCE MATERIALS ATTACHED:

- Draft General Liability Program Actuarial Report as of March 4, 2022



Bickmore — Actuarial

Actuarial Review of the Self-Insured Liability Program

Outstanding Liabilities as of June 30, 2022
Forecast for Program Year 2022-23

Presented to
PLAN JPA

March 4, 2022 - DRAFT

Friday, March 4, 2022

Mr. Jon Paulsen
Pool Administrator
Pooled Liability Assurance Network Joint Powers Authority
1750 Creekside Oaks Drive, Suite 200
Sacramento, CA 95833

Re: Actuarial Review of the Self-Insured Liability Program

Dear Mr. Paulsen:

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 2022-23 program year to be \$4,972,000 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 2022-23 claims translates to a rate of \$1.044 per \$100 payroll.

In addition, we estimate the program's liability for outstanding claims to be \$19,808,000 as of June 30, 2022, 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 \$48,829,000 (including SIR Fund assets), the program is funded above the 95% confidence level (see Graph 1 on Page 8).

The \$18,808,000 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, 2022

	Expected	Marginally Acceptable 70% CL	Recommended Range			Conservative 90% CL
			Low 75% CL	80% CL	High 85% CL	
Loss and ALAE	\$18,423,000					
ULAE (Claims Administration)	2,303,000					
Investment Income Offset @ 2%	(918,000)					
Discounted Loss and LAE	\$19,808,000	\$21,967,000	\$22,878,000	\$23,968,000	\$25,315,000	\$27,137,000
Program Assets Includes SIR Fund	48,829,000					
Redundancy	\$29,021,000	\$26,862,000	\$25,951,000	\$24,861,000	\$23,514,000	\$21,692,000

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, 2022

Discount Rate	Outstanding Liability
2.0%	\$19,808,000
3.0%	\$19,380,000
4.0%	\$18,971,000

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. Generally, the amount should be sufficient to bring funding to the 75% to 85% confidence level.

It should be noted that the \$48,829,000 of program assets can be broken downs as follows:

- \$22,599,000 of assets backing discounted loss and LAE liabilities at expected level
- \$7,329,000 of assets backing discounted loss and LAE liabilities from the expected level to the 90% confidence level (Risk-Margin Fund)
- \$21,692,000 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 2022-23 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	\$4,972,000	\$4,813,000	\$4,662,000
60% Confidence Level	5,102,000	4,938,000	4,783,000
70% Confidence Level	5,828,000	5,641,000	5,464,000
80% Confidence Level	6,787,000	6,570,000	6,364,000
90% Confidence Level	8,309,000	8,043,000	7,790,000

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.

DRAFT

Please note, the estimates included in this report do not make any provision for the increased cost of general liability claims as a result of the coronavirus (COVID-19) pandemic.

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 or David Kim at (916) 244-1166 with any questions you may have concerning this report.

Sincerely,

Bickmore Actuarial

DRAFT

Becky Richard, ACAS, MAAA
Senior Actuarial Manager, Bickmore Actuarial
Associate, Casualty Actuarial Society
Member, American Academy of Actuaries

DRAFT

Mike Harrington, FCAS, MAAA
President and Principal, Bickmore Actuarial
Fellow, Casualty Actuarial Society
Member, American Academy of Actuaries

DRAFT

David Kim, MA
Senior Actuarial Analyst, Bickmore Actuarial

TABLE OF CONTENTS

I. BACKGROUND	6
II. CONCLUSIONS AND RECOMMENDATIONS	8
A. LIABILITY FOR OUTSTANDING CLAIMS AS OF JUNE 30, 2022	8
B. COSTS OF 2022-23 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. EXHIBITS	32
VI. APPENDICIES	50

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:

<u>Loss Layer</u>	<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, 2022, the PLAN JPA is expected to have available assets of \$48,829,000 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 and #30. The specific objectives of the study are to estimate the Authority's liability for outstanding claims as of June 30, 2022, project ultimate loss cost for 2022-23 and provide funding guidelines to meet these liabilities and future costs.

II. CONCLUSIONS AND RECOMMENDATIONS

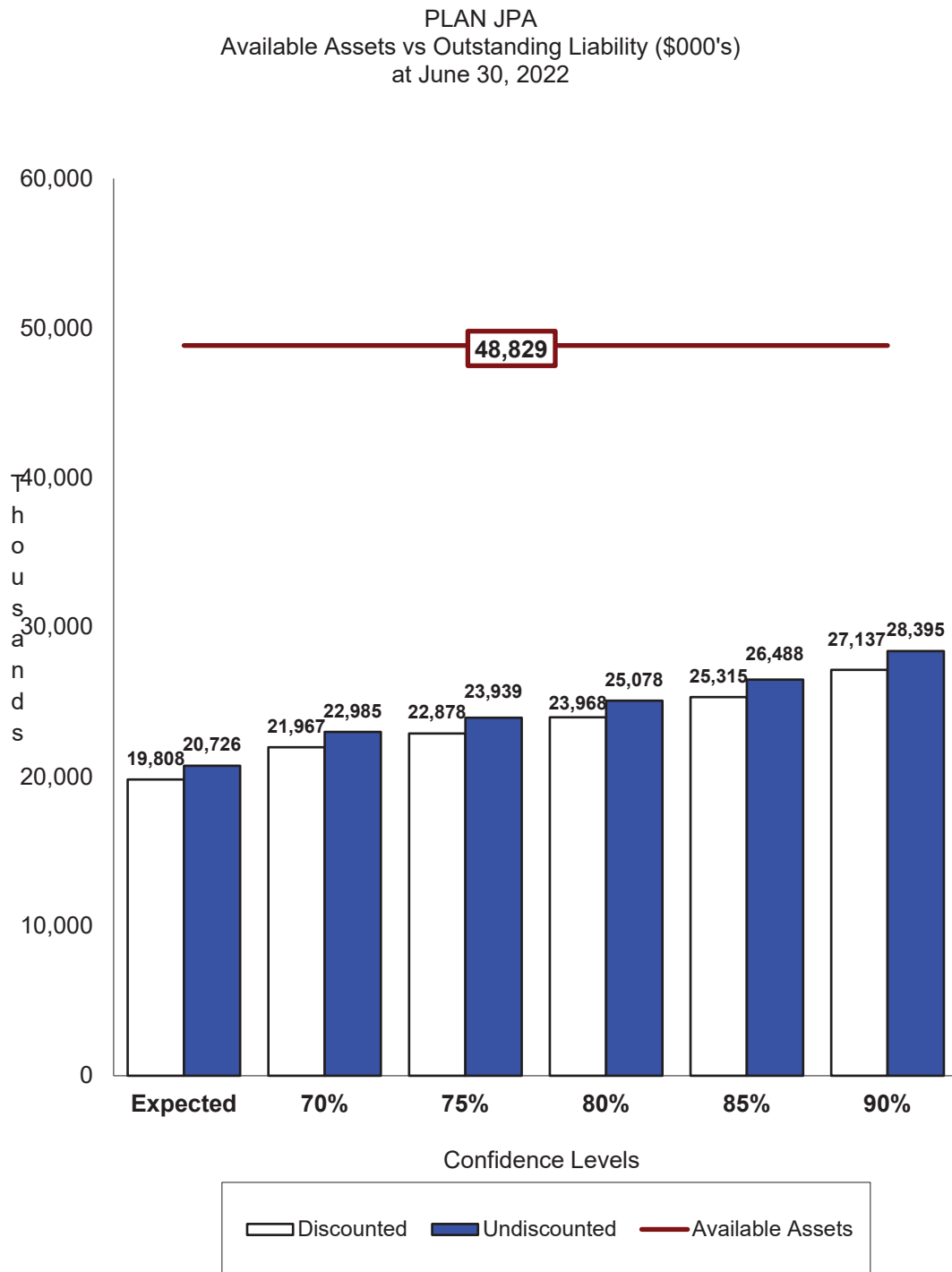
A. LIABILITY FOR OUTSTANDING CLAIMS AS OF JUNE 30, 2022

Graph 1 on the following page summarizes our assessment of the PLAN JPA's funding position as of June 30, 2022. 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, 2022 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 \$20,726,000. 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.

Graph 1



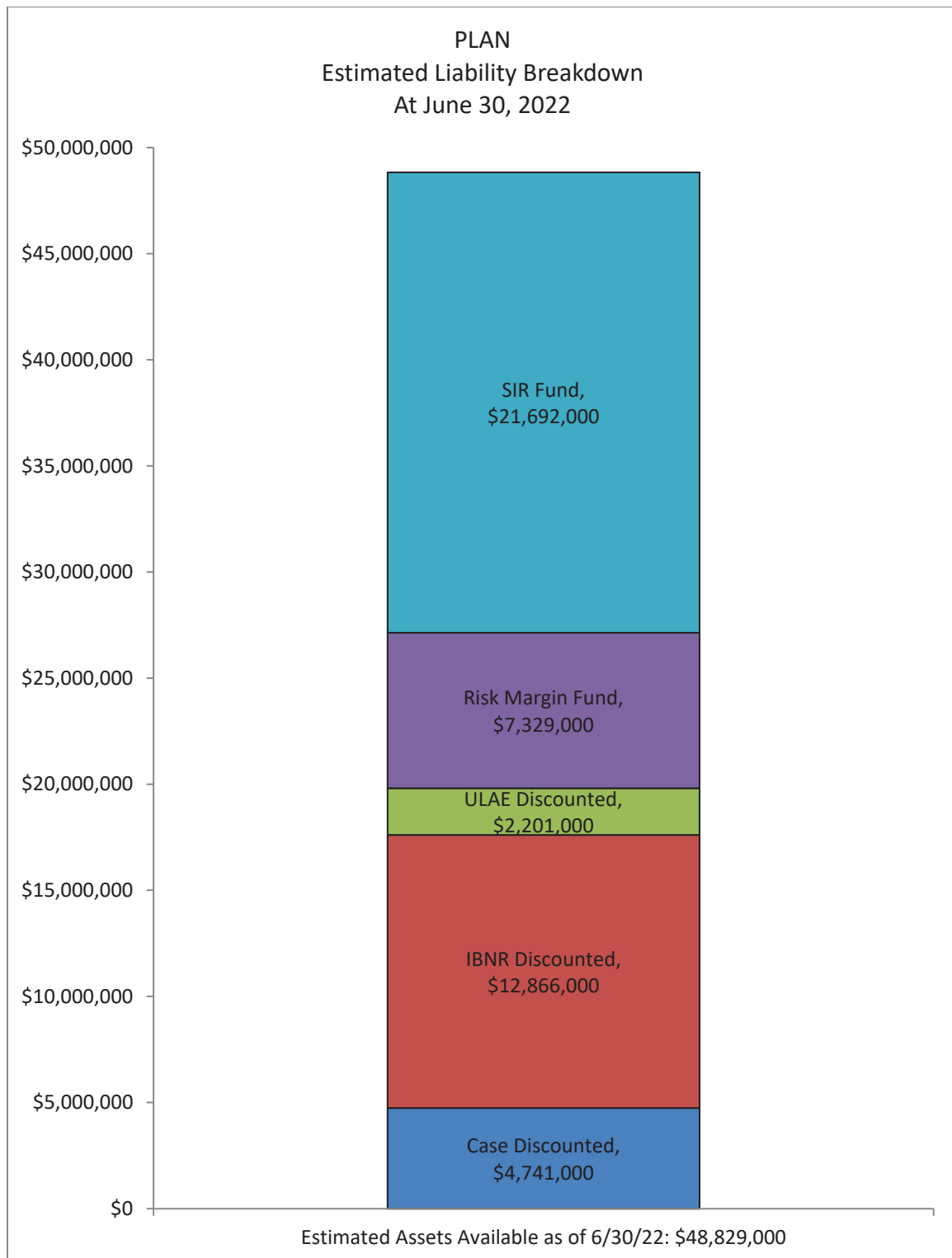
The PLAN can earn investment income on the assets it holds until claims payments come due. Assuming a long-term average annual return on investments of 2.0%, we estimate the impact of investment income earnings to be about 4.4% if the program is funded within the range indicated in Graph 1. Investment 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 \$19,808,000 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.

Liability for Outstanding Claims at 6/30/22						
Confidence Levels	Expected	70%	75%	80%	85%	90%
Not Discounted	\$20,726,000	\$22,985,000	\$23,939,000	\$25,078,000	\$26,488,000	\$28,395,000
Discounted	19,808,000	21,967,000	22,878,000	23,968,000	25,315,000	27,137,000
Assets Available at 6/30/22	\$48,829,000					

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. Optimally, the amount should be sufficient to bring funding to the 75% to 85% confidence level. We consider funding to the 90% confidence level to be conservative.

The following chart shows the breakdown of PLAN's estimated assets available as of June 30, 2022. The discounted value of PLAN's estimated case reserves, IBNR and ULAE as of June 30, 2022 are \$4,741,000, \$12,866,000, and \$2,201,000, respectively. An additional \$7,329,000 increases the funding to 90% confidence.



B. COSTS OF 2022-23 CLAIMS

The following chart shows our funding recommendations for PLAN for the 2022-23 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	\$4,972,000	\$4,813,000	\$4,662,000
60% Confidence Level	5,102,000	4,938,000	4,783,000
70% Confidence Level	5,828,000	5,641,000	5,464,000
80% Confidence Level	6,787,000	6,570,000	6,364,000
90% Confidence Level	8,309,000	8,043,000	7,790,000

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.

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 Statements #10 and #30.

The PLAN has separated, to some extent, the funding goals for its self-insurance program from these accounting guidelines. GASB #10 and #30 do not address funding requirements. They do, however, allow a range of funded amounts to be recognized for accounting purposes, specifically GASB #10 and #30 allow recognition of a funding margin for unexpectedly adverse loss experience.

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

We also strongly believe, however, that 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's other budgetary constraints, and the relative

level of risk it is believed appropriate to assume. This means formulating both short- and long-term funding goals, which may be the same in some years, but different in others.

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

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

<u>Funding Benchmarks</u>	<u>Score (SIR: \$2.5M)</u>	<u>Score (SIR: \$1M)</u>	<u>Target</u>	<u>Result</u>
Net Assets to SIR	11.61	29.02	>5 : 1	Pass
SIR fund to SIR	8.68	21.69	> 2 : 1	Pass
Net Premium to Net Assets	0.18	0.18	< 2 : 1	Pass
Claim Reserve/IBNR to Net Assets	0.61	0.61	< 3 : 1	Pass
Ultimate Loss Development to Net Assets	-18%	-18%	< 20%	Pass

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	2021-22 \$1.0M/\$30M	2022-23 \$1.0M/\$30M		
Member	Prior Funding	Proposed Funding	Dollar Change	Percent Change
American Canyon	\$366,248	\$428,830	\$62,581	17.09%
Atherton	241,418	300,792	59,374	24.59%
Benicia	764,947	892,720	127,773	16.70%
Burlingame	677,137	860,957	183,820	27.15%
Campbell	814,430	853,727	39,297	4.83%
Colma	106,988	120,302	13,314	12.44%
Cupertino	708,593	953,479	244,887	34.56%
Dublin	708,418	1,062,627	354,209	50.00%
East Palo Alto	497,809	713,791	215,982	43.39%
Foster City	462,331	642,442	180,111	38.96%
Half Moon Bay	237,854	262,330	24,477	10.29%
Hillsborough	362,411	373,163	10,752	2.97%
Los Altos Hills	232,844	203,286	(29,558)	-12.69%
Los Gatos	587,027	601,390	14,363	2.45%
Millbrae	490,019	535,284	45,265	9.24%
Milpitas	1,283,279	1,776,078	492,800	38.40%
Morgan Hill	1,148,574	1,178,729	30,156	2.63%
Newark	963,154	1,033,474	70,320	7.30%
Pacifica	1,029,312	1,051,731	22,419	2.18%
Portola Valley	107,940	118,977	11,038	10.23%
Ross, Town of	88,562	91,799	3,238	3.66%
San Bruno	1,255,750	1,329,032	73,282	5.84%
San Carlos	963,495	781,034	(182,462)	-18.94%
Saratoga	430,311	645,467	215,156	50.00%
South SF	1,476,305	1,376,528	(99,777)	-6.76%
Suisun City	389,892	584,838	194,946	50.00%
Tiburon	188,307	233,242	44,935	23.86%
Woodside	141,802	160,526	18,725	13.20%
Total	\$16,725,157	\$19,166,577	\$2,441,420	14.60%

As shown in the previous table, total PLAN contributions are \$19,166,577, 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 2022-23. 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 (2016-17 through 2020-21) 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 2022-23 are \$2,342,577. Total PLAN administrative expenses of \$2,342,577 are split into \$1,874,062 for general liability and \$468,515 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 \$773,050 and 28 members for the 2022-23 fiscal year, this results in an initial charge of \$27,609 per member.

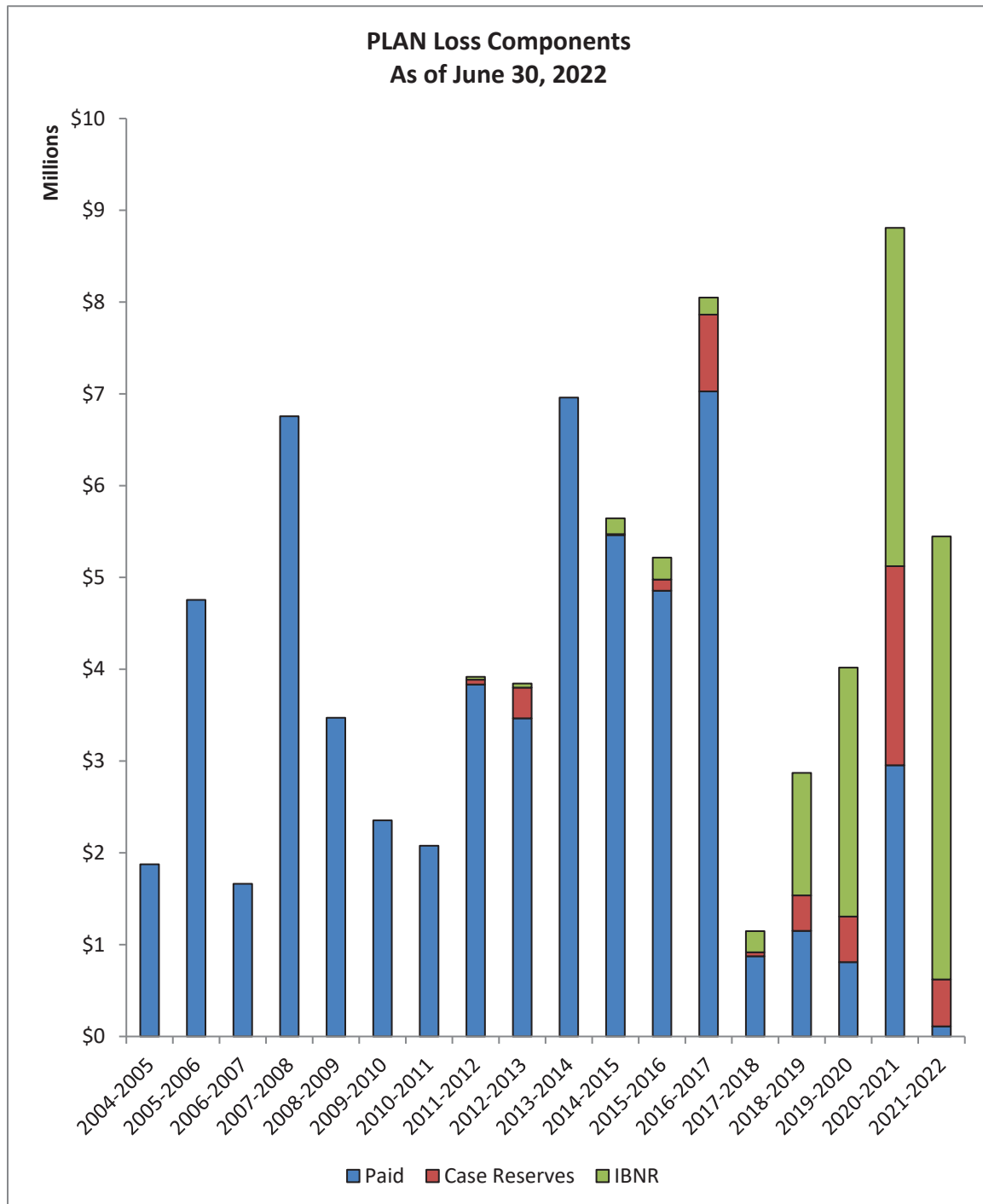
The remaining sixty-seven percent of administrative expenses are assumed to vary by member and are initially allocated based upon one-third weight to reported claims

greater than \$1 (i.e. excluding claims closed without payment) and two-thirds weight to paid losses in the period 2016-17 through 2020-21. Liability and Property are treated separately for the allocation, then added into the premium in total.

In order to prevent extreme year-to-year fluctuations in each member's deposit, there is a limit in the annual change in deposit between the upcoming year and the current year. As directed by PLAN, the annual change in deposit is limited to 50%, assuming the member keeps the same deductible. The net impact of limiting the change in deposit is spread back to all members whose deposits are not already limited so that total deposit collected for the 2022-23 after limiting will be equal to prior deposit.

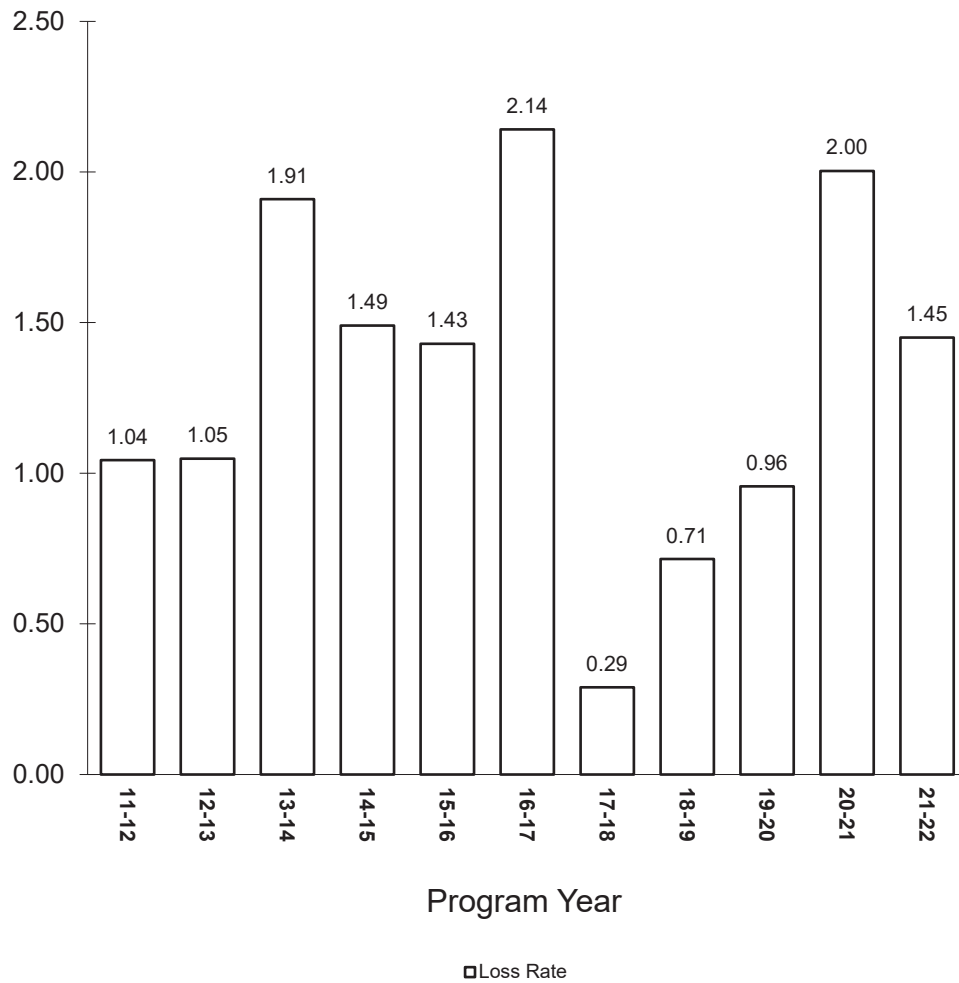
D. OTHER RESULTS

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



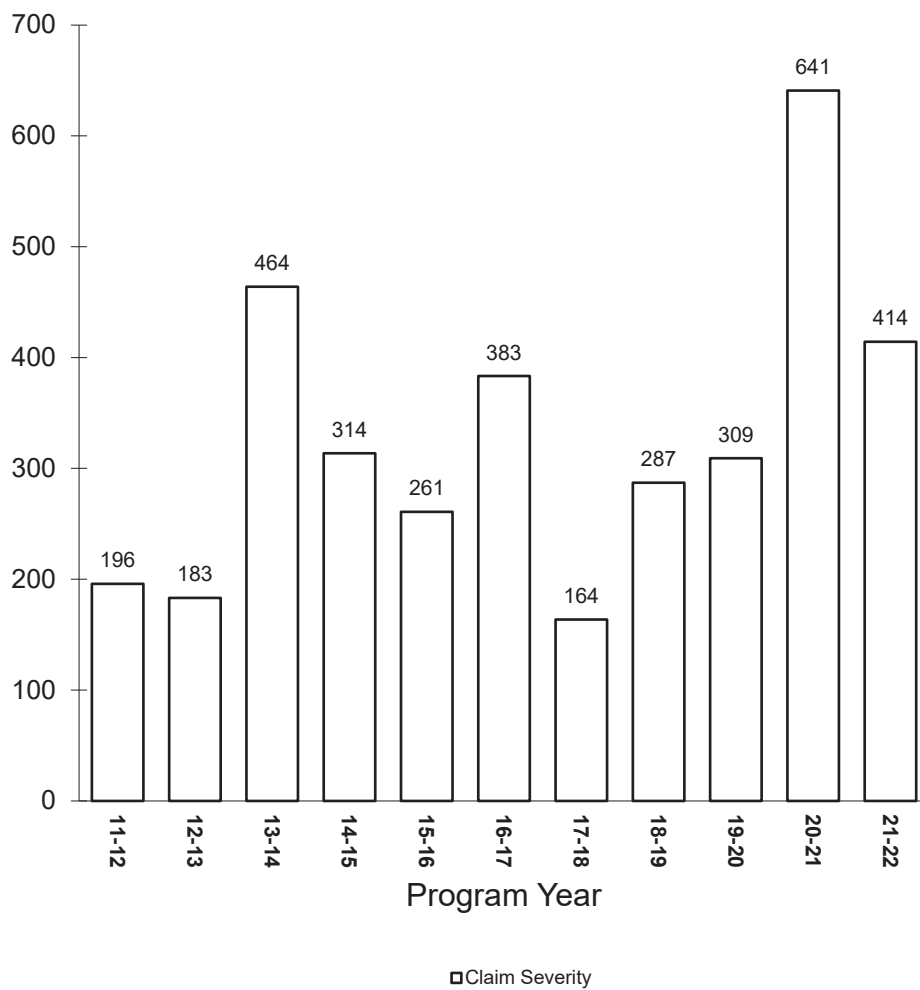
PLAN's loss rate per \$100 of payroll has varied significantly over the past ten years. The projected loss rate of \$1.45 per \$100 of payroll for the 2021-22 year is based on the long-term average.

**Indicated Loss Rate per \$100 of Payroll
Pool Layer**



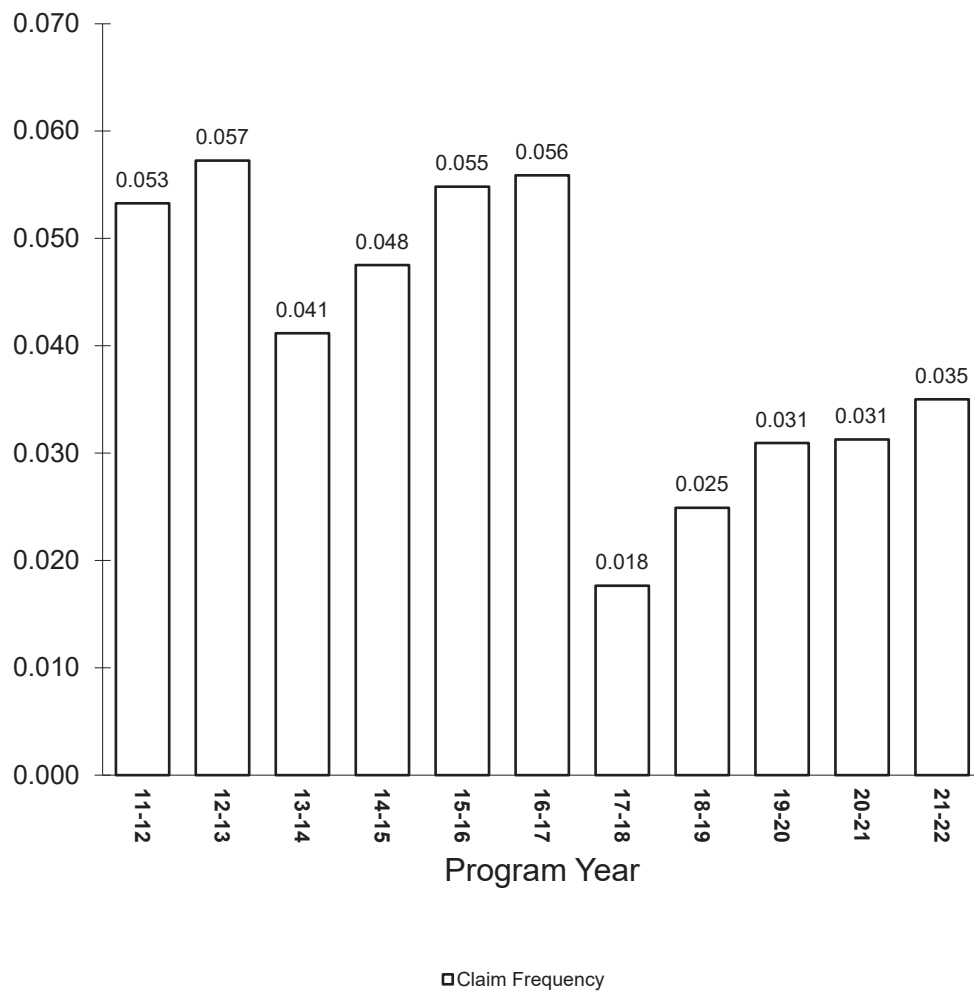
The program's cost per claim averaged \$189,500 per claim prior to 2013-14. Since then the severity averaged \$350,000 in the latest eight years. The projected severity for the 2021-22 program year of \$414,000 is based on this increasing trend. The claim severities in the following chart are limited to pool limits.

**Indicated Severity
Pool Layer (\$000)**



PLAN's claims frequency per \$1 million of payroll averaged 0.052 claims per \$1 million of payroll during the 2011-12 through 2016-17 years. However, the average frequency for the latest four years decreased to 0.026 claims per \$1 million of payroll. The projected frequency for the 2021-22 program year of 0.035 is based on the long-term average.

Indicated Frequency Pool Layer



E. COMPARISON WITH OUR PREVIOUS RESULTS

The prior report for PLAN was dated August 4, 2021. In the table below we display actual versus expected development of incurred losses and ALAE by accident year between the December 31, 2020 evaluation date of the prior report and the December 31, 2021 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
1986-01	\$1,000	\$0	(\$1,000)
2001-02	0	0	0
2002-03	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	(1,000)	(1,000)
2009-10	0	0	0
2010-11	0	0	0
2011-12	19,000	0	(19,000)
2012-13	37,000	0	(37,000)
2013-14	47,000	0	(47,000)
2014-15	91,000	0	(91,000)
2015-16	80,000	(130,000)	(210,000)
2016-17	247,000	761,000	514,000
2017-18	1,085,000	(53,000)	(1,138,000)
2018-19	1,571,000	434,000	(1,137,000)
2019-20	2,480,000	304,000	(2,176,000)
2020-21	975,000	1,789,000	814,000
Total	\$6,633,000	\$3,104,000	(\$3,529,000)

As shown, actual incurred development was less than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that incurred losses through accident year 2020-21 would increase by \$6,633,000 between the two evaluation dates. However, actual development was approximately \$3,104,000; or about \$3,529,000 less than expected.

In the table below we display actual versus expected development of paid losses and ALAE by accident year between the December 31, 2020 evaluation date of the prior report and the December 31, 2021 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
1986-01	\$2,000	\$0	(\$2,000)
2001-02	0	0	0
2002-03	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	(1,000)	(1,000)
2009-10	0	0	0
2010-11	0	0	0
2011-12	41,000	2,000	(39,000)
2012-13	209,000	18,000	(191,000)
2013-14	64,000	0	(64,000)
2014-15	160,000	0	(160,000)
2015-16	407,000	204,000	(203,000)
2016-17	952,000	1,709,000	757,000
2017-18	912,000	38,000	(874,000)
2018-19	1,516,000	540,000	(976,000)
2019-20	955,000	56,000	(899,000)
2020-21	280,000	2,431,000	2,151,000
Total	\$5,498,000	\$4,997,000	(\$501,000)

As shown, actual paid development was less than anticipated since the prior report. Based on the assumptions from the prior report, it was expected that paid losses through accident year 2020-21 would increase by \$5,498,000 between the two evaluation dates. However, actual development was approximately \$4,997,000; or about \$501,000 less 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

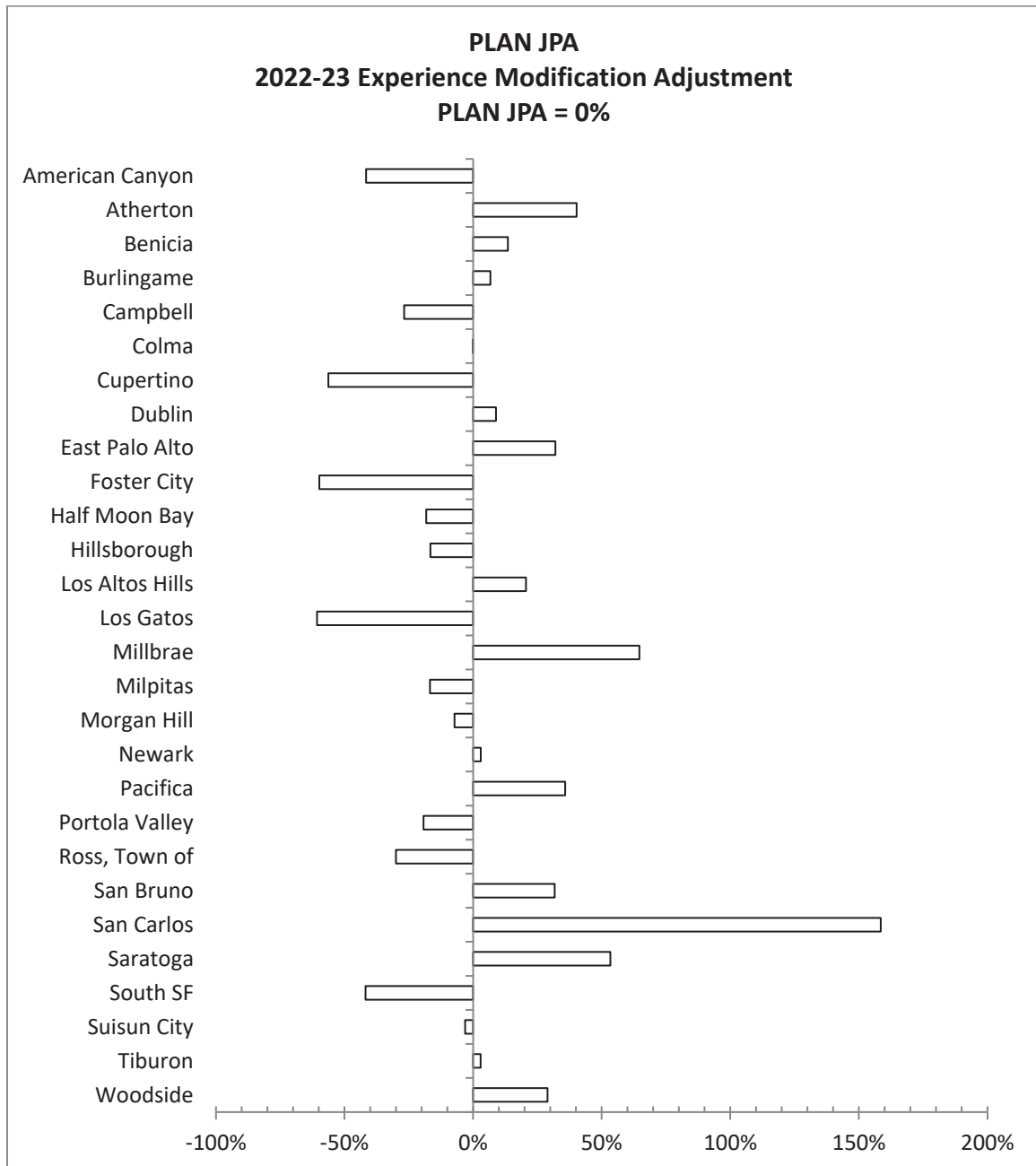
Accident Year	Prior Report	Current Report	Change
1986-01	\$30,004,000	\$30,004,000	\$0
2001-02	4,627,000	4,627,000	0
2002-03	8,812,000	8,812,000	0
2003-04	2,574,000	2,574,000	0
2004-05	1,874,000	1,874,000	0
2005-06	4,756,000	4,756,000	0
2006-07	1,662,000	1,662,000	0
2007-08	6,756,000	6,756,000	0
2008-09	3,473,000	3,472,000	(1,000)
2009-10	2,353,000	2,353,000	0
2010-11	2,077,000	2,077,000	0
2011-12	3,936,000	3,917,000	(19,000)
2012-13	3,883,000	3,845,000	(38,000)
2013-14	7,087,000	6,959,000	(128,000)
2014-15	5,760,000	5,644,000	(116,000)
2015-16	5,413,000	5,216,000	(197,000)
2016-17	7,698,000	8,049,000	351,000
2017-18	3,013,000	1,146,000	(1,867,000)
2018-19	4,147,000	2,871,000	(1,276,000)
2019-20	5,859,000	4,018,000	(1,841,000)
2020-21	6,997,000	8,808,000	1,811,000
Total	\$122,761,000	\$119,440,000	(\$3,321,000)

As shown, overall we have decreased our estimated ultimate losses by \$3,321,000 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 2022-23 funding and actual 2021-22 funding by member.

Member	2021-22 Actual Funding	2022-23 Proposed Funding	Dollar Change	Percent Change
American Canyon	\$366,248	\$428,830	\$62,581	17.09%
Atherton	241,418	300,792	59,374	24.59%
Benicia	764,947	892,720	127,773	16.70%
Burlingame	677,137	860,957	183,820	27.15%
Campbell	814,430	853,727	39,297	4.83%
Colma	106,988	120,302	13,314	12.44%
Cupertino	708,593	953,479	244,887	34.56%
Dublin	708,418	1,062,627	354,209	50.00%
East Palo Alto	497,809	713,791	215,982	43.39%
Foster City	462,331	642,442	180,111	38.96%
Half Moon Bay	237,854	262,330	24,477	10.29%
Hillsborough	362,411	373,163	10,752	2.97%
Los Altos Hills	232,844	203,286	(29,558)	-12.69%
Los Gatos	587,027	601,390	14,363	2.45%
Millbrae	490,019	535,284	45,265	9.24%
Milpitas	1,283,279	1,776,078	492,800	38.40%
Morgan Hill	1,148,574	1,178,729	30,156	2.63%
Newark	963,154	1,033,474	70,320	7.30%
Pacifica	1,029,312	1,051,731	22,419	2.18%
Portola Valley	107,940	118,977	11,038	10.23%
Ross, Town of	88,562	91,799	3,238	3.66%
San Bruno	1,255,750	1,329,032	73,282	5.84%
San Carlos	963,495	781,034	(182,462)	-18.94%
Saratoga	430,311	645,467	215,156	50.00%
South SF	1,476,305	1,376,528	(99,777)	-6.76%
Suisun City	389,892	584,838	194,946	50.00%
Tiburon	188,307	233,242	44,935	23.86%
Woodside	141,802	160,526	18,725	13.20%
Total	\$16,725,157	\$19,166,577	\$2,441,420	14.60%

The following table displays PLAN JPA members' 2022-23 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, 2021. This data appeared to be consistent with the data provided for prior reviews.

We were provided with fiscal year payrolls for the 2020-21, 2021-22 and 2022-23 program years.

Excess insurance premium is estimated to be \$11,722,000 for the \$1 million to \$30 million layer. Premiums for individual layers are estimated based upon pool limits factors.

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

III. ASSUMPTIONS AND LIMITATIONS

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

- Our analysis is based on loss experience, exposure data, and other general and specific information provided to us by PLAN. We have accepted all of this information without audit.
- We have also made use of loss statistics that have been developed from the information gathered and compiled from other California public entities with self-insured excess liability program.
- We have assumed that the future development of incurred and paid losses can be reasonably predicted on the basis of development of such losses in the recent past. We have also assumed that the historical development patterns for the participants of other California public entities with self-insured liability programs in the aggregate form a reasonable basis of comparison to the patterns from PLAN's data.
- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial reviews of other California public entities with self-insured liability programs.
- We have assumed that there is a continuing relationship between past and future loss costs.
- It is not possible to predict future claim costs precisely. Most of the cost of liability claims arise from a small number of incidents involving serious injury. A relatively small number of such claims could generate enough loss dollars to significantly reduce, or even deplete, the self-insurance fund.
- We cannot predict and have not attempted to predict the impact of future law changes and court rulings on claims costs. This is one major reason why we believe our funding recommendations are reasonable now, but should not be extrapolated into the future.

- We have assumed that the loss costs associated with liability claims are increasing at 6.5% per year. We have assumed that the average claim size is stable and that the average number of claims per \$1 million increases at 6.5% 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 \$48,829,000 as of June 30, 2022 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.)

PLAN JPA

Summary of 2022-23 Deposit by Retention Limit

Member (A)	2021-22 Premium Deposit (B)	Total Deposit \$1 Million Retention Limit \$30 Million (C)	Indicated Dollar Change (D)	Indicated Percent Change (E)	Total Deposit Capped at +/- 50% (F)	Total Percent Change (G)
American Canyon	\$366,248	\$426,269	\$60,021	16.4%	428,830	17.1%
Atherton	241,418	298,996	57,578	23.8%	300,792	24.6%
Benicia	764,947	887,389	122,442	16.0%	892,720	16.7%
Burlingame	677,137	855,816	178,679	26.4%	860,957	27.1%
Campbell	814,430	848,629	34,199	4.2%	853,727	4.8%
Colma	106,988	119,583	12,595	11.8%	120,302	12.4%
Cupertino	708,593	947,786	239,193	33.8%	953,479	34.6%
Dublin	708,418	1,122,844	414,426	58.5%	1,062,627	50.0%
East Palo Alto	497,809	709,529	211,720	42.5%	713,791	43.4%
Foster City	462,331	638,606	176,274	38.1%	642,442	39.0%
Half Moon Bay	237,854	260,764	22,910	9.6%	262,330	10.3%
Hillsborough	362,411	370,935	8,524	2.4%	373,163	3.0%
Los Altos Hills	232,844	202,072	(30,772)	-13.2%	203,286	-12.7%
Los Gatos	587,027	597,799	10,772	1.8%	601,390	2.4%
Millbrae	490,019	532,087	42,069	8.6%	535,284	9.2%
Milpitas	1,283,279	1,765,473	482,194	37.6%	1,776,078	38.4%
Morgan Hill	1,148,574	1,171,691	23,117	2.0%	1,178,729	2.6%
Newark	963,154	1,027,303	64,149	6.7%	1,033,474	7.3%
Pacifica	1,029,312	1,045,451	16,139	1.6%	1,051,731	2.2%
Portola Valley	107,940	118,267	10,327	9.6%	118,977	10.2%
Ross, Town of	88,562	91,251	2,689	3.0%	91,799	3.7%
San Bruno	1,255,750	1,321,096	65,346	5.2%	1,329,032	5.8%
San Carlos	963,495	776,370	(187,125)	-19.4%	781,034	-18.9%
Saratoga	430,311	672,298	241,987	56.2%	645,467	50.0%
South SF	1,476,305	1,368,309	(107,997)	-7.3%	1,376,528	-6.8%
Suisun City	389,892	598,546	208,654	53.5%	584,838	50.0%
Tiburon	188,307	231,850	43,543	23.1%	233,242	23.9%
Woodside	141,802	159,568	17,766	12.5%	160,526	13.2%
Total	\$16,725,157	\$19,166,577	\$2,441,420	14.6%	\$19,166,577	

(B) From provided by PLAN JPA.

(C) From Exhibit 1 - Page 2a

(D) (C) - (B)

(E) (C) / (B) - 1

(F) (E) Capped at +/-50%

PLAN JPA

Split of 2022-23 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	\$74,249	\$292,721	\$59,299	\$426,269
Atherton	157,010	97,039	44,947	298,996
Benicia	406,546	381,500	99,343	887,389
Burlingame	191,796	418,579	245,441	855,816
Campbell	183,678	584,443	80,508	848,629
Colma	53,231	23,345	43,008	119,583
Cupertino	74,188	825,394	48,203	947,786
Dublin	145,196	910,374	67,274	1,122,844
East Palo Alto	201,964	427,078	80,486	709,529
Foster City	106,622	462,145	69,839	638,606
Half Moon Bay	50,918	173,209	36,636	260,764
Hillsborough	140,567	160,292	70,076	370,935
Los Altos Hills	50,785	118,062	33,225	202,072
Los Gatos	107,079	433,917	56,803	597,799
Millbrae	140,686	316,742	74,660	532,087
Milpitas	552,618	1,064,713	148,142	1,765,473
Morgan Hill	298,746	666,636	206,309	1,171,691
Newark	245,712	687,533	94,057	1,027,303
Pacifica	385,060	533,180	127,211	1,045,451
Portola Valley	25,263	64,167	28,837	118,267
Ross, Town of	27,341	35,841	28,069	91,251
San Bruno	450,194	632,329	238,574	1,321,096
San Carlos	292,712	419,536	64,122	776,370
Saratoga	193,507	429,836	48,955	672,298
South SF	299,668	944,709	123,932	1,368,309
Suisun City	139,577	406,421	52,548	598,546
Tiburon	61,774	133,063	37,012	231,850
Woodside	45,312	79,196	35,060	159,568
Total	\$5,102,000	\$11,722,000	\$2,342,577	\$19,166,577

(B) From Exhibit 1, Page 2b.

(C) From Exhibit 1, Page 2b.

(D) From Exhibit 1, Page 2b.

(E) (B) + (C) + (D)

PLAN JPA

2022-23 Deposit by Member
\$1.0M Retention / \$30M Limit

Member (A)	Deductible (B)	Deductible Factor (C)	Adjusted Experience Modification Factor (D)	2022-23 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	1.403	58%	85,038	70,846	74,249	292,721	59,299	426,269
Atherton	25,000	1.403	140%	74,867	149,815	157,010	97,039	44,947	298,996
Benicia	25,000	1.403	114%	239,540	387,916	406,546	381,500	99,343	887,389
Burlingame	250,000	0.622	107%	271,151	183,007	191,796	418,579	245,441	855,816
Campbell	100,000	1.000	73%	235,577	175,261	183,678	584,443	80,508	848,629
Colma	50,000	1.230	100%	40,653	50,791	53,231	23,345	43,008	119,583
Cupertino	250,000	0.622	44%	255,934	70,789	74,188	825,394	48,203	947,786
Dublin	50,000	1.230	109%	101,718	138,543	145,196	910,374	67,274	1,122,844
East Palo Alto	100,000	1.000	132%	143,546	192,709	201,964	427,078	80,486	709,529
Foster City	100,000	1.000	40%	248,749	101,736	106,622	462,145	69,839	638,606
Half Moon Bay	50,000	1.230	82%	47,486	48,585	50,918	173,209	36,636	260,764
Hillsborough	50,000	1.230	83%	128,612	134,126	140,567	160,292	70,076	370,935
Los Altos Hills	25,000	1.403	121%	28,174	48,458	50,785	118,062	33,225	202,072
Los Gatos	50,000	1.230	39%	207,729	102,172	107,079	433,917	56,803	597,799
Millbrae	100,000	1.000	165%	80,165	134,239	140,686	316,742	74,660	532,087
Milpitas	100,000	1.000	83%	623,171	527,294	552,618	1,064,713	148,142	1,765,473
Morgan Hill	100,000	1.000	93%	302,233	285,056	298,746	666,636	206,309	1,171,691
Newark	100,000	1.000	103%	223,832	234,452	245,712	687,533	94,057	1,027,303
Pacifica	50,000	1.230	136%	216,335	367,414	385,060	533,180	127,211	1,045,451
Portola Valley	25,000	1.403	81%	20,935	24,105	25,263	64,167	28,837	118,267
Ross, Town of	25,000	1.403	70%	26,123	26,089	27,341	35,841	28,069	91,251
San Bruno	100,000	1.000	132%	320,646	429,563	450,194	632,329	238,574	1,321,096
San Carlos	100,000	1.000	259%	106,244	279,299	292,712	419,536	64,122	776,370
Saratoga	25,000	1.403	153%	84,366	184,640	193,507	429,836	48,955	672,298
South SF	100,000	1.000	58%	483,190	285,935	299,668	944,709	123,932	1,368,309
Suisun City	25,000	1.403	97%	96,358	133,181	139,577	406,421	52,548	598,546
Tiburon	50,000	1.230	103%	45,792	58,944	61,774	133,063	37,012	231,850
Woodside	25,000	1.403	129%	23,506	43,236	45,312	79,196	35,060	159,568
Total		1.054	94%	4,761,670	4,868,199	5,102,000	11,722,000	2,342,577	19,166,577

(B) Provided by PLAN

(C) From Exhibit 3, Page 2.

(D) From Exhibit 1, Page 6.

(E) From Exhibit 3, Page 1.

(G) { [\$5,102,000 / Total (E)] x [(C) / Weighted Average of (C)] x (D) x (E)}.

\$5,102,000 is the discounted expected loss & ALAE at 60% CL from Exhibit 2, Page 1a. (2.0% Discount Rate).

(H) From Exhibit 1, page 3.

(I) Provided by PLAN

(J) (G) + (H) + (I)

PLAN JPA

2022-23 Allocation of Excess Insurance Premium by Member

Member (A)	2022-23 Population (B)	Percent 2022-23 Population (C)	2022-23 Excess Insurance \$29M XS \$1M (D)
American Canyon	20,802	2.50%	292,721
Atherton	6,896	0.83%	97,039
Benicia	27,111	3.25%	381,500
Burlingame	29,746	3.57%	418,579
Campbell	41,533	4.99%	584,443
Colma	1,659	0.20%	23,345
Cupertino	58,656	7.04%	825,394
Dublin	64,695	7.77%	910,374
East Palo Alto	30,350	3.64%	427,078
Foster City	32,842	3.94%	462,145
Half Moon Bay	12,309	1.48%	173,209
Hillsborough	11,391	1.37%	160,292
Los Altos Hills	8,390	1.01%	118,062
Los Gatos	30,836	3.70%	433,917
Millbrae	22,509	2.70%	316,742
Milpitas	75,663	9.08%	1,064,713
Morgan Hill	47,374	5.69%	666,636
Newark	48,859	5.87%	687,533
Pacifica	37,890	4.55%	533,180
Portola Valley	4,560	0.55%	64,167
Ross, Town of	2,547	0.31%	35,841
San Bruno	44,936	5.39%	632,329
San Carlos	29,814	3.58%	419,536
Saratoga	30,546	3.67%	429,836
South SF	67,135	8.06%	944,709
Suisun City	28,882	3.47%	406,421
Tiburon	9,456	1.14%	133,063
Woodside	5,628	0.68%	79,196
Total	833,015	100.0%	11,722,000

(B) Provided by PLAN JPA.

(C) (B) / Total (B)

(D) (C) X Total (D)

PLAN JPA

2022-23 Allocation of Variable Administrative Expenses by Member
Property Claims

Member (A)	Property Reported Counts > \$1 2016-17 2020-21 (B)	Property Paid Losses 2016-17 2020-21 (C)	Percent Property Reported Counts > \$1 (D)	Percent Property Paid Losses 2016-17 2020-21 (E)	Percent Property Variable Administrative Expenses (G)	Property Variable Administrative Expenses (H)
American Canyon	11	461,878	7.01%	8.95%	8.30%	26,064
Atherton	5	13,362	3.18%	0.26%	1.23%	3,874
Benicia	10	429,237	6.37%	8.32%	7.67%	24,073
Burlingame	1	95,000	0.64%	1.84%	1.44%	4,519
Campbell	4	327,286	2.55%	6.34%	5.08%	15,940
Colma	7	38,641	4.46%	0.75%	1.99%	6,232
Cupertino	1	0	0.64%	0.00%	0.21%	666
Dublin	6	48,645	3.82%	0.94%	1.90%	5,972
East Palo Alto	21	187,349	13.38%	3.63%	6.88%	21,594
Foster City	6	431,019	3.82%	8.35%	6.84%	21,480
Half Moon Bay	1	0	0.64%	0.00%	0.21%	666
Hillsborough	6	22,667	3.82%	0.44%	1.57%	4,918
Los Altos Hills	4	15,467	2.55%	0.30%	1.05%	3,293
Los Gatos	8	110,050	5.10%	2.13%	3.12%	9,795
Millbrae	3	97,017	1.91%	1.88%	1.89%	5,934
Milpitas	16	302,185	10.19%	5.86%	7.30%	22,919
Morgan Hill	5	374,153	3.18%	7.25%	5.90%	18,507
Newark	5	156,593	3.18%	3.03%	3.08%	9,683
Pacifica	2	765,322	1.27%	14.83%	10.31%	32,372
Portola Valley	1	210	0.64%	0.00%	0.22%	675
Ross, Town of	0	0	0.00%	0.00%	0.00%	0
San Bruno	8	1,042,105	5.10%	20.20%	15.16%	47,597
San Carlos	4	7,951	2.55%	0.15%	0.95%	2,988
Saratoga	3	35,396	1.91%	0.69%	1.09%	3,435
South SF	13	164,195	8.28%	3.18%	4.88%	15,323
Suisun City	3	22,122	1.91%	0.43%	0.92%	2,897
Tiburon	2	0	1.27%	0.00%	0.42%	1,333
Woodside	1	12,000	0.64%	0.23%	0.37%	1,153
Total	157	5,159,848	100.00%	100.00%	100.00%	313,905

(B) Based on reported claims count > \$1 for 2016-17 2020-21 from Appendix E, Page 8.
Reported property claims for 2016-17 2020-21 included.

(C) Based on paid losses limited to SIR for 2016-17 2020-21 from Appendix E, Page 6b.
Property paid losses limited to SIR for 2016-17 2020-21 are included.

(D) (B) / Total (B)

(E) (C) / Total (C)

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

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

Total variable liability expenses are equal to 13.4% of total expenses. Total expenses of \$2,342,577 projected by PLAN JPA.

PLAN JPA

2022-23 Allocation of Variable Administrative Expenses by Member
Liability Claims

Member (A)	Liability Reported Counts > \$1 2016-17 2020-21 (B)	Liability Paid Losses 2016-17 2020-21 (C)	Percent Liability Reported Counts > \$1 (D)	Percent Liability Paid Losses 2016-17 2020-21 (E)	Percent Liability Variable Administrative Expenses (G)	Liability Variable Administrative Expenses (H)
American Canyon	8	42,386	0.88%	0.23%	0.45%	5,627
Atherton	8	212,992	0.88%	1.17%	1.07%	13,464
Benicia	57	466,789	6.26%	2.56%	3.80%	47,660
Burlingame	69	3,952,516	7.58%	21.69%	16.99%	213,313
Campbell	47	333,979	5.16%	1.83%	2.94%	36,960
Colma	13	69,376	1.43%	0.38%	0.73%	9,166
Cupertino	31	123,424	3.41%	0.68%	1.59%	19,928
Dublin	19	543,213	2.09%	2.98%	2.68%	33,694
East Palo Alto	25	430,665	2.75%	2.36%	2.49%	31,283
Foster City	25	201,382	2.75%	1.11%	1.65%	20,750
Half Moon Bay	12	61,858	1.32%	0.34%	0.67%	8,361
Hillsborough	55	266,709	6.04%	1.46%	2.99%	37,549
Los Altos Hills	4	10,513	0.44%	0.06%	0.18%	2,323
Los Gatos	32	101,891	3.52%	0.56%	1.54%	19,399
Millbrae	27	624,706	2.97%	3.43%	3.27%	41,117
Milpitas	73	1,393,974	8.02%	7.65%	7.77%	97,614
Morgan Hill	55	2,936,379	6.04%	16.12%	12.76%	160,193
Newark	43	805,144	4.73%	4.42%	4.52%	56,765
Pacifica	39	1,072,982	4.29%	5.89%	5.35%	67,230
Portola Valley	1	2,027	0.11%	0.01%	0.04%	553
Ross, Town of	1	0	0.11%	0.00%	0.04%	460
San Bruno	87	2,685,121	9.56%	14.74%	13.01%	163,368
San Carlos	29	439,416	3.19%	2.41%	2.67%	33,525
Saratoga	18	209,661	1.98%	1.15%	1.43%	17,911
South SF	87	892,159	9.56%	4.90%	6.45%	81,000
Suisun City	26	219,508	2.86%	1.20%	1.76%	22,042
Tiburon	11	65,547	1.21%	0.36%	0.64%	8,070
Woodside	8	56,989	0.88%	0.31%	0.50%	6,298
Total	910	18,221,306	100.00%	100.00%	100.00%	1,255,621

(B) Based on reported claims count > \$1 for 2016-17 2020-21 from Appendix E, Page 8.

(C) Based on paid losses limited to SIR for 2016-17 2020-21 from Appendix E, Page 6b.

(D) (B) / Total (B)

(E) (C) / Total (C)

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

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

Total variable liability expenses are equal to 53.6% of total expenses. Total expenses of \$2,342,577 projected by PLAN JPA.

PLAN JPA

Calculation of Experience Modification Factors by Member

Member (A)	2016-17 2020-21 Limited Incurred Losses (B)	2016-17 2020-21 Payroll (00) (C)	Percent Incurred Losses (D)	Percent Payroll (E)	Indicated Differential (F)	Credibility (G)	2022-23 Indicated Experience Modification Factor (H)	2021-22 Capped Experience Modification Factor (I)	+/- 30% Capped Experience Modification Factor (J)	Change In Experience Modification Factor (K)
American Canyon	42,386	358,813	0.3%	1.7%	0.168	50%	58%	60.9%	58.4%	-4.1%
Atherton	335,187	237,453	2.3%	1.1%	2.007	40%	140%	130.4%	140.3%	7.6%
Benicia	1,196,649	985,555	8.1%	4.7%	1.726	80%	158%	87.3%	113.5%	30.0%
Burlingame	965,563	1,178,152	6.5%	5.6%	1.165	80%	113%	82.1%	106.7%	30.0%
Campbell	557,564	1,192,680	3.8%	5.7%	0.665	80%	73%	82.1%	73.2%	-10.9%
Colma	187,341	215,443	1.3%	1.0%	1.236	40%	109%	76.8%	99.9%	30.0%
Cupertino	227,959	1,092,418	1.5%	5.2%	0.297	80%	44%	38.7%	43.7%	13.1%
Dublin	782,104	473,213	5.3%	2.2%	2.349	60%	181%	83.8%	108.9%	30.0%
East Palo Alto	512,231	474,751	3.5%	2.3%	1.534	60%	132%	117.4%	132.0%	12.4%
Foster City	273,513	1,250,155	1.8%	5.9%	0.311	80%	45%	30.9%	40.2%	30.0%
Half Moon Bay	80,165	209,078	0.5%	1.0%	0.545	40%	82%	76.0%	81.8%	7.7%
Hillsborough	266,716	524,393	1.8%	2.5%	0.723	60%	83%	91.1%	83.4%	-8.4%
Los Altos Hills	11,015	121,768	0.1%	0.6%	0.129	30%	74%	172.2%	120.6%	-30.0%
Los Gatos	154,070	906,652	1.0%	4.3%	0.242	80%	39%	48.3%	39.3%	-18.6%
Millbrae	554,946	379,636	3.7%	1.8%	2.078	60%	165%	231.0%	164.7%	-28.7%
Milpitas	1,508,750	2,636,478	10.2%	12.5%	0.813	90%	83%	87.2%	83.2%	-4.6%
Morgan Hill	857,552	1,340,436	5.8%	6.4%	0.909	80%	93%	113.5%	92.8%	-18.3%
Newark	748,679	1,025,678	5.0%	4.9%	1.038	80%	103%	97.9%	103.0%	5.2%
Pacifica	951,326	934,328	6.4%	4.4%	1.447	80%	136%	151.0%	135.8%	-10.1%
Portola Valley	2,027	81,329	0.0%	0.4%	0.035	20%	81%	80.8%	80.7%	-0.1%
Ross, Town of	1	110,151	0.0%	0.5%	0.000	30%	70%	70.0%	70.0%	0.0%
San Bruno	1,447,758	1,473,317	9.8%	7.0%	1.397	80%	132%	142.8%	131.7%	-7.8%
San Carlos	667,344	426,966	4.5%	2.0%	2.222	60%	173%	369.3%	258.5%	-30.0%
Saratoga	499,324	343,210	3.4%	1.6%	2.068	50%	153%	140.1%	153.4%	9.5%
South SF	942,147	2,500,927	6.4%	11.9%	0.535	90%	58%	73.0%	58.2%	-20.3%
Suisun City	473,890	325,674	3.2%	1.5%	2.068	50%	153%	74.5%	96.9%	30.0%
Tiburon	306,491	183,801	2.1%	0.9%	2.370	40%	155%	79.2%	102.9%	30.0%
Woodside	277,217	97,910	1.9%	0.5%	4.025	20%	160%	99.2%	128.9%	30.0%
Total	14,829,915	21,080,363	100.0%	100.0%	1.000	100%	101%		95%	

(B) Based on losses limited to \$250,000 for 2016-17 to 2020-21 from Exhibit 1, Page 7

(C) Based on payroll for 2016-17 to 2020-21 from ,

(D) (B) / Total (B)

(E) (C) / Total (C)

(F) (D) / (E)

(G) [(C) / ((C) + 30,000,000)]. Limited to minimum of 10% and maximum of 90%, and rounded to the nearest 10%.

(H) ((F) x (G)) + (1.00 - (G))

(I) Prior X-Mod.

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

(K) (J) / (I) - 1

PLAN JPA

Limited Incurred Losses

Member (A)	2016-17 (B)	2017-18 (C)	2018-19 (D)	2019-20 (E)	2020-21 (F)
American Canyon	11,618	30,538	0	230	0
Atherton	110,707	857	2,494	2,234	218,895
Benicia	100,689	232,424	22,137	176,668	664,732
Burlingame	301,970	167,689	41,049	136,361	318,495
Campbell	138,659	159,039	11,050	214,105	34,711
Colma	1,498	42,689	5,416	4,774	132,964
Cupertino	6,140	13,431	117,335	55,508	35,545
Dublin	115,452	1,434	250,530	31,707	382,981
East Palo Alto	227,202	141,796	2,375	127,783	13,075
Foster City	29,686	21,810	26,791	184,219	11,006
Half Moon Bay	0	8,914	1,200	62,126	7,924
Hillsborough	144,307	15,748	53,735	34,097	18,829
Los Altos Hills	513	0	0	10,502	
Los Gatos	32,021	46,081	5,875	8,452	61,640
Millbrae	411,143	101,504	17,641	5,789	18,869
Milpitas	525,827	313,944	177,102	241,754	250,124
Morgan Hill	383,125	270,161	33,287	113,462	57,517
Newark	265,762	63,884	58,362	92,900	267,771
Pacifica	342,112	81,679	370,548	4,924	152,062
Portola Valley		2,027	0	0	
Ross, Town of	0		0		1
San Bruno	471,033	499,624	67,238	224,669	185,193
San Carlos	3,831	38,641	425,276	189,073	10,523
Saratoga	72,767	6,559	289,996	130,000	2
South SF	683,553	126,262	53,885	45,008	33,439
Suisun City	4,668	10,468	70,580	207,757	180,417
Tiburon	34,402		0	21,676	250,413
Woodside	43,184	8,000	0	1,367	224,666
Total	4,461,870	2,405,204	2,103,903	2,327,142	3,531,795

PLAN JPA
Pool LayerFunding Options for 2022-2023 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)		4,761,670	4,761,670	4,761,670	4,761,670	4,761,670
(B) Average SIR Discount factor:		105.4%	105.4%	105.4%	105.4%	105.4%
(C) Base Loss Rate:		\$1.060	\$1.319	\$1.369	\$1.485	\$1.522
(D) PLAN JPA Expected Losses:		\$5,318,000	\$6,615,000	\$6,868,000	\$7,449,000	\$7,638,000
(E) Discount Factor for Future Funding: at 2% interest		93.5%	93.5%	93.5%	93.5%	93.5%
(F) Estimated Cost of Excess Insurance		\$11,722,000	\$8,863,000	\$8,308,000	\$7,025,000	\$6,609,000
(G) Estimated Administration Expenses		\$2,343,000	\$2,343,000	\$2,343,000	\$2,343,000	\$2,343,000
(H) Discounted Losses w/ Excess Insurance		\$19,037,000	\$17,391,000	\$17,073,000	\$16,333,000	\$16,094,000
(I) 60% Confidence Margin	1.026	129,000	161,000	168,000	181,000	186,000
70% Confidence Margin	1.172	855,000	1,064,000	1,105,000	1,198,000	1,228,000
80% Confidence Margin	1.365	1,815,000	2,258,000	2,344,000	2,542,000	2,607,000
90% Confidence Margin	1.671	3,337,000	4,150,000	4,309,000	4,674,000	4,792,000
(J) Funding at the 60% confidence Level:		19,166,000	17,552,000	17,241,000	16,514,000	16,280,000
Funding at the 70% confidence Level:		19,892,000	18,455,000	18,178,000	17,531,000	17,322,000
Funding at the 80% confidence Level:		20,852,000	19,649,000	19,417,000	18,875,000	18,701,000
Funding at the 90% confidence Level:		22,374,000	21,541,000	21,382,000	21,007,000	20,886,000
(A) From , .						
(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 \$11,722,000 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)						

PLAN JPA
Pool LayerFunding Options for 2022-2023 Losses
2.0% Discount Rate

	\$1M Retention \$30M Limit
(A) Payroll (\$00's)	4,761,670
(B) Average SIR Discount factor:	105.4%
(C) Base Loss Rate:	\$1.060
(D) PLAN JPA Expected Losses:	\$5,318,000
(E) Discount Factor for Future Funding: at 2% interest	93.5%
(F) Estimated Cost of Excess Insurance	\$11,722,000
(G) Estimated Administration Expenses	\$2,343,000
(H) Discounted Losses w/ Excess Insurance	\$19,037,000
(I) 60% Confidence Margin	129,000
70% Confidence Margin	855,000
80% Confidence Margin	1,815,000
90% Confidence Margin	3,337,000
(J) Funding at the 60% confidence Level:	19,166,000
Funding at the 70% confidence Level:	19,892,000
Funding at the 80% confidence Level:	20,852,000
Funding at the 90% confidence Level:	22,374,000
(A) From , .	
(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) Provided by PLAN JPA.	
(G) Provided by PLAN JPA.	
(H) (D) x (E) + (F) + (G)	
(I) Based on \$100K to \$1M Rate Analysis Appendix G	
(J) (H) + (I)	

PLAN JPA
Pool Layer

Selected 2022-2023 Base Loss Rate (\$100K - \$1M Layer)

		Current 2022-2023	Prior 2021-2022
(A)	Estimated based on \$1M Ultimate Less \$100K Ultimate	\$1.051	\$1.076
(B)	Estimated based on \$100K - \$1M Analysis:	1.061	1.061
(C)	Estimated based on \$100K Analysis & Size of Loss Factors:	1.055	1.037
(D)	Selected Base Loss Rate (\$100K - \$1M Layer):	1.060	1.060
(E)	Factor to \$1.0M Retention	1.000	1.000
	Factor to \$2.0M Retention	1.244	1.244
	Factor to \$2.5M Retention	1.291	1.291
	Factor to \$3.0M Retention	1.362	1.362
	Factor to \$3.5M Retention	1.378	1.378
	Factor to \$4.0M Retention	1.401	1.401
	Factor to \$5.0M Retention	1.436	1.436
(F)	Selected Base Loss Rate for \$1.0M Retention :	\$1.060	\$1.060
	Selected Base Loss Rate for \$2.0M Retention :	1.319	1.319
	Selected Base Loss Rate for \$2.5M Retention :	1.369	1.369
	Selected Base Loss Rate for \$3.0M Retention :	1.444	1.444
	Selected Base Loss Rate for \$3.5M Retention :	1.460	1.460
	Selected Base Loss Rate for \$4.0M Retention :	1.485	1.485
	Selected Base Loss Rate for \$5.0M Retention :	1.522	1.522

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

Member	X-MOD Experience Period												PLAN JPA											
	Historical Payroll By Member												Historical Payroll By Member											
	2021-22	2020-21	2019-20	2018-19	2017-18	2016-17	2015-16	2014-15	2013-14	2012-13	2011-12	2010-11	2009-10	2008-09	2007-08	2006-07	2005-06	2004-05	2003-04	2002-03	2001-02	2000-01	1999-00	
American Canyon	85,038	82,561	67,674	76,546	71,504	73,529	69,561	64,947	62,832	59,261	56,164	53,981	56,022	63,972	63,432	58,502	54,210	48,886	41,573	34,774	28,801	23,329	21,177	20,203
Atherton	74,867	72,687	51,210	48,404	48,829	45,445	43,565	41,078	38,491	34,000	34,592	36,802	45,381	50,023	50,796	45,874	45,055	45,194	43,882	41,735	40,574	32,989	26,438	30,482
Benicia	239,340	232,563	220,431	204,187	195,449	190,907	174,580	173,400	168,219	161,532	169,601	171,303	182,687	198,410	225,356	216,184	202,790	186,246	176,805	168,413	159,140	146,155	133,716	122,153
Burlingame	271,151	263,234	238,964	251,655	244,121	226,049	196,142	211,620	204,811	226,244	212,557	222,582	196,076	220,383	232,462	230,613	216,855	210,827	206,662	205,624	205,991	195,222	173,377	146,874
Campbell	235,577	228,715	238,045	255,640	241,923	232,507	224,585	219,282	202,300	186,236	182,084	174,052	169,237	182,887	179,241	173,961	165,454	162,011	163,179	162,967	155,318	142,955	130,119	126,874
Colma	40,653	39,469	46,434	44,486	44,629	40,153	39,739	36,261	32,798	34,461	33,463	36,130	34,548	33,406	35,110	35,626	35,236	30,768	27,803	25,229	21,834	20,566	19,108	16,198
Cupertino	255,934	248,480	236,636	231,368	218,591	210,161	195,661	173,727	161,102	151,388	147,032	140,304	140,719	140,147	135,281	128,347	121,432	115,940	115,054	112,134	109,351	94,215	84,590	90,186
East Palo Alto	101,718	98,756	93,603	97,221	95,973	93,651	92,564	81,926	82,125	96,655	95,638	98,599	108,795	105,568	104,042	109,195	104,812	102,953	95,207	90,196	44,190	37,520	32,110	26,570
Foster City	248,749	241,504	220,415	226,687	263,534	275,599	263,920	245,194	234,067	197,640	236,679	215,001	229,560	283,752	260,152	250,629	237,184	230,922	227,263	227,324	225,614	209,424	189,817	177,988
Half Moon Bay	47,486	46,103	42,032	50,635	44,685	41,399	30,328	25,309	19,966	23,164	18,107	18,975	42,436	53,954	64,070	72,572	72,027	66,403	58,039	53,898	53,734	49,001	41,546	36,128
Hillsborough	128,612	124,866	116,374	109,048	102,940	101,065	94,966	85,298	78,341	84,635	85,353	82,536	91,127	94,376	95,120	89,252	82,257	78,219	69,089	61,053	58,055	59,743	57,700	50,339
Los Altos Hills	28,174	27,354	29,198	27,922	24,483	20,742	19,024	18,097	17,831	17,747	19,300	18,321	18,579	18,952	17,168	16,045	16,038	15,289	14,424	14,484	14,819	13,461	11,175	10,538
Los Gatos	207,729	201,679	204,277	191,197	182,860	167,907	160,411	156,997	152,590	153,503	155,665	157,468	152,679	155,119	165,399	157,508	150,600	148,037	144,536	143,117	142,289	132,046	116,501	104,685
Milbrae	80,165	77,831	70,605	78,661	84,069	78,738	67,563	63,586	76,638	73,789	70,939	68,090	67,768	67,446	67,519	66,372	64,075	69,650	71,640	69,901	79,854	80,079	70,992	65,384
Morgan Hill	623,171	605,020	573,193	525,414	467,593	448,555	419,722	381,307	356,375	356,375	403,269	403,269	428,492	516,308	525,480	519,865	506,534	510,706	517,325	513,319	483,543	417,519	380,864	390,828
Newark	302,233	293,430	272,857	274,915	273,262	267,465	251,938	239,627	202,443	183,195	167,140	165,575	167,044	200,336	204,796	190,530	172,093	149,919	137,728	124,354	114,774	113,909	100,320	82,561
Pacifica	223,832	217,313	198,877	211,197	213,924	207,069	193,612	179,059	175,394	172,576	160,369	162,569	154,950	259,438	298,331	305,613	300,480	288,155	294,338	289,438	253,146	222,908	206,155	188,202
Portola Valley	216,335	210,034	198,237	186,500	187,895	176,823	184,874	168,836	164,792	163,285	163,989	170,266	188,468	174,664	178,353	175,683	170,265	158,652	151,102	147,091	143,911	137,863	125,728	114,410
Ross, Town of	20,935	20,325	17,163	16,549	16,001	16,637	14,979	12,541	13,637	12,265	10,881	12,035	12,308	11,973	11,341	10,378	9,112	8,314	8,311	8,167	7,505	6,758	6,420	5,936
San Bruno	26,123	25,362	21,610	23,395	22,187	22,304	20,655	18,705	17,852	13,324	15,066	25,237	25,270	24,782	24,902	21,107	18,825	17,180	15,692	14,306	12,401	12,583	12,980	12,988
San Carlos	320,646	311,307	295,367	306,329	299,658	286,052	285,710	269,032	253,278	242,461	236,970	230,925	233,714	220,779	202,857	206,968	207,920	203,992	204,509	201,479	190,694	169,404	146,559	146,559
San Jose	106,244	103,150	90,744	92,075	84,072	79,879	80,196	69,256	65,545	62,150	88,708	73,340	78,628	116,455	110,995	107,921	111,044	110,501	105,698	106,674	105,202	100,881	90,088	78,508
San Mateo	84,366	81,909	74,247	71,248	68,692	65,333	63,691	61,993	57,618	56,508	54,527	53,195	53,060	62,759	53,711	49,948	45,739	41,102	38,859	39,497	39,416	35,396	29,873	26,608
South SF	483,190	469,116	465,097	471,026	486,223	548,505	530,076	481,353	509,905	492,016	487,646	485,900	485,791	493,074	516,356	498,645	439,070	413,129	435,324	424,355	409,682	390,342	359,016	331,372
Suisun City	96,388	93,552	75,233	71,140	64,867	58,784	55,650	56,250	53,967	54,989	57,679	65,699	67,250	65,168	68,617	59,200	57,315	50,974	51,221	50,443	50,101	48,106	44,248	40,541
Thurston	45,792	44,458	39,549	41,159	35,379	34,840	32,874	23,351	22,110	21,897	21,895	21,688	24,396	24,670	25,801	24,651	17,072	14,394	14,107	13,989	13,313	11,851	10,344	9,276
Woodside	23,506	22,821	21,284	20,468	18,755	18,618	16,765	20,365	21,603	19,994	21,440	24,433	26,217	25,788	23,573	27,389	19,923	17,941	16,600	16,971	15,628	12,982	11,468	10,144
Total	4,761,670	4,622,980	4,396,808	4,346,148	4,265,647	4,135,396	3,936,364	3,697,212	3,550,523	3,430,028	3,480,180	3,457,490	3,534,443	3,940,725	4,049,436	3,909,370	3,705,140	3,557,514	3,500,006	3,401,137	3,255,273	2,986,375	2,694,385	2,454,227

PLAN JPA

Member Deductibles

Member	2022-23	2021-22
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 2022-2023

At Various Discount Rates and Confidence Levels

I. Funding Guidelines for Discounted Outstanding Liabilities at 6/30/22

Investment Rate	Expected Confidence Level	70% Confidence Level	75% Confidence Level	80% Confidence Level	85% Confidence Level	90% Confidence Level
1.0%	\$20,256,000	\$22,464,000	\$23,396,000	\$24,510,000	\$25,887,000	\$27,751,000
1.5%	20,030,000	22,213,000	23,135,000	24,236,000	25,598,000	27,441,000
2.0%	19,808,000	21,967,000	22,878,000	23,968,000	25,315,000	27,137,000
2.5%	19,592,000	21,728,000	22,629,000	23,706,000	25,039,000	26,841,000
3.0%	19,380,000	21,492,000	22,384,000	23,450,000	24,768,000	26,551,000
3.5%	19,173,000	21,263,000	22,145,000	23,199,000	24,503,000	26,267,000
4.0%	18,971,000	21,039,000	21,912,000	22,955,000	24,245,000	25,990,000

II. Funding Options for Program Year 2022-2023

Investment Rate	Expected Confidence Level	60% Confidence Level	70% Confidence Level	80% Confidence Level	90% Confidence Level
1.0%	\$19,206,000	\$19,340,000	\$20,090,000	\$21,082,000	\$22,655,000
1.5%	19,120,000	19,251,000	19,990,000	20,965,000	22,512,000
2.0%	19,037,000	19,166,000	19,892,000	20,852,000	22,374,000
2.5%	18,957,000	19,084,000	19,798,000	20,743,000	22,239,000
3.0%	18,878,000	19,003,000	19,706,000	20,635,000	22,108,000
3.5%	18,802,000	18,925,000	19,617,000	20,531,000	21,980,000
4.0%	18,727,000	18,848,000	19,529,000	20,429,000	21,855,000

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)
2000-2001	1,719,728	2.281	3,922,700	4,426,994	0.886
2001-2002	2,949,541	2.193	6,468,343	4,793,823	1.349
2002-2003	4,237,463	2.108	8,932,572	5,201,926	1.717
2003-2004	2,205,881	2.028	4,473,527	5,302,373	0.844
2004-2005	1,424,731	1.949	2,776,801	5,323,509	0.522
2005-2006	2,684,321	1.875	5,033,102	5,279,351	0.953
2006-2007	1,419,184	1.803	2,558,789	5,365,043	0.477
2007-2008	2,651,368	1.733	4,594,821	5,523,940	0.832
2008-2009	2,652,344	1.667	4,421,457	5,584,172	0.792
2009-2010	1,335,978	1.603	2,141,573	5,300,275	0.404
2010-2011	1,557,549	1.541	2,400,183	4,637,189	0.518
2011-2012	3,503,000	1.482	5,191,446	4,425,587	1.173
2012-2013	3,577,000	1.425	5,097,225	4,346,745	1.173
2013-2014	2,088,304	1.370	2,860,976	4,181,204	0.684
2014-2015	3,799,380	1.317	5,003,783	4,221,572	1.185
2015-2016	3,287,000	1.267	4,164,629	4,288,766	0.971
2016-2017	5,426,000	1.218	6,608,868	4,455,964	1.483
2017-2018	1,170,000	1.171	1,370,070	4,565,477	0.300
2018-2019	1,910,000	1.125	2,148,750	4,594,102	0.468
2019-2020	2,371,000	1.082	2,565,422	4,567,802	0.562
2020-2021	4,818,000	1.040	5,010,720	4,506,728	1.112
Totals	\$56,787,772		\$87,745,757	100,892,542	\$0.870
11/12-16/17	21,680,684		28,926,927	25,919,838	1.116
11/12-20/21	31,949,684		40,021,889	44,153,947	0.906
(F) Selected Limited Rate:					\$1.020
Prior:					\$1.020
Program Year:	2021-2022	2022-2023			
(G) Factor to SIR:	1.000	1.000			
(H) Trend Factor:	1.000	1.040			
(I) Program Rate:	\$1.020	\$1.061			
(J) Trended Payroll (\$00):	4,622,980	4,761,670			
(K) Projected Program Losses:	4,715,000	5,052,000			
(L) Projected ULAE:	0	0			
(M) Projected Loss and ULAE:	\$4,715,000	\$5,052,000			

Notes appear on the next page.

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

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

Notes:

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

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

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

Reported Loss Development

Accident Year (A)	Limited Reported Losses as of 12/31/21 (B)	Reported Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Reported Losses of 12/31/21 (E)	Reported Loss Development Factor (F)	Ultimate Program Losses (G)
2000-2001	\$1,719,728	1.000	\$1,719,728	\$1,719,728	1.000	\$1,719,728
2001-2002	2,949,541	1.000	2,949,541	2,949,541	1.000	2,949,541
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	2,652,344	1.001	2,654,996	2,652,344	1.001	2,654,996
2009-2010	1,335,978	1.003	1,339,986	1,335,978	1.003	1,339,986
2010-2011	1,557,549	1.006	1,566,894	1,557,549	1.006	1,566,894
2011-2012	3,468,509	1.010	3,503,194	3,468,509	1.010	3,503,194
2012-2013	3,524,416	1.015	3,577,282	3,524,416	1.015	3,577,282
2013-2014	2,088,304	1.025	2,140,512	2,088,304	1.025	2,140,512
2014-2015	3,799,380	1.040	3,951,355	3,799,380	1.040	3,951,355
2015-2016	3,125,229	1.052	3,287,741	3,125,229	1.052	3,287,741
2016-2017	5,165,945	1.063	5,491,400	5,165,945	1.063	5,491,400
2017-2018	773,258	1.098	760,837	773,258	1.098	760,837
2018-2019	717,128	1.265	907,167	717,128	1.265	907,167
2019-2020	66,812	1.762	117,723	66,812	1.762	117,723
2020-2021	2,019,771	4.097	8,275,002	2,019,771	4.097	8,275,002
Totals	\$49,586,840		\$56,866,306	\$49,586,840		\$56,866,306

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

Accident Year	Limited Losses Reported as of:										
	6 Months	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months
2000-2001				898,513	1,005,578	1,060,578	1,023,612	1,023,612	964,842	964,842	1,825,620
2001-2002			965,485	958,981	953,812	1,008,532	1,579,410	1,581,139	1,581,139	2,382,404	2,382,404
2002-2003		365,699	1,446,885	1,633,894	2,059,086	2,967,377	2,941,383	2,955,718	2,956,981	2,951,981	3,039,481
2003-2004	365,543	1,476,042	3,953,355	3,589,550	4,887,581	4,262,606	4,441,309	4,901,984	4,966,984	5,011,984	3,560,542
2004-2005		66,478	363,636	398,884	890,862	986,705	3,560,692	3,460,542	3,560,542	2,866,202	2,866,155
2005-2006		586,598	1,140,449	1,700,075	1,700,074	2,861,424	2,893,524	2,858,702	3,795,674	3,789,394	3,789,394
2006-2007	25,000	331,278	1,741,278	2,362,206	3,669,875	3,689,497	3,765,682	3,394,986	3,394,936	3,394,936	3,394,936
2007-2008	200,000	292,450	332,811	3,039,627	3,179,650	3,297,534	4,358,070	4,259,056	4,259,284	4,259,284	4,259,284
2008-2009	100,000	633,000	3,743,710	4,332,780	4,420,360	3,430,417	3,345,621	3,347,708	3,346,029	3,347,708	3,336,906
2009-2010		2,839,064	3,484,984	3,288,639	3,131,959	3,127,921	3,127,921	3,127,921	3,127,921	3,127,921	3,127,921
2010-2011	763,697	3,371,740	3,848,137	2,650,741	2,519,762	2,455,668	2,409,001	2,409,001	2,396,051	2,396,051	2,396,051
2011-2012	510,509	2,770,955	3,631,019	3,415,805	3,302,356	3,237,194	3,127,725	3,127,725	3,127,725	3,127,725	3,127,725
2012-2013	602,255	4,254,395	3,881,185	3,547,144	3,502,651	3,489,052	3,450,659	3,459,906	3,559,906	3,559,906	
2013-2014	842,948	2,251,578	2,694,553	2,631,490	2,671,389	2,539,618	2,539,618	2,539,618	2,539,618		
2014-2015	325,035	2,666,242	3,946,907	3,795,367	3,350,810	3,291,420	3,281,784				
2015-2016	371,511	2,328,347	4,341,861	3,149,726	3,155,562	3,143,331	3,135,461				
2016-2017	290,633	3,737,779	2,754,128	2,812,484	2,851,248	2,931,044					
2017-2018	199,803	1,368,867	1,871,566	1,908,433	1,873,364						
2018-2019	65,888	691,395	1,755,631	1,596,209							
2019-2020	184,043	934,320	2,260,330								
2020-2021	23,204,597	2,532,027									
2021-2022	415,421										

	Reported Loss Development Factors:										
	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months
2000-2001				1.119	1.055	0.965	1.000	0.943	1.000	1.892	1.000
2001-2002			0.993	0.995	1.057	1.566	1.001	1.000	1.507	1.000	1.000
2002-2003		3.956	1.129	1.260	1.441	0.991	1.005	1.000	0.998	1.030	1.638
2003-2004	4.038	2.678	0.908	1.362	0.872	1.042	1.104	1.013	1.009	0.710	1.000
2004-2005		5.470	1.097	2.233	1.108	3.609	0.972	1.029	0.805	1.000	1.001
2005-2006		1.944	1.491	1.000	1.683	1.011	0.988	1.328	0.998	1.000	1.000
2006-2007	13.251	5.256	1.357	1.554	1.005	1.021	0.902	1.000	1.000	1.000	1.000
2007-2008	1.462	1.138	9.133	1.046	1.037	1.322	0.977	1.000	1.000	1.000	0.977
2008-2009	6.330	5.914	1.157	1.020	0.776	0.975	1.001	0.999	1.001	0.997	1.003
2009-2010		1.228	0.944	0.952	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2010-2011	4.415	1.141	0.689	0.951	0.975	0.981	1.000	0.995	1.000	1.000	1.000
2011-2012	5.428	1.310	0.941	0.967	0.980	0.966	1.000	1.000	1.000	1.000	
2012-2013	7.064	0.912	0.914	0.987	0.996	0.989	1.003	1.029	1.000		
2013-2014	2.671	1.197	0.977	1.015	0.951	1.000	1.000	1.000			
2014-2015	8.203	1.480	0.962	0.883	0.982	0.997	1.000				
2015-2016	6.267	1.865	0.725	1.002	0.996	0.997					
2016-2017	12.861	0.737	1.021	1.014	1.028						
2017-2018	6.851	1.367	1.020	0.982							
2018-2019	10.493	2.539	0.909								
2019-2020	5.077	2.419									
2020-2021	0.109										

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months
Average Dollar-Weighted Averages	6.301	2.364	1.465	1.130	1.055	1.215	0.997	1.024	1.024	1.052	1.056
3-yr	0.177	1.966	0.990	1.001	1.001	0.998	1.001	1.011	1.000	1.000	1.001
4-yr	0.234	1.284	0.883	0.963	0.990	0.996	1.001	1.008	1.000	0.999	0.993
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	1.334	1.166	1.053	1.018	1.016	1.015	1.010	1.005	1.004
Selected	5.500	2.325	1.393	1.152	1.033	1.010	1.011	1.015	1.010	1.005	1.004
Cumulated	22.534	4.097	1.762	1.265	1.098	1.063	1.052	1.040	1.025	1.015	1.010

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

Accident Year	Limited Losses Reported as of:										
	138 Months	150 Months	162 Months	174 Months	186 Months	198 Months	210 Months	222 Months	234 Months	246 Months	258 Months
2000-2001	1,825,620	1,825,620	2,482,404	2,482,404	2,485,232	2,482,404	2,485,232	2,485,232	2,485,232	2,485,232	4,217,210
2001-2002	2,382,504	3,027,919	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	7,414,620	
2002-2003	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	5,444,013		
2003-2004	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542			
2004-2005	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654				
2005-2006	3,789,394	3,788,958	3,788,958	3,788,958	3,788,958	3,788,958					
2006-2007	3,394,936	3,400,836	3,400,836	3,425,837	3,408,506						
2007-2008	4,159,284	4,259,284	4,259,284								
2008-2009	3,347,708	3,347,708	3,347,708								
2009-2010	3,127,921	3,127,921									
2010-2011	2,396,051										
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											

Reported Loss Development Factors:

	138-150 Months	150-162 Months	162-174 Months	174-186 Months	186-198 Months	198-210 Months	210-222 Months	222-234 Months	234-246 Months	246-258 Months	258-Ult. Months
2000-2001	1.000	1.360	1.000	1.001	0.999	1.001	1.000	1.000	1.000	1.697	
2001-2002	1.271	0.995	1.000	1.000	1.000	1.000	1.000	1.000	2.462		
2002-2003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.094			
2003-2004	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2004-2005	1.000	1.000	1.000	1.000	1.000	1.000					
2005-2006	1.000	1.000	1.000	1.000	1.000						
2006-2007	1.002	1.000	1.007	0.995							
2007-2008	1.024	1.000	1.000								
2008-2009	1.000	1.000									
2009-2010	1.000										
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
Average	1.030	1.039	1.001	0.999	1.000	1.000	1.000	1.031	1.731	1.697	
Dollar-Weighted											
Averages											
3-yr	1.009	1.000	1.002	0.998	1.000	1.000	1.000	1.045			
4-yr	1.008	1.000	1.002	0.999	1.000	1.000	1.000				
Comparative											
Factors	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.003	1.002	1.001	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

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

Paid Loss Development

Accident Year (A)	Limited Paid Losses as of 12/31/21 (B)	Paid Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Paid Losses of 12/31/21 (E)	Paid Loss Development Factor (F)	Ultimate Program Losses (G)
2000-2001	\$1,719,728	1.000	\$1,719,728	\$1,719,728	1.000	\$1,719,728
2001-2002	2,949,541	1.000	2,949,541	2,949,541	1.000	2,949,541
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	2,652,344	1.001	2,654,996	2,652,344	1.001	2,654,996
2009-2010	1,335,978	1.003	1,339,986	1,335,978	1.003	1,339,986
2010-2011	1,557,549	1.006	1,566,894	1,557,549	1.006	1,566,894
2011-2012	3,404,584	1.010	3,438,630	3,404,584	1.010	3,438,630
2012-2013	3,107,052	1.015	3,153,658	3,107,052	1.015	3,153,658
2013-2014	2,088,304	1.025	2,140,512	2,088,304	1.025	2,140,512
2014-2015	3,799,381	1.051	3,993,149	3,799,381	1.051	3,993,149
2015-2016	2,991,237	1.104	3,302,326	2,991,237	1.104	3,302,326
2016-2017	4,466,711	1.236	5,520,855	4,466,711	1.236	5,520,855
2017-2018	719,295	1.415	644,302	719,295	1.415	644,302
2018-2019	515,432	1.981	1,021,071	515,432	1.981	1,021,071
2019-2020	0	4.957	0	0	4.957	0
2020-2021	947,057	22.307	21,126,000	947,057	22.307	21,126,000
Totals	\$46,877,142		\$69,194,597	\$46,877,142		\$69,194,597

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

Limited Losses Paid as of:

Accident Year	6 Months	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months
2000-2001					1,000,106	1,275,187	1,823,244	1,823,244	1,823,244	1,823,244	1,823,244
2001-2002				880,149	1,000,578	1,023,612	1,023,612	1,023,612	964,842	964,842	2,382,404
2002-2003			873,114	953,412	953,532	953,532	1,579,410	1,581,139	1,581,139	2,939,481	2,998,047
2003-2004		309,735	1,022,186	1,490,294	1,947,824	2,029,466	2,041,384	2,943,619	4,893,323	4,930,307	3,560,542
2004-2005	75,543	903,527	2,226,102	3,446,317	3,946,802	3,910,106	4,427,910	3,460,542	3,560,542	2,866,154	2,866,154
2005-2006		15,692	363,636	379,734	682,512	766,935	2,853,463	2,858,654	3,780,292	3,789,394	3,789,394
2006-2007		6,598	310,953	1,675,075	1,675,075	3,654,071	3,764,224	3,394,936	3,394,936	3,394,936	3,394,936
2007-2008		208,642	211,412	862,224	3,103,547	3,253,555	4,228,474	4,256,077	4,259,284	4,259,284	4,259,284
2008-2009	6,182	15,240	69,317	3,650,448	4,101,554	3,338,980	3,345,621	3,347,708	3,346,029	3,347,708	3,336,906
2009-2010		54,284	2,186,680	2,792,089	2,998,274	3,072,132	3,115,424	3,127,921	3,127,921	3,127,921	3,127,921
2010-2011		1,046,459	2,274,617	2,287,500	2,319,013	2,395,143	2,396,051	2,396,051	2,396,051	2,396,051	2,396,051
2011-2012	106,645	872,432	2,112,380	2,750,332	3,122,242	3,118,744	3,127,725	3,127,725	3,127,725	3,127,725	3,127,725
2012-2013	114,916	934,308	2,290,004	3,124,392	3,371,990	3,450,380	3,450,659	3,459,906	3,559,906	3,559,906	
2013-2014	130,461	888,140	1,780,866	2,316,155	2,654,568	2,539,618	2,539,618	2,539,618	2,539,618		
2014-2015	91,368	1,387,749	2,717,926	3,379,346	3,268,352	3,281,784	3,281,784	3,281,784			
2015-2016	98,110	679,755	1,938,077	2,795,127	2,999,838	3,135,716	3,135,461				
2016-2017	30,679	920,995	1,975,490	2,421,836	2,773,661	2,834,023					
2017-2018	31,268	758,485	1,188,193	1,713,864	1,800,791						
2018-2019	16,322	417,918	940,933	1,337,293							
2019-2020	65,521	413,661	1,128,779								
2020-2021	54,421	793,126									
2021-2022	40,902										

Paid Loss Development Factors:

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months
2000-2001					1.275	1.430	1.000	1.000	1.000	1.000	1.001
2001-2002				1.137	1.023	1.000	1.000	0.943	1.000	2.469	1.000
2002-2003			1.092	1.000	1.000	1.656	1.001	1.000	1.859	1.020	1.660
2003-2004		3.300	1.458	1.307	1.042	1.006	1.442	1.662	1.008	0.722	1.000
2004-2005	11.960	2.464	1.548	1.145	0.991	1.132	0.782	1.029	0.805	1.000	1.001
2005-2006		23.173	1.044	1.797	1.124	3.721	1.002	1.322	1.002	1.000	1.000
2006-2007		47.128	5.387	1.000	2.181	1.030	0.902	1.000	1.000	1.000	1.000
2007-2008		1.013	4.078	3.599	1.048	1.300	1.007	1.001	1.000	1.000	0.977
2008-2009	2.465	4.548	52.663	1.124	0.814	1.002	1.001	0.999	1.001	0.997	1.003
2009-2010		40.282	1.277	1.074	1.025	1.014	1.004	1.000	1.000	1.000	1.000
2010-2011		2.174	1.006	1.014	1.033	1.000	1.000	1.000	1.000	1.000	1.000
2011-2012	8.181	2.421	1.302	1.135	0.999	1.003	1.000	1.000	1.000	1.000	
2012-2013	8.130	2.451	1.364	1.079	1.023	1.000	1.003	1.029	1.000		
2013-2014	6.808	2.005	1.301	1.146	0.957	1.000	1.000	1.000			
2014-2015	15.189	1.959	1.243	0.967	1.004	1.000	1.000				
2015-2016	6.928	2.851	1.442	1.073	1.045	1.000					
2016-2017	30.020	2.145	1.226	1.145	1.022						
2017-2018	24.258	1.567	1.442	1.051							
2018-2019	25.605	2.251	1.421								
2019-2020	6.313	2.729									
2020-2021	14.574										
Average Dollar-Weighted Averages	13.369	8.498	4.723	1.282	1.094	1.268	1.010	1.070	1.052	1.101	1.058
3-yr	11.923	2.049	1.333	1.093	1.023	1.000	1.001	1.011	1.000	1.000	1.001
4-yr	14.225	2.084	1.368	1.052	1.008	1.000	1.001	1.009	1.000	0.999	0.993
Comparative 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	2.521	1.400	1.145	1.120	1.050	1.025	1.010	1.005	1.004
Selected	9.100	4.500	2.502	1.400	1.145	1.120	1.050	1.025	1.010	1.005	1.004
Cumulated	202.994	22.307	4.957	1.981	1.415	1.236	1.104	1.051	1.025	1.015	1.010

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

Accident Year	Limited Losses Paid as of:										
	138 Months	150 Months	162 Months	174 Months	186 Months	198 Months	210 Months	222 Months	234 Months	246 Months	258 Months
2000-2001	1,825,620	1,825,620	2,482,404	2,482,404	2,485,232	2,482,404	2,485,232	2,485,232	2,485,232	2,485,232	4,217,210
2001-2002	2,382,404	3,000,611	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	7,414,620	
2002-2003	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	5,444,013		
2003-2004	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542			
2004-2005	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654				
2005-2006	3,789,394	3,788,958	3,788,958	3,788,958	3,788,958	3,788,958					
2006-2007	3,394,936	3,400,836	3,400,836	3,403,249	3,408,506						
2007-2008	4,159,284	4,259,284	4,259,284								
2008-2009	3,347,708	3,347,708	3,347,708								
2009-2010	3,127,921	3,127,921									
2010-2011	2,396,051										
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											

Paid Loss Development Factors:

	138-150 Months	150-162 Months	162-174 Months	174-186 Months	186-198 Months	198-210 Months	210-222 Months	222-234 Months	234-246 Months	246-258 Months	258-Ult. Months
2000-2001	1.000	1.360	1.000	1.001	0.999	1.001	1.000	1.000	1.000	1.697	
2001-2002	1.259	1.004	1.000	1.000	1.000	1.000	1.000	1.000	2.462		
2002-2003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.094			
2003-2004	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2004-2005	1.000	1.000	1.000	1.000	1.000	1.000					
2005-2006	1.000	1.000	1.000	1.000	1.000						
2006-2007	1.002	1.000	1.001	1.002							
2007-2008	1.024	1.000	1.000								
2008-2009	1.000	1.000									
2009-2010	1.000										
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
	138-150 Months	150-162 Months	162-174 Months	174-186 Months	186-198 Months	198-210 Months	210-222 Months	222-234 Months	234-246 Months	246-258 Months	258-Ult. Months
Average	1.029	1.040	1.000	1.000	1.000	1.000	1.000	1.031	1.731	1.697	
Dollar-Weighted											
Averages											
3-yr	1.009	1.000	1.000	1.001	1.000	1.000	1.000	1.045			
4-yr	1.008	1.000	1.000	1.000	1.000	1.000	1.000				
Comparative											
Factors	1.006	1.004	1.004	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000
Prior	1.003	1.002	1.001	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

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

Exposure and Development Method
Based on Reported Losses

Accident Year	Trended Payroll (\$00) (A)	Reported Losses as of 12/31/21 (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)
2000-2001	4,426,994	1,719,728	1.000	0.000	0.388	0	1,719,728
2001-2002	4,793,823	2,949,541	1.000	0.000	0.615	0	2,949,541
2002-2003	5,201,926	4,237,463	1.000	0.000	0.815	0	4,237,463
2003-2004	5,302,373	2,205,881	1.000	0.000	0.416	0	2,205,881
2004-2005	5,323,509	1,424,731	1.000	0.000	0.268	0	1,424,731
2005-2006	5,279,351	2,684,321	1.000	0.000	0.508	0	2,684,321
2006-2007	5,365,043	1,419,184	1.000	0.000	0.265	0	1,419,184
2007-2008	5,523,940	2,651,368	1.000	0.000	0.480	0	2,651,368
2008-2009	5,584,172	2,652,344	1.001	0.001	0.475	2,652	2,654,996
2009-2010	5,300,275	1,335,978	1.003	0.003	0.252	4,007	1,339,985
2010-2011	4,637,189	1,557,549	1.006	0.006	0.336	9,349	1,566,898
2011-2012	4,425,587	3,468,509	1.010	0.010	0.792	35,051	3,503,560
2012-2013	4,346,745	3,524,416	1.015	0.015	0.823	53,661	3,578,077
2013-2014	4,181,204	2,088,304	1.025	0.024	0.499	50,074	2,138,378
2014-2015	4,221,572	3,799,380	1.040	0.038	0.900	144,378	3,943,758
2015-2016	4,288,766	3,125,229	1.052	0.049	0.767	161,185	3,286,414
2016-2017	4,455,964	5,165,945	1.063	0.059	0.739	194,284	5,360,229
2017-2018	4,565,477	773,258	1.098	0.089	0.769	312,466	1,085,724
2018-2019	4,594,102	717,128	1.265	0.209	0.800	768,134	1,485,262
2019-2020	4,567,802	66,812	1.762	0.432	0.832	1,641,778	1,708,590
2020-2021	4,506,728	2,019,771	4.097	0.756	0.865	2,947,130	4,966,901
Totals	100,892,542	\$49,586,840				\$6,324,149	\$55,910,989

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) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

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

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

Exposure and Development Method
Based on Paid Losses

Accident Year	Trended Payroll (\$00) (A)	Paid Losses as of 12/31/21 (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)
2000-2001	4,426,994	1,719,728	1.000	0.000	0.388	0	1,719,728
2001-2002	4,793,823	2,949,541	1.000	0.000	0.615	0	2,949,541
2002-2003	5,201,926	4,237,463	1.000	0.000	0.815	0	4,237,463
2003-2004	5,302,373	2,205,881	1.000	0.000	0.416	0	2,205,881
2004-2005	5,323,509	1,424,731	1.000	0.000	0.268	0	1,424,731
2005-2006	5,279,351	2,684,321	1.000	0.000	0.508	0	2,684,321
2006-2007	5,365,043	1,419,184	1.000	0.000	0.265	0	1,419,184
2007-2008	5,523,940	2,651,369	1.000	0.000	0.480	0	2,651,369
2008-2009	5,584,172	2,652,344	1.001	0.001	0.475	2,652	2,654,996
2009-2010	5,300,275	1,335,978	1.003	0.003	0.252	4,007	1,339,985
2010-2011	4,637,189	1,557,549	1.006	0.006	0.336	9,349	1,566,898
2011-2012	4,425,587	3,404,584	1.010	0.010	0.792	35,051	3,439,635
2012-2013	4,346,745	3,107,052	1.015	0.015	0.823	53,661	3,160,713
2013-2014	4,181,204	2,088,304	1.025	0.024	0.499	50,074	2,138,378
2014-2015	4,221,572	3,799,381	1.051	0.049	0.900	186,171	3,985,552
2015-2016	4,288,766	2,991,237	1.104	0.094	0.767	309,211	3,300,448
2016-2017	4,455,964	4,466,711	1.236	0.191	0.739	628,955	5,095,666
2017-2018	4,565,477	719,295	1.415	0.293	0.769	1,028,680	1,747,975
2018-2019	4,594,102	515,432	1.981	0.495	0.800	1,819,264	2,334,696
2019-2020	4,567,802		4.957	0.798	0.832	3,032,728	3,032,728
2020-2021	4,506,728	947,057	22.307	0.955	0.865	3,722,895	4,669,952
Totals	100,892,542	\$46,877,142				\$10,882,698	\$57,759,840

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) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

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

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

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)
2000-2001	4,426,994	1,719,728	2.281	3,922,700	0.886	0.388	1.000	0.388
2001-2002	4,793,823	2,949,541	2.193	6,468,343	1.349	0.615	1.000	0.615
2002-2003	5,201,926	4,237,463	2.108	8,932,572	1.717	0.815	1.000	0.815
2003-2004	5,302,373	2,205,881	2.028	4,473,527	0.844	0.416	1.000	0.416
2004-2005	5,323,509	1,424,731	1.949	2,776,801	0.522	0.268	1.000	0.268
2005-2006	5,279,351	2,684,321	1.875	5,033,102	0.953	0.508	1.000	0.508
2006-2007	5,365,043	1,419,184	1.803	2,558,789	0.477	0.265	1.000	0.265
2007-2008	5,523,940	2,651,368	1.733	4,594,821	0.832	0.480	1.000	0.480
2008-2009	5,584,172	2,652,344	1.667	4,421,457	0.792	0.475	1.000	0.475
2009-2010	5,300,275	1,335,978	1.603	2,141,573	0.404	0.252	1.000	0.252
2010-2011	4,637,189	1,557,549	1.541	2,400,183	0.518	0.336	1.000	0.336
2011-2012	4,425,587	3,503,000	1.482	5,191,446	1.173	0.792	1.000	0.792
2012-2013	4,346,745	3,577,000	1.425	5,097,225	1.173	0.823	1.000	0.823
2013-2014	4,181,204	2,088,304	1.370	2,860,976	0.684	0.499	1.000	0.499
2014-2015	4,221,572	3,799,380	1.317	5,003,783	1.185	0.900	1.000	0.900
2015-2016	4,288,766	3,288,000	1.267	4,165,896	0.971	0.767	1.000	0.767
2016-2017	4,455,964	5,491,000	1.218	6,688,038	1.501	0.739	1.000	0.739
2017-2018	4,565,477	761,000	1.171	891,131	0.195	0.769	1.000	0.769
2018-2019	4,594,102	907,000	1.125	1,020,375	0.222	0.800	1.000	0.800
2019-2020	4,567,802	2,353,000	1.082	2,545,946	0.557	0.832	1.000	0.832
2020-2021	4,506,728	2,863,000	1.040	2,977,520	0.661	0.865	1.000	0.865
Total/Avg	100,892,542	\$53,468,772		\$84,166,204	\$0.834			
14/15-18/19	22,125,881	14,246,380		17,769,223	0.803			
15/16-19/20	22,472,111	12,800,000		15,311,386	0.681			

Selected Limited Rate: \$0.900
Prior: \$0.975

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 2015-2016 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)
2000-2001	\$245,675	7	\$1,719,725
2001-2002	294,954	10	2,949,540
2002-2003	201,784	21	4,237,464
2003-2004	183,823	12	2,205,876
2004-2005	356,183	4	1,424,732
2005-2006	206,486	13	2,684,318
2006-2007	109,168	13	1,419,184
2007-2008	220,947	12	2,651,364
2008-2009	241,122	11	2,652,342
2009-2010	95,427	14	1,335,978
2010-2011	173,061	9	1,557,549
2011-2012	233,533	15	3,502,995
2012-2013	238,467	15	3,577,005
2013-2014	232,034	9	2,088,306
2014-2015	422,153	9	3,799,377
2015-2016	205,438	16	3,287,008
2016-2017	317,241	15	4,758,615
2017-2018	326,821	6	1,960,926
2018-2019	336,688	6	2,020,128
2019-2020	346,843	6	2,081,058
2020-2021	357,282	8	2,858,256
Total		231	\$54,771,746

Notes:

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

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)
2000-2001	\$1,719,728	7	\$245,675	1.862	\$457,447	\$245,675	1.000	\$245,675
2001-2002	2,949,541	10	294,954	1.808	533,277	294,954	1.000	294,954
2002-2003	4,237,463	21	201,784	1.755	354,131	201,784	1.000	201,784
2003-2004	2,205,881	12	183,823	1.704	313,234	183,823	1.000	183,823
2004-2005	1,424,731	4	356,183	1.654	589,127	356,183	1.000	356,183
2005-2006	2,684,321	13	206,486	1.606	331,617	206,486	1.000	206,486
2006-2007	1,419,184	13	109,168	1.559	170,193	109,168	1.000	109,168
2007-2008	2,651,368	12	220,947	1.513	334,293	220,947	1.000	220,947
2008-2009	2,652,344	11	241,122	1.469	354,208	241,122	1.000	241,122
2009-2010	1,335,978	14	95,427	1.426	136,079	95,427	1.000	95,427
2010-2011	1,557,549	9	173,061	1.385	239,689	173,061	1.000	173,061
2011-2012	3,503,000	15	233,533	1.345	314,102	233,533	1.000	233,533
2012-2013	3,577,000	15	238,467	1.306	311,438	238,467	1.000	238,467
2013-2014	2,088,304	9	232,034	1.267	293,987	232,034	1.000	232,034
2014-2015	3,799,380	9	422,153	1.231	519,670	422,153	1.000	422,153
2015-2016	3,287,000	16	205,438	1.195	245,498	205,438	1.000	205,438
2016-2017	5,426,000	15	361,733	1.160	419,610	317,241	1.000	317,241
2017-2018	1,170,000	6	195,000	1.126	219,570	326,821	1.000	326,821
2018-2019	1,910,000	6	318,333	1.093	347,938	336,688	1.000	336,688
2019-2020	2,371,000	6	395,167	1.061	419,272	346,843	1.000	346,843
2020-2021	4,818,000	8	602,250	1.030	620,318	357,282	1.000	357,282

Average Limited Severity: \$358,319
Average 15/16-19/20 Limited Severity: 330,378
Average 16/17-20/21 Limited Severity: 405,342

Selected Limited Severity: \$368,000
Prior: \$445,000

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.

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

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)
2000-2001	7	7	7	442.7	0.016	1.232	0.020
2001-2002	10	10	10	479.4	0.021	1.219	0.026
2002-2003	21	21	21	520.2	0.040	1.208	0.048
2003-2004	12	12	12	530.2	0.023	1.196	0.028
2004-2005	4	4	4	532.4	0.008	1.184	0.009
2005-2006	13	13	13	527.9	0.025	1.173	0.029
2006-2007	13	13	13	536.5	0.024	1.161	0.028
2007-2008	12	12	12	552.4	0.022	1.150	0.025
2008-2009	11	11	11	558.4	0.020	1.138	0.023
2009-2010	14	14	14	530.0	0.026	1.126	0.029
2010-2011	9	9	9	463.7	0.019	1.116	0.021
2011-2012	15	14	15	442.6	0.034	1.105	0.038
2012-2013	15	14	15	434.7	0.035	1.094	0.038
2013-2014	9	9	9	418.1	0.022	1.083	0.024
2014-2015	9	9	9	422.2	0.021	1.073	0.023
2015-2016	16	15	16	428.9	0.037	1.062	0.039
2016-2017	15	9	15	445.6	0.034	1.051	0.036
2017-2018	6	4	6	456.5	0.013	1.041	0.014
2018-2019	6	1	6	459.4	0.013	1.030	0.013
2019-2020	6	0	6	456.8	0.013	1.019	0.013
2020-2021	39	0	8	450.7	0.018	1.010	0.018
Total	262	201	231	10,089.3			0.026
15/16-19/20	49	29	49	2,247.2			0.023

(H) Selected Frequency: 0.028
Prior: 0.028

Program Year:	2021-2022	2022-2023
(I) Trend Factor:	1.000	1.010
(J) Selected Frequency:	0.028	0.028
(K) Est. Payroll (\$000,000):	462.3	476.2
(L) Ultimate Claims:	13	13

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).
 (G) (E) x (F).
 (H) The selected frequency of 0.028 is based on (G).
 (I) From \$100K to \$1M Rate Analysis Appendix E, Page 1, Column (H).
 (J) (H) x (I).
 (K) From \$100K to \$1M Rate Analysis 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.

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

Frequency and Severity Method
Reported Claim Count Development

Accident Year	Claims Reported as of 12/31/2021 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2000-2001	7	1.000	7	0.019
2001-2002	10	1.000	10	0.025
2002-2003	21	1.000	21	0.049
2003-2004	12	1.000	12	0.027
2004-2005	4	1.000	4	0.009
2005-2006	13	1.000	13	0.029
2006-2007	13	1.000	13	0.028
2007-2008	12	1.000	12	0.025
2008-2009	11	1.000	11	0.022
2009-2010	14	1.001	14	0.030
2010-2011	9	1.001	9	0.022
2011-2012	15	1.001	15	0.037
2012-2013	15	1.002	15	0.038
2013-2014	9	1.003	9	0.023
2014-2015	9	1.004	9	0.023
2015-2016	16	1.005	16	0.040
2016-2017	15	1.015	15	0.035
2017-2018	6	1.040	6	0.014
2018-2019	5	1.196	6	0.013
2019-2020	4	1.435	6	0.013
2020-2021	12	3.229	39	0.087
Total	232		262	0.029

Notes:

- (A) Provided by the Authority.
 (B) From \$100K to \$1M Rate Analysis Appendix D, Page 6.
 (C) (A) x (B).
 (D) (C) / [\$100K to \$1M Rate Analysis Appendix D, Page 3, (D)] x [\$100K to \$1M Rate Analy:

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 Program (\$100K to \$1M Analysis)

Frequency and Severity Method
Closed Claim Count Development

Accident Year	Claims Closed as of 12/31/2021 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2000-2001	7	1.000	7	0.019
2001-2002	10	1.000	10	0.025
2002-2003	21	1.000	21	0.049
2003-2004	12	1.000	12	0.027
2004-2005	4	1.000	4	0.009
2005-2006	13	1.000	13	0.029
2006-2007	13	1.000	13	0.028
2007-2008	12	1.000	12	0.025
2008-2009	11	1.001	11	0.022
2009-2010	14	1.002	14	0.030
2010-2011	9	1.003	9	0.022
2011-2012	14	1.004	14	0.035
2012-2013	14	1.005	14	0.035
2013-2014	9	1.006	9	0.023
2014-2015	9	1.007	9	0.023
2015-2016	15	1.008	15	0.037
2016-2017	9	1.009	9	0.021
2017-2018	4	1.010	4	0.009
2018-2019	1	1.061	1	0.002
2019-2020	0	3.183	0	
2020-2021	0	11.141	0	
Total	201		201	0.023

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 [\$100K to \$1M Rate Analy:

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

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

Accident Year	Claims Reported as of:													
	6 Months	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months	138 Months	150 Months	162 Months
2000-2001								3	3	3	3	3	8	8
2001-2002							8	8	8	8	8	7	10	10
2002-2003						7	7	7	7	7	11	21	21	21
2003-2004					9	10	10	10	10	22	12	12	12	12
2004-2005				17	20	20	20	20	12	5	5	5	5	5
2005-2006			4	7	9	10	11	5	15	15	15	15	15	15
2006-2007		3	8	6	6	5	16	13	13	13	13	13	13	13
2007-2008	1	5	9	11	14	11	19	18	18	18	18	17	18	13
2008-2009	2	6	8	8	19	14	13	13	13	13	13	13	18	13
2009-2010	3	5	14	14	16	16	16	16	16	16	16	13	16	
2010-2011		6	21	14	13	12	11	11	11	11	16	11		
2011-2012	3	11	19	17	17	16	16	16	16	11	17			
2012-2013	3	22	22	15	15	16	15	15	16	16				
2013-2014	3	4	8	10	11	11	11	15	11					
2014-2015	3	8	15	12	12	12	11	12						
2015-2016		4	10	15	16	12	16							
2016-2017		4	11	12	16	15								
2017-2018		2	4	12	6									
2018-2019			4	5										
2019-2020			4											
2020-2021		12												
2021-2022	1													

Reported Claim Count Development Factors:

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months	138-150 Months	150-162 Months	162-174 Months
2000-2001								1.000	1.000	1.000	1.000	2.667	1.000	1.000
2001-2002							1.000	1.000	1.000	1.000	0.875	1.429	1.000	1.000
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	1.154
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	0.722	1.385
2008-2009	3.000	1.333	1.000	2.375	0.737	0.929	1.000	1.000	1.000	1.000	1.000	1.385	0.722	
2009-2010	1.667	2.800	1.000	1.143	1.000	1.000	1.000	1.000	1.000	1.000	0.813	1.231		
2010-2011		3.500	0.667	0.929	0.923	0.917	1.000	1.000	1.000	1.455	0.688			
2011-2012	3.667	1.727	0.895	1.000	0.941	1.000	1.000	1.000	0.688	1.545				
2012-2013	7.333	1.000	0.682	1.000	1.067	0.938	1.000	1.067	1.000					
2013-2014	1.333	2.000	1.250	1.100	1.000	1.000	1.364	0.733						
2014-2015	2.667	1.875	0.800	1.000	1.000	0.917	1.091							
2015-2016		2.500	1.500	1.067	0.750	1.333								
2016-2017		2.750	1.091	1.333	0.938									
2017-2018		2.000	3.000	0.500										
2018-2019			1.250											
2019-2020														
2020-2021														
	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months	138-150 Months	150-162 Months	162-174 Months
Average	3.524	2.163	1.204	1.156	0.943	1.219	0.976	1.100	1.023	1.093	1.021	1.277	0.938	1.067
Claim-Weighted														
Averages														
3-yr			1.526	0.974	0.886	1.086	1.135	0.935	0.884	1.289	0.822	1.209	0.796	1.171
4-yr			1.517	0.980	0.909	1.039	1.094	0.947	0.915	1.216	0.857	1.161	0.844	1.152
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	3.700	2.250	1.200	1.150	1.025	1.010	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000
Selected	3.700	2.250	1.200	1.150	1.025	1.010	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000
Cumulated	11.947	3.229	1.435	1.196	1.040	1.015	1.005	1.004	1.003	1.002	1.001	1.001	1.001	1.000

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

Closed Claim Development

Claims Closed as of:

Accident Year	6 Months	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months	138 Months	150 Months	162 Months
2000-2001								2	2	3	3	3	8	8
2001-2002							8	8	8	8	8	7	10	10
2002-2003						6	7	7	7	7	10	20	20	20
2003-2004					6	7	8	10	10	20	12	12	12	12
2004-2005				12	17	18	19	20	10	5	5	5	5	5
2005-2006			4	4	5	5	6	5	13	14	15	15	15	15
2006-2007		1	1	5	5	5	13	13	13	13	13	13	13	12
2007-2008			1	6	8	8	18	18	18	18	18	17	18	12
2008-2009		1	2	6	12	10	12	13	13	13	13	13	18	13
2009-2010			1	6	13	14	15	15	16	16	16	13	16	
2010-2011			1	4	7	10	11	11	11	11	16	11		
2011-2012				2	8	10	14	16	15	11	16			
2012-2013		1	5	10	11	15	14	14	15	15				
2013-2014			3	5	10	9	10	14	11					
2014-2015		2	5	9	8	12	10	12						
2015-2016			2	6	10	12	15							
2016-2017				1	5	10	9							
2017-2018				1	5	4								
2018-2019				1	1									
2019-2020														
2020-2021														
2021-2022														

Closed Claim Count Development Factors:

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months	138-150 Months	150-162 Months	162-174 Months
2000-2001								1.000	1.500	1.000	1.000	2.667	1.000	1.000
2001-2002							1.000	1.000	1.000	1.000	0.875	1.429	1.000	1.000
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	1.250
2007-2008			6.000	1.333	1.000	2.250	1.000	1.000	1.000	1.000	0.944	1.059	0.667	1.500
2008-2009		2.000	3.000	2.000	0.833	1.200	1.083	1.000	1.000	1.000	1.000	1.385	0.722	
2009-2010			6.000	2.167	1.077	1.071	1.000	1.067	1.000	1.000	0.813	1.231		
2010-2011		4.000	1.750	1.429	1.100	1.000	1.000	1.000	1.000	1.455	0.688			
2011-2012			4.000	1.250	1.400	1.143	0.938	1.000	0.733	1.455				
2012-2013		5.000	2.000	1.100	1.364	0.933	1.000	1.071	1.000					
2013-2014			1.667	2.000	0.900	1.111	1.400	0.786						
2014-2015		2.500	1.800	0.889	1.500	0.833	1.200							
2015-2016			3.000	1.667	1.200	1.250								
2016-2017			5.000	2.000	0.900									
2017-2018			5.000	0.800										
2018-2019			1.000											
2019-2020														
2020-2021														
Average	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months	138-150 Months	150-162 Months	162-174 Months
Claim-Weighted		2.900	3.301	1.450	1.107	1.283	1.054	1.073	1.062	1.084	1.029	1.277	0.924	1.094
Averages														
3-yr			3.667	1.500	1.179	1.061	1.176	0.953	0.902	1.263	0.822	1.209	0.755	1.231
4-yr			3.400	1.280	1.105	1.021	1.100	0.963	0.930	1.196	0.857	1.161	0.813	1.205
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	3.500	3.000	1.050	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Selected	4.000	3.500	3.000	1.050	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Cumulated	44.564	11.141	3.183	1.061	1.010	1.009	1.008	1.007	1.006	1.005	1.004	1.003	1.002	1.001

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

Loss Trend Factors

Accident Year	Benefit Level Factor (A)	Factor to 2021-2022 Loss Rate Level (B)	Factor to 2022-2023 Loss Rate Level (C)	Factor to 2023-2024 Loss Rate Level (D)	Factor to 2024-2025 Loss Rate Level (E)	Factor to 2021-2022 Frequency Level (F)	Factor to 2022-2023 Frequency Level (G)	Factor to 2023-2024 Frequency Level (H)	Factor to 2024-2025 Frequency Level (I)	Factor to 2021-2022 Severity Level (J)
2000-2001	1.000	2.281	2.372	2.467	2.566	1.232	1.244	1.256	1.269	1.862
2001-2002	1.000	2.193	2.280	2.372	2.467	1.219	1.231	1.244	1.256	1.808
2002-2003	1.000	2.108	2.192	2.281	2.372	1.208	1.220	1.232	1.244	1.755
2003-2004	1.000	2.028	2.108	2.193	2.281	1.196	1.208	1.220	1.232	1.704
2004-2005	1.000	1.949	2.027	2.109	2.193	1.184	1.196	1.208	1.220	1.654
2005-2006	1.000	1.875	1.949	2.028	2.109	1.173	1.184	1.196	1.208	1.606
2006-2007	1.000	1.803	1.874	1.950	2.028	1.161	1.173	1.184	1.196	1.559
2007-2008	1.000	1.733	1.802	1.875	1.950	1.150	1.161	1.172	1.184	1.513
2008-2009	1.000	1.667	1.733	1.803	1.875	1.138	1.149	1.160	1.172	1.469
2009-2010	1.000	1.603	1.666	1.734	1.803	1.126	1.137	1.149	1.160	1.426
2010-2011	1.000	1.541	1.603	1.667	1.734	1.116	1.126	1.138	1.149	1.385
2011-2012	1.000	1.482	1.541	1.603	1.667	1.105	1.116	1.127	1.138	1.345
2012-2013	1.000	1.425	1.482	1.541	1.603	1.094	1.105	1.116	1.127	1.306
2013-2014	1.000	1.370	1.424	1.482	1.541	1.083	1.094	1.105	1.116	1.267
2014-2015	1.000	1.317	1.370	1.425	1.482	1.073	1.083	1.094	1.105	1.231
2015-2016	1.000	1.267	1.317	1.370	1.425	1.062	1.073	1.083	1.094	1.195
2016-2017	1.000	1.218	1.266	1.317	1.370	1.051	1.062	1.072	1.083	1.160
2017-2018	1.000	1.171	1.217	1.266	1.317	1.041	1.051	1.061	1.072	1.126
2018-2019	1.000	1.125	1.170	1.217	1.266	1.030	1.040	1.050	1.061	1.093
2019-2020	1.000	1.082	1.125	1.170	1.217	1.019	1.029	1.040	1.050	1.061
2020-2021	1.000	1.040	1.081	1.125	1.170	1.010	1.020	1.030	1.040	1.030
2021-2022	1.000	1.000	1.040	1.082	1.125	1.000	1.010	1.020	1.030	1.000
2022-2023	1.000	--	1.000	1.040	1.082	--	1.000	1.010	1.020	--
2023-2024	1.000	--	--	1.000	1.040	--	--	1.000	1.010	--
2024-2025	1.000	--	--	--	1.000	--	--	--	1.000	--

Notes:

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

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

Residual Trend Factors

Accident Year	Initial Estimate of Ultimate Limited Losses (A)	Ultimate Reported Claims (B)	BLF (C)	Adjusted Limited Severity (D)	Trended Payroll (\$00) (E)	Ultimate Frequency (F)
2000-2001	\$1,719,728	7	1.000	245,675	4,426,994	0.016
2001-2002	2,949,541	10	1.000	294,954	4,793,823	0.021
2002-2003	4,237,463	21	1.000	201,784	5,201,926	0.040
2003-2004	2,205,881	12	1.000	183,823	5,302,373	0.023
2004-2005	1,424,731	4	1.000	356,183	5,323,509	0.008
2005-2006	2,684,321	13	1.000	206,486	5,279,351	0.025
2006-2007	1,419,184	13	1.000	109,168	5,365,043	0.024
2007-2008	2,651,368	12	1.000	220,947	5,523,940	0.022
2008-2009	2,652,344	11	1.000	241,122	5,584,172	0.020
2009-2010	1,335,978	14	1.000	95,427	5,300,275	0.026
2010-2011	1,557,549	9	1.000	173,061	4,637,189	0.019
2011-2012	3,503,000	15	1.000	233,533	4,425,587	0.034
2012-2013	3,577,000	15	1.000	238,467	4,346,745	0.035
2013-2014	2,088,304	9	1.000	232,034	4,181,204	0.022
2014-2015	3,799,380	9	1.000	422,153	4,221,572	0.021
2015-2016	3,288,000	16	1.000	205,500	4,288,766	0.037
2016-2017	5,491,000	15	1.000	366,067	4,455,964	0.034
2017-2018	761,000	6	1.000	126,833	4,565,477	0.013
2018-2019	907,000	6	1.000	151,167	4,594,102	0.013
2019-2020	2,353,000	6	1.000	392,167	4,567,802	0.013
2020-2021	2,863,000	8	1.000	357,875	4,506,728	0.018

Severity Trend FactorsFrequency Trend Factors

2007-2008 through 2016-2017	1.074	1.048
2008-2009 through 2017-2018	1.039	0.997
2009-2010 through 2018-2019	1.027	0.948
Prior	1.030	1.010
Default	1.030	0.975

Selected Residual Trend	1.030	1.010
-------------------------	-------	-------

Notes:

- (A) Selected average of results from \$100K to \$1M Rate Analysis Appendix A and \$100K to
 (B) \$100K to \$1M Rate Analysis Appendix D, Page 3, Column (C).
 (C) \$100K to \$1M Rate Analysis Appendix E, Page 1, (A).
 (D) (A) x (C) / (B).
 (E) From \$100K to \$1M Rate Analysis Appendix I, Column (C).
 (F) (B) / (E) x 10,000.

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

Calculation of Discount Factors

Payment Year (A)	Payment Pattern (B)	Return on Investment (C)	Discounted Reserves (D)	Undiscounted Reserves (E)	Discount Factor (F)
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.0%	2.0%	0.000	0.000	1.000
15	0.0%	2.0%	0.000	0.000	1.000
14	0.2%	2.0%	0.002	0.002	0.990
13	0.2%	2.0%	0.004	0.004	0.980
12	0.4%	2.0%	0.008	0.008	0.976
11	0.4%	2.0%	0.011	0.012	0.968
10	0.8%	2.0%	0.019	0.020	0.965
9	1.7%	2.0%	0.035	0.037	0.967
8	3.5%	2.0%	0.069	0.071	0.968
7	7.1%	2.0%	0.138	0.142	0.970
6	9.9%	2.0%	0.234	0.242	0.967
5	15.2%	2.0%	0.380	0.394	0.964
4	25.2%	2.0%	0.623	0.647	0.963
3	23.0%	2.0%	0.838	0.877	0.956
2	9.8%	2.0%	0.919	0.975	0.943
1	2.5%	2.0%	0.926	1.000	0.926

(G) Discount Factor for Future Funding:	2021-2022	0.935
	2022-2023	0.935

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, $91.9\% = [83.8\% / 1.020] + [9.8\% / (1.010)]$.
- (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 to \$1M Analysis)

Confidence Level Table

Probability	Projected Losses	Outstanding Losses
95%	1.965	1.533
90%	1.671	1.376
85%	1.496	1.283
80%	1.365	1.213
75%	1.260	1.157
70%	1.172	1.109
65%	1.094	1.067
60%	1.026	1.029
55%	0.962	0.994
50%	0.902	0.960
45%	0.846	0.929
40%	0.792	0.897
35%	0.738	0.866
30%	0.685	0.835
25%	0.632	0.801

To read table: For the above retention, there is a 90% chance that final loss settlements will be less than 1.671 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 (\$100K to \$1M Analysis)

Incurred Losses as of 12/31/21

Accident Year (A)	Unlimited Incurred (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Incurred (E)	Incurred Over SIR (F)	Incurred Over \$100,000 (G)	Incurred Capped at to SIR Layer (H)	Incurred \$100,000 to SIR Layer (I)	Incurred Capped at SIR (J)	Incurred Capped at SIR & Aggregate (K)
2000-2001	\$3,911,857	\$0	\$0	\$3,911,857	\$0	\$1,719,728	\$2,192,130	\$1,719,728	\$3,911,857	\$3,911,857
2001-2002	7,249,504	0	0	7,249,504	1,452,906	4,402,447	2,847,057	2,949,541	5,796,598	5,796,598
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	4,547,760	0	0	4,547,760	0	1,419,184	3,128,576	1,419,184	4,547,760	4,547,760
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	5,484,881	0	0	5,484,881	120,835	2,773,179	2,711,703	2,652,344	5,364,046	5,364,046
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	6,315,380	0	0	6,315,380	22,224	3,490,733	2,824,647	3,468,509	6,293,156	6,293,156
2012-2013	6,833,017	0	0	6,833,017	0	3,524,416	3,308,601	3,524,416	6,833,017	6,833,017
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	8,501,264	0	0	8,501,264	2,240,574	5,365,803	3,135,461	3,125,229	6,260,691	6,260,691
2016-2017	35,651,100	0	0	35,651,100	27,554,111	32,720,056	2,931,044	5,165,945	8,096,989	8,096,989
2017-2018	2,646,622	0	0	2,646,622	0	773,258	1,873,364	773,258	2,646,622	2,646,622
2018-2019	2,313,337	0	0	2,313,337	0	717,128	1,596,209	717,128	2,313,337	2,313,337
2019-2020	2,327,142	0	0	2,327,142	0	66,812	2,260,330	66,812	2,327,142	2,327,142
2020-2021	33,801,806	0	0	33,801,806	29,250,008	31,269,779	2,532,027	2,019,771	4,551,798	4,551,798
2021-2022	465,421	0	0	465,421	0	50,000	415,421	50,000	465,421	465,421
Total	\$179,826,857	\$0	\$0	\$179,826,857	\$72,017,498	\$121,654,340	\$58,172,517	\$49,636,841	\$107,809,359	\$107,809,359

Notes:

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

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

Paid Losses as of 12/31/21

Accident Year (A)	Unlimited Paid (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Paid (E)	Paid Over SIR (F)	Paid Over \$100,000 (G)	Paid Capped at \$100,000 (H)	Paid \$100,000 to SIR Layer (I)	Paid Capped at SIR (J)	Paid Capped at SIR & Aggregate (K)
2000-2001	\$3,911,857	\$0	\$0	\$3,911,857	\$0	\$1,719,728	\$2,192,130	\$1,719,728	\$3,911,857	\$3,911,857
2001-2002	7,249,504	0	0	7,249,504	1,452,906	4,402,447	2,847,057	2,949,541	5,796,598	5,796,598
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	4,547,760	0	0	4,547,760	0	1,419,184	3,128,576	1,419,184	4,547,760	4,547,760
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	5,484,881	0	0	5,484,881	120,835	2,773,179	2,711,703	2,652,344	5,364,046	5,364,046
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	6,251,455	0	0	6,251,455	22,224	3,426,808	2,824,647	3,404,584	6,229,231	6,229,231
2012-2013	6,415,654	0	0	6,415,654	0	3,107,052	3,308,601	3,107,052	6,415,654	6,415,654
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	8,367,272	0	0	8,367,272	2,240,574	5,231,811	3,135,461	2,991,237	6,126,699	6,126,699
2016-2017	34,479,534	0	0	34,479,534	27,178,799	31,645,510	2,834,023	4,466,711	7,300,734	7,300,734
2017-2018	2,520,086	0	0	2,520,086	0	719,295	1,800,791	719,295	2,520,086	2,520,086
2018-2019	1,852,726	0	0	1,852,726	0	515,432	1,337,293	515,432	1,852,726	1,852,726
2019-2020	1,128,779	0	0	1,128,779	0	0	1,128,779	0	1,128,779	1,128,779
2020-2021	10,740,183	0	0	10,740,183	9,000,000	9,947,057	793,126	947,057	1,740,183	1,740,183
2021-2022	40,902	0	0	40,902	0	0	40,902	0	40,902	40,902
Total	\$152,768,357	\$0	\$0	\$152,768,357	\$51,392,178	\$98,269,320	\$54,499,037	\$46,877,142	\$101,376,178	\$101,376,178

Notes:

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

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

Case Reserves as of 12/31/21

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 to SIR Layer (H)	Reserves \$100,000 to SIR Layer (I)	Reserves Capped at SIR (J)	Reserves Capped at SIR & Aggregate (K)
2000-2001	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2001-2002	0	0	0	0	0	0	0	0	0	0
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	63,925	0	0	63,925	0	63,925	0	63,925	63,925	63,925
2012-2013	417,364	0	0	417,364	0	417,364	0	417,364	417,364	417,364
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	133,992	0	0	133,992	0	133,992	0	133,992	133,992	133,992
2016-2017	1,171,566	0	0	1,171,566	375,312	1,074,546	97,020	699,234	796,254	796,254
2017-2018	126,536	0	0	126,536	0	53,963	72,573	53,963	126,536	126,536
2018-2019	460,612	0	0	460,612	0	201,696	258,916	201,696	460,612	460,612
2019-2020	1,198,363	0	0	1,198,363	0	66,812	1,131,551	66,812	1,198,363	1,198,363
2020-2021	23,061,623	0	0	23,061,623	20,250,008	21,322,722	1,738,901	1,072,714	2,811,615	2,811,615
2021-2022	424,519	0	0	424,519	0	50,000	374,519	50,000	424,519	424,519
Total	\$27,058,500	\$0	\$0	\$27,058,500	\$20,625,320	\$23,385,020	\$3,673,480	\$2,759,700	\$6,433,180	\$6,433,180

Notes:

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

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

Claim Counts as of 12/31/21 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)
2000-2001	7	0	0	7	7	0	0	7	0	0
2001-2002	10	0	0	10	10	0	0	10	0	0
2002-2003	21	0	0	21	21	0	0	21	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	13	0	0	13	13	0	0	13	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	15	0	0	15	14	0	0	14	1	1
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	15	0	0	15	9	0	0	9	6	6
2017-2018	6	0	0	6	4	0	0	4	2	2
2018-2019	5	0	0	5	1	0	0	1	4	4
2019-2020	4	0	0	4	0	0	0	0	4	4
2020-2021	12	0	0	12	0	0	0	0	12	12
2021-2022	1	0	0	1	0	0	0	0	1	1
Total	233	0	0	233	201	0	0	201	32	32

Notes:

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

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

Exposure Measures

Accident Year	Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
2000-2001	2,636,685	1.679	4,426,994
2001-2002	2,926,632	1.638	4,793,823
2002-2003	3,255,273	1.598	5,201,926
2003-2004	3,401,137	1.559	5,302,373
2004-2005	3,500,006	1.521	5,323,509
2005-2006	3,557,514	1.484	5,279,351
2006-2007	3,705,140	1.448	5,365,043
2007-2008	3,909,370	1.413	5,523,940
2008-2009	4,049,436	1.379	5,584,172
2009-2010	3,940,725	1.345	5,300,275
2010-2011	3,534,443	1.312	4,637,189
2011-2012	3,457,490	1.280	4,425,587
2012-2013	3,480,180	1.249	4,346,745
2013-2014	3,430,028	1.219	4,181,204
2014-2015	3,550,523	1.189	4,221,572
2015-2016	3,697,212	1.160	4,288,766
2016-2017	3,936,364	1.132	4,455,964
2017-2018	4,135,396	1.104	4,565,477
2018-2019	4,265,647	1.077	4,594,102
2019-2020	4,346,148	1.051	4,567,802
2020-2021	4,396,808	1.025	4,506,728
2021-2022	4,622,980	1.000	4,622,980
2022-2023	4,761,670	1.000	4,761,670

Notes:

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

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)
2000-2001	0	1.862	0	0	0.000
2001-2002	2,847,057	1.808	5,147,479	4,793,823	1.074
2002-2003	4,646,965	1.755	8,155,424	5,201,926	1.568
2003-2004	3,509,537	1.704	5,980,251	5,302,373	1.128
2004-2005	2,444,607	1.654	4,043,380	5,323,509	0.760
2005-2006	2,947,359	1.606	4,733,459	5,279,351	0.897
2006-2007	3,128,576	1.559	4,877,450	5,365,043	0.909
2007-2008	3,147,259	1.513	4,761,803	5,523,940	0.862
2008-2009	2,711,703	1.469	3,983,492	5,584,172	0.713
2009-2010	2,538,522	1.426	3,619,932	5,300,275	0.683
2010-2011	2,013,526	1.385	2,788,734	4,637,189	0.601
2011-2012	2,825,000	1.345	3,799,625	4,425,587	0.859
2012-2013	3,309,000	1.306	4,321,554	4,346,745	0.994
2013-2014	2,229,780	1.267	2,825,131	4,181,204	0.676
2014-2015	2,938,392	1.231	3,617,161	4,221,572	0.857
2015-2016	3,142,000	1.195	3,754,690	4,288,766	0.875
2016-2017	2,943,000	1.160	3,413,880	4,455,964	0.766
2017-2018	1,891,000	1.126	2,129,266	4,565,477	0.466
2018-2019	1,683,000	1.093	1,839,519	4,594,102	0.400
2019-2020	2,480,000	1.061	2,631,280	4,567,802	0.576
2020-2021	3,779,000	1.030	3,892,370	4,506,728	0.864
Totals	\$57,155,283		\$80,315,880	96,465,548	\$0.833
13/14-18/19	14,827,172		17,579,647	26,307,085	0.668
14/15-19/20	15,077,392		17,385,796	26,693,683	0.651
(F) Selected Limited Rate:					\$0.800
Prior \$100K:					\$0.825
Prior \$100K to \$1M:					\$1.037
			\$100,000	\$1,000,000	\$100K - \$1M
Program Year:			2022-2023	2022-2023	2022-2023
(G) Factor to SIR:			1.000	2.281	
(H) Trend Factor:			1.030	1.030	
(I) Program Rate:			\$0.824	\$1.879	\$1.055
(J) Trended Payroll (\$00):			4,622,980	4,761,670	4,761,670
(K) Projected Program Losses:			3,809,000	8,947,000	5,024,000
(L) Projected ULAE:			0	0	0
(M) Projected Loss and ULAE:			\$3,809,000	\$8,947,000	\$5,024,000

Notes appear on the next page.

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

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

Notes:

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

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

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

Reported Loss Development

Accident Year (A)	Limited Reported Losses as of 12/31/21 (B)	Reported Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Reported Losses of 12/31/21 (E)	Reported Loss Development Factor (F)	Ultimate Program Losses (G)
2000-2001	\$2,192,130	1.000	\$2,192,130	\$3,911,857	1.000	\$3,911,857
2001-2002	2,847,057	1.000	2,847,057	5,796,598	1.000	5,796,598
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	3,128,576	1.000	3,128,576	4,547,760	1.000	4,547,760
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	5,364,046	1.000	5,364,046
2009-2010	2,538,522	1.000	2,538,522	3,874,500	1.001	3,878,375
2010-2011	2,013,526	1.000	2,013,526	3,571,075	1.003	3,581,788
2011-2012	2,824,647	1.000	2,824,647	6,293,156	1.004	6,318,329
2012-2013	3,308,601	1.000	3,308,601	6,833,017	1.007	6,880,848
2013-2014	2,229,780	1.000	2,229,780	4,318,084	1.012	4,369,901
2014-2015	2,938,392	1.001	2,941,330	6,737,773	1.019	6,865,791
2015-2016	3,135,461	1.002	3,141,732	6,260,691	1.026	6,423,469
2016-2017	2,931,044	1.004	2,942,768	8,096,989	1.033	8,364,190
2017-2018	1,873,364	1.007	1,886,478	2,646,622	1.052	2,784,246
2018-2019	1,596,209	1.017	1,623,345	2,313,337	1.133	2,621,011
2019-2020	2,260,330	1.037	2,343,962	2,327,142	1.329	3,092,772
2020-2021	2,532,027	1.616	4,091,756	4,551,798	2.408	9,552,730
Totals	\$57,757,096		\$59,461,640	\$107,343,937		\$114,253,203

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

Accident Year	Limited Losses Reported as of:										
	6 Months	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months
2000-2001			2,502,195	2,256,049	2,413,689	2,435,656	2,425,865	2,387,404	2,387,404	2,382,404	2,382,404
2001-2002		2,356,125	2,422,293	2,794,437	2,851,519	2,940,724	2,987,766	2,939,481	2,956,981	2,951,981	3,039,481
2002-2003	1,341,283	3,829,893	4,293,424	4,604,949	4,740,657	4,821,491	4,811,984	4,901,984	4,966,984	5,011,984	4,977,421
2003-2004	702,623	2,248,188	2,863,892	3,229,117	3,366,140	3,528,698	3,560,692	3,460,542	3,560,542	3,560,542	3,560,542
2004-2005	909,032	2,172,504	3,103,889	2,811,093	3,026,321	2,861,424	2,893,524	2,858,702	2,866,202	2,866,202	2,866,155
2005-2006	584,388	2,569,384	3,328,173	3,524,433	3,669,875	3,689,497	3,765,682	3,770,624	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	3,391,424	3,394,986	3,394,936	3,394,936	3,394,936
2007-2008	1,054,492	2,921,920	3,743,710	4,332,780	4,420,360	4,381,184	4,358,070	4,259,056	4,259,284	4,259,284	4,259,284
2008-2009	543,401	2,839,064	3,484,984	3,288,639	3,398,037	3,430,417	3,345,621	3,347,708	3,346,029	3,347,708	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	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	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	3,127,725	3,127,725	3,127,725	3,127,725
2012-2013	465,105	4,254,395	3,881,185	3,547,144	3,502,651	3,489,052	3,450,659	3,459,906	3,559,906	3,559,906	
2013-2014	842,948	2,251,578	2,694,553	2,631,490	2,671,389	2,539,618	2,539,618	2,539,618	2,539,618		
2014-2015	325,035	2,666,242	3,946,907	3,795,367	3,350,810	3,291,420	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				
2016-2017	290,633	1,930,274	2,754,128	2,812,484	2,851,248	2,931,044					
2017-2018	199,803	1,368,867	1,871,566	1,908,433	1,873,364						
2018-2019	65,888	691,395	1,364,408	1,596,209							
2019-2020	184,043	934,320	2,260,330								
2020-2021	299,593	2,532,027									
2021-2022	415,421										

Reported Loss Development Factors:

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months
2000-2001			0.902	1.070	1.009	0.996	0.984	1.000	0.998	1.000	1.000
2001-2002		1.028	1.154	1.020	1.031	1.016	0.984	1.006	0.998	1.030	0.987
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
2004-2005	2.390	1.429	0.906	1.077	0.946	1.011	0.988	1.003	1.000	1.000	1.001
2005-2006	4.397	1.295	1.059	1.041	1.005	1.021	1.001	1.007	0.998	1.000	1.000
2006-2007	3.097	1.209	1.046	1.046	1.037	1.028	1.001	1.000	1.000	1.000	1.000
2007-2008	2.771	1.281	1.157	1.020	0.991	0.995	0.977	1.000	1.000	1.000	0.977
2008-2009	5.225	1.228	0.944	1.033	1.010	0.975	1.001	0.999	1.001	0.997	1.003
2009-2010	4.415	1.141	0.810	1.005	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2010-2011	5.428	0.990	0.967	0.951	0.975	0.981	1.000	0.995	1.000	1.000	1.000
2011-2012	5.842	1.032	0.941	0.967	0.980	0.966	1.000	1.000	1.000	1.000	
2012-2013	9.147	0.912	0.914	0.987	0.996	0.989	1.003	1.029	1.000		
2013-2014	2.671	1.197	0.977	1.015	0.951	1.000	1.000	1.000			
2014-2015	8.203	1.480	0.962	0.883	0.982	0.997	1.000				
2015-2016	6.267	1.414	0.957	1.002	0.996	0.997					
2016-2017	6.642	1.427	1.021	1.014	1.028						
2017-2018	6.851	1.367	1.020	0.982							
2018-2019	10.493	1.973	1.170								
2019-2020	5.077	2.419									
2020-2021	8.452										
	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months
Average	5.443	1.327	1.006	1.010	1.000	0.999	0.995	1.006	1.000	1.002	0.997
Dollar-Weighted											
Averages											
3-yr	7.566	1.835	1.055	1.001	1.001	0.998	1.001	1.011	1.000	1.000	1.001
4-yr	7.375	1.675	1.020	0.963	0.990	0.996	1.001	1.008	1.000	0.999	0.993
Comparative											
Factors	2.999	1.280	1.016	0.979	0.987	0.998	1.000	1.001	1.000	1.000	1.000
Prior	6.216	1.395	1.020	1.010	1.003	1.002	1.001	1.001	1.000	1.000	1.000
Selected	6.650	1.558	1.020	1.010	1.003	1.002	1.001	1.001	1.000	1.000	1.000
Cumulated	10.747	1.616	1.037	1.017	1.007	1.004	1.002	1.001	1.000	1.000	1.000

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

Accident Year	<u>Limited Losses Reported as of:</u>										
	138 Months	150 Months	162 Months	174 Months	186 Months	198 Months	210 Months	222 Months	234 Months	246 Months	258 Months
2000-2001	2,382,504	2,482,404	2,482,404	2,482,404	2,485,232	2,482,404	2,485,232	2,485,232	2,485,232	2,485,232	2,485,232
2001-2002	3,000,035	3,027,919	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	
2002-2003	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421		
2003-2004	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542			
2004-2005	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654				
2005-2006	3,789,394	3,788,958	3,788,958	3,788,958	3,788,958	3,788,958					
2006-2007	3,394,936	3,400,836	3,400,836	3,425,837	3,408,506						
2007-2008	4,159,284	4,259,284	4,259,284								
2008-2009	3,347,708	3,347,708	3,347,708								
2009-2010	3,127,921	3,127,921									
2010-2011	2,396,051										
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											

Reported Loss Development Factors:

	138-150 Months	150-162 Months	162-174 Months	174-186 Months	186-198 Months	198-210 Months	210-222 Months	222-234 Months	234-246 Months	246-258 Months	258-Ult. Months
2000-2001	1.042	1.000	1.000	1.001	0.999	1.001	1.000	1.000	1.000	1.000	
2001-2002	1.009	0.995	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2002-2003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2003-2004	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2004-2005	1.000	1.000	1.000	1.000	1.000	1.000					
2005-2006	1.000	1.000	1.000	1.000	1.000						
2006-2007	1.002	1.000	1.007	0.995							
2007-2008	1.024	1.000	1.000								
2008-2009	1.000	1.000									
2009-2010	1.000										
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
Average	1.008	0.999	1.001	0.999	1.000	1.000	1.000	1.000	1.000	1.000	
Dollar-Weighted											
Averages											
3-yr	1.009	1.000	1.002	0.998	1.000	1.000	1.000	1.000			
4-yr	1.008	1.000	1.002	0.999	1.000	1.000	1.000				
Comparative											
Factors	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	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

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

Paid Loss Development

Accident Year (A)	Limited Paid Losses as of 12/31/21 (B)	Paid Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Paid Losses of 12/31/21 (E)	Paid Loss Development Factor (F)	Ultimate Program Losses (G)
2000-2001	\$2,192,130	1.000	\$2,192,130	\$3,911,857	1.000	\$3,911,857
2001-2002	2,847,057	1.000	2,847,057	5,796,598	1.000	5,796,598
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	3,128,576	1.000	3,128,576	4,547,760	1.000	4,547,760
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	5,364,046	1.000	5,364,046
2009-2010	2,538,522	1.000	2,538,522	3,874,500	1.001	3,878,375
2010-2011	2,013,526	1.001	2,015,540	3,571,075	1.003	3,581,788
2011-2012	2,824,647	1.002	2,830,296	6,229,231	1.006	6,266,606
2012-2013	3,308,601	1.004	3,321,835	6,415,654	1.009	6,473,395
2013-2014	2,229,780	1.007	2,245,388	4,318,084	1.015	4,382,855
2014-2015	2,938,392	1.011	2,970,714	6,737,773	1.030	6,939,906
2015-2016	3,135,461	1.019	3,195,035	6,126,699	1.059	6,488,174
2016-2017	2,834,023	1.031	2,921,878	7,300,734	1.125	8,213,326
2017-2018	1,800,791	1.057	1,903,436	2,520,086	1.215	3,061,904
2018-2019	1,337,293	1.137	1,520,502	1,852,726	1.464	2,712,391
2019-2020	1,128,779	1.561	1,762,024	1,128,779	2.462	2,779,054
2020-2021	793,126	3.174	2,517,382	1,740,183	5.943	5,398,908
Totals	\$54,458,134		\$57,317,745	\$101,335,277		\$109,696,435

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.

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

Paid Loss Development

Accident Year	Limited Losses Paid as of:										
	6 Months	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months
2000-2001			1,691,549	2,066,275	2,230,962	2,324,934	2,376,109	2,382,404	2,382,404	2,382,404	2,382,404
2001-2002		1,331,577	1,898,744	2,493,146	2,814,747	2,835,674	2,838,647	2,939,481	2,939,481	2,939,481	2,998,047
2002-2003	368,341	1,921,924	3,419,382	4,159,574	4,572,735	4,708,622	4,811,984	4,820,255	4,893,323	4,930,307	4,962,508
2003-2004	173,413	1,278,587	2,112,645	2,806,518	3,216,963	3,398,305	3,452,557	3,460,542	3,560,542	3,560,542	3,560,542
2004-2005	92,583	901,463	2,122,845	2,612,734	2,848,049	2,845,394	2,853,463	2,858,654	2,866,154	2,866,154	2,866,154
2005-2006	91,777	1,099,067	1,733,718	3,299,822	3,599,286	3,654,071	3,764,224	3,766,533	3,780,292	3,789,394	3,789,394
2006-2007	178,735	1,234,100	2,253,938	2,920,430	3,103,547	3,253,555	3,391,424	3,394,936	3,394,936	3,394,936	3,394,936
2007-2008	149,993	1,300,794	2,635,467	3,650,448	4,101,554	4,208,833	4,228,474	4,256,077	4,259,284	4,259,284	4,259,284
2008-2009	161,539	1,020,079	2,186,680	2,792,089	3,110,459	3,338,980	3,345,621	3,347,708	3,346,029	3,347,708	3,336,906
2009-2010	301,727	1,046,459	2,274,617	2,817,091	2,998,274	3,072,132	3,115,424	3,127,921	3,127,921	3,127,921	3,127,921
2010-2011	106,645	872,432	1,692,195	2,287,500	2,319,013	2,395,143	2,396,051	2,396,051	2,396,051	2,396,051	2,396,051
2011-2012	114,916	832,713	2,112,380	2,750,332	3,122,242	3,118,744	3,127,725	3,127,725	3,127,725	3,127,725	3,127,725
2012-2013	98,607	934,308	2,290,004	3,124,392	3,371,990	3,450,380	3,450,659	3,459,906	3,559,906	3,559,906	
2013-2014	130,461	888,140	1,780,866	2,316,155	2,654,568	2,539,618	2,539,618	2,539,618	2,539,618		
2014-2015	91,368	1,387,749	2,717,926	3,379,346	3,268,352	3,281,784	3,281,784	3,281,784			
2015-2016	98,110	679,755	1,782,598	2,795,127	2,999,838	3,135,716	3,135,461				
2016-2017	30,679	920,995	1,975,490	2,421,836	2,773,661	2,834,023					
2017-2018	31,268	758,485	1,188,193	1,713,864	1,800,791						
2018-2019	16,322	417,918	867,701	1,337,293							
2019-2020	65,521	413,661	1,128,779								
2020-2021	54,421	793,126									
2021-2022	40,902										

Paid Loss Development Factors:

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months
2000-2001			1.222	1.080	1.042	1.022	1.003	1.000	1.000	1.000	1.000
2001-2002		1.426	1.313	1.129	1.007	1.001	1.036	1.000	1.000	1.020	1.001
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	
2012-2013	9.475	2.451	1.364	1.079	1.023	1.000	1.003	1.029	1.000		
2013-2014	6.808	2.005	1.301	1.146	0.957	1.000	1.000	1.000			
2014-2015	15.189	1.959	1.243	0.967	1.004	1.000	1.000				
2015-2016	6.928	2.622	1.568	1.073	1.045	1.000					
2016-2017	30.020	2.145	1.226	1.145	1.022						
2017-2018	24.258	1.567	1.442	1.051							
2018-2019	25.605	2.076	1.541								
2019-2020	6.313	2.729									
2020-2021	14.574										
Average Dollar-Weighted Averages	11.277	2.052	1.355	1.089	1.024	1.010	1.004	1.006	1.001	1.002	0.999
3-yr	11.923	2.003	1.358	1.093	1.023	1.000	1.001	1.011	1.000	1.000	1.001
4-yr	14.225	2.055	1.422	1.052	1.008	1.000	1.001	1.009	1.000	0.999	0.993
Comparative Factors	4.341	2.135	1.445	1.148	1.053	1.029	1.016	1.010	1.009	1.007	1.007
Prior	16.544	2.024	1.356	1.076	1.025	1.012	1.008	1.004	1.003	1.002	1.001
Selected	16.544	2.033	1.373	1.076	1.025	1.012	1.008	1.004	1.003	1.002	1.001
Cumulated	52.510	3.174	1.561	1.137	1.057	1.031	1.019	1.011	1.007	1.004	1.002

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

Paid Loss Development

Accident Year	Limited Losses Paid as of:										
	138 Months	150 Months	162 Months	174 Months	186 Months	198 Months	210 Months	222 Months	234 Months	246 Months	258 Months
2000-2001	2,382,404	2,482,404	2,482,404	2,482,404	2,485,232	2,482,404	2,485,232	2,485,232	2,485,232	2,485,232	2,485,232
2001-2002	3,000,035	3,000,611	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	3,012,173	
2002-2003	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421	4,977,421		
2003-2004	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542	3,560,542			
2004-2005	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654	2,867,654				
2005-2006	3,789,394	3,788,958	3,788,958	3,788,958	3,788,958	3,788,958					
2006-2007	3,394,936	3,400,836	3,400,836	3,403,249	3,408,506						
2007-2008	4,159,284	4,259,284	4,259,284								
2008-2009	3,347,708	3,347,708	3,347,708								
2009-2010	3,127,921	3,127,921									
2010-2011	2,396,051										
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											

Paid Loss Development Factors:

	138-150 Months	150-162 Months	162-174 Months	174-186 Months	186-198 Months	198-210 Months	210-222 Months	222-234 Months	234-246 Months	246-258 Months	258-Ult. Months
2000-2001	1.042	1.000	1.000	1.001	0.999	1.001	1.000	1.000	1.000	1.000	
2001-2002	1.000	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2002-2003	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
2003-2004	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2004-2005	1.000	1.000	1.000	1.000	1.000	1.000					
2005-2006	1.000	1.000	1.000	1.000	1.000						
2006-2007	1.002	1.000	1.001	1.002							
2007-2008	1.024	1.000	1.000								
2008-2009	1.000	1.000									
2009-2010	1.000										
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
Average	1.007	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	
Dollar-Weighted											
Averages											
3-yr	1.009	1.000	1.000	1.001	1.000	1.000	1.000	1.000			
4-yr	1.008	1.000	1.000	1.000	1.000	1.000	1.000				
Comparative											
Factors	1.006	1.005	1.004	1.003	1.001	1.002	1.001	1.001	1.001	1.000	1.001
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

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

Exposure and Development Method
Based on Reported Losses

Accident Year	Trended Payroll (\$00) (A)	Reported Losses as of 12/31/21 (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)
2000-2001	0		1.000	0.000	0.599	0	
2001-2002	4,793,823	5,796,598	1.000	0.000	0.897	0	5,796,598
2002-2003	5,201,926	8,884,428	1.000	0.000	1.371	0	8,884,428
2003-2004	5,302,373	5,715,419	1.000	0.000	1.034	0	5,715,419
2004-2005	5,323,509	3,869,337	1.000	0.000	0.730	0	3,869,337
2005-2006	5,279,351	5,631,680	1.000	0.000	0.904	0	5,631,680
2006-2007	5,365,043	4,547,760	1.000	0.000	0.963	0	4,547,760
2007-2008	5,523,940	5,798,628	1.000	0.000	0.959	0	5,798,628
2008-2009	5,584,172	5,364,046	1.000	0.000	0.834	0	5,364,046
2009-2010	5,300,275	3,874,500	1.001	0.001	0.839	4,447	3,878,947
2010-2011	4,637,189	3,571,075	1.003	0.003	0.774	10,768	3,581,843
2011-2012	4,425,587	6,293,156	1.004	0.004	1.162	20,570	6,313,726
2012-2013	4,346,745	6,833,017	1.007	0.007	1.415	43,055	6,876,072
2013-2014	4,181,204	4,318,084	1.012	0.012	1.011	50,726	4,368,810
2014-2015	4,221,572	6,737,773	1.019	0.019	1.347	108,043	6,845,816
2015-2016	4,288,766	6,260,691	1.026	0.025	1.449	155,361	6,416,052
2016-2017	4,455,964	8,096,989	1.033	0.032	1.305	186,081	8,283,070
2017-2018	4,565,477	2,646,622	1.052	0.049	1.371	306,704	2,953,326
2018-2019	4,594,102	2,313,337	1.133	0.117	1.442	775,089	3,088,426
2019-2020	4,567,802	2,327,142	1.329	0.248	1.517	1,718,480	4,045,622
2020-2021	4,506,728	4,551,798	2.408	0.585	1.594	4,202,479	8,754,277
Totals	96,465,548	\$103,432,080				\$7,581,803	\$111,013,883

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) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

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

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

Exposure and Development Method
Based on Paid Losses

Accident Year	Trended Payroll (\$00) (A)	Paid Losses as of 12/31/21 (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)
2000-2001	0		1.000	0.000	0.599	0	
2001-2002	4,793,823	5,796,598	1.000	0.000	0.897	0	5,796,598
2002-2003	5,201,926	8,884,428	1.000	0.000	1.371	0	8,884,428
2003-2004	5,302,373	5,715,419	1.000	0.000	1.034	0	5,715,419
2004-2005	5,323,509	3,869,337	1.000	0.000	0.730	0	3,869,337
2005-2006	5,279,351	5,631,680	1.000	0.000	0.904	0	5,631,680
2006-2007	5,365,043	4,547,760	1.000	0.000	0.963	0	4,547,760
2007-2008	5,523,940	5,798,628	1.000	0.000	0.959	0	5,798,628
2008-2009	5,584,172	5,364,046	1.000	0.000	0.834	0	5,364,046
2009-2010	5,300,275	3,874,500	1.001	0.001	0.839	4,447	3,878,947
2010-2011	4,637,189	3,571,075	1.003	0.003	0.774	10,768	3,581,843
2011-2012	4,425,587	6,229,231	1.006	0.006	1.162	30,855	6,260,086
2012-2013	4,346,745	6,415,654	1.009	0.009	1.415	55,356	6,471,010
2013-2014	4,181,204	4,318,084	1.015	0.015	1.011	63,408	4,381,492
2014-2015	4,221,572	6,737,773	1.030	0.029	1.347	164,907	6,902,680
2015-2016	4,288,766	6,126,699	1.059	0.056	1.449	348,008	6,474,707
2016-2017	4,455,964	7,300,734	1.125	0.111	1.305	645,469	7,946,203
2017-2018	4,565,477	2,520,086	1.215	0.177	1.371	1,107,891	3,627,977
2018-2019	4,594,102	1,852,726	1.464	0.317	1.442	2,100,028	3,952,754
2019-2020	4,567,802	1,128,779	2.462	0.594	1.517	4,116,037	5,244,816
2020-2021	4,506,728	1,740,183	5.943	0.832	1.594	5,976,859	7,717,042
Totals	96,465,548	\$97,423,420				\$14,624,033	\$112,047,453

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) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

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

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

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)
2000-2001	0		1.862			0.403	1.485	0.599
2001-2002	4,793,823	2,847,057	1.808	5,147,479	1.074	0.594	1.510	0.897
2002-2003	5,201,926	4,646,965	1.755	8,155,424	1.568	0.893	1.536	1.371
2003-2004	5,302,373	3,509,537	1.704	5,980,251	1.128	0.662	1.562	1.034
2004-2005	5,323,509	2,444,607	1.654	4,043,380	0.760	0.459	1.590	0.730
2005-2006	5,279,351	2,947,359	1.606	4,733,459	0.897	0.558	1.620	0.904
2006-2007	5,365,043	3,128,576	1.559	4,877,450	0.909	0.583	1.652	0.963
2007-2008	5,523,940	3,147,259	1.513	4,761,803	0.862	0.570	1.683	0.959
2008-2009	5,584,172	2,711,703	1.469	3,983,492	0.713	0.486	1.715	0.834
2009-2010	5,300,275	2,538,522	1.426	3,619,932	0.683	0.479	1.751	0.839
2010-2011	4,637,189	2,013,526	1.385	2,788,734	0.601	0.434	1.784	0.774
2011-2012	4,425,587	2,825,000	1.345	3,799,625	0.859	0.638	1.821	1.162
2012-2013	4,346,745	3,309,000	1.306	4,321,554	0.994	0.761	1.859	1.415
2013-2014	4,181,204	2,229,780	1.267	2,825,131	0.676	0.533	1.896	1.011
2014-2015	4,221,572	2,938,392	1.231	3,617,161	0.857	0.696	1.935	1.347
2015-2016	4,288,766	3,142,000	1.195	3,754,690	0.875	0.733	1.976	1.449
2016-2017	4,455,964	2,943,000	1.160	3,413,880	0.766	0.647	2.018	1.305
2017-2018	4,565,477	1,886,000	1.126	2,123,636	0.465	0.666	2.059	1.371
2018-2019	4,594,102	1,623,000	1.093	1,773,939	0.386	0.686	2.102	1.442
2019-2020	4,567,802	2,344,000	1.061	2,486,984	0.544	0.707	2.146	1.517
2020-2021	4,506,728	3,698,000	1.030	3,808,940	0.845	0.728	2.189	1.594
Total/Avg	96,465,548	\$56,873,283		\$80,016,944	\$0.829			
14/15-18/19	22,125,881	12,532,392		14,683,306	0.664			
16/17-20/21	22,690,073	12,494,000		13,607,379	0.600			
Selected Limited Rate:					\$0.750			
Prior:					\$0.800			

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 2015-2016 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 and \$1M Analysis)

Frequency and Severity Method

Accident Year	Ultimate Program Severity (A)	Adjusted Ultimate Claims (B)	Ultimate Program Losses (C)
2000-2001	\$5,753	566	\$3,256,198
2001-2002	6,339	678	4,297,842
2002-2003	9,453	755	7,137,015
2003-2004	8,742	627	5,481,234
2004-2005	6,867	566	3,886,722
2005-2006	8,494	562	4,773,628
2006-2007	8,971	576	5,167,296
2007-2008	8,003	662	5,297,986
2008-2009	7,882	590	4,650,380
2009-2010	8,579	518	4,443,922
2010-2011	8,594	418	3,592,292
2011-2012	11,883	433	5,145,339
2012-2013	12,400	496	6,150,400
2013-2014	9,502	445	4,228,390
2014-2015	11,726	485	5,687,110
2015-2016	12,521	496	6,210,416
2016-2017	11,050	514	5,679,700
2017-2018	11,561	492	5,688,012
2018-2019	12,099	434	5,250,966
2019-2020	12,661	438	5,545,518
2020-2021	13,243	373	4,939,639
Total		11,124	\$106,510,005

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

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)
2000-2001	\$2,192,130	566	\$3,873	1.679	\$6,503	\$3,873	1.485	\$5,753
2001-2002	2,847,057	678	4,199	1.638	6,878	4,199	1.510	6,339
2002-2003	4,646,965	755	6,155	1.598	9,836	6,155	1.536	9,453
2003-2004	3,509,537	627	5,597	1.559	8,726	5,597	1.562	8,742
2004-2005	2,444,607	566	4,319	1.521	6,569	4,319	1.590	6,867
2005-2006	2,947,359	562	5,244	1.484	7,782	5,244	1.620	8,494
2006-2007	3,128,576	576	5,432	1.448	7,866	5,432	1.652	8,971
2007-2008	3,147,259	662	4,754	1.412	6,713	4,754	1.683	8,003
2008-2009	2,711,703	590	4,596	1.378	6,333	4,596	1.715	7,882
2009-2010	2,538,522	518	4,901	1.344	6,587	4,901	1.751	8,579
2010-2011	2,013,526	418	4,817	1.312	6,320	4,817	1.784	8,594
2011-2012	2,825,000	433	6,524	1.280	8,351	6,524	1.821	11,883
2012-2013	3,309,000	496	6,671	1.249	8,332	6,671	1.859	12,400
2013-2014	2,229,780	445	5,011	1.218	6,103	5,011	1.896	9,502
2014-2015	2,938,392	485	6,059	1.188	7,198	6,059	1.935	11,726
2015-2016	3,142,000	496	6,335	1.160	7,349	6,335	1.976	12,521
2016-2017	2,943,000	514	5,726	1.132	6,482	5,477	2.018	11,050
2017-2018	1,891,000	492	3,843	1.104	4,243	5,616	2.059	11,561
2018-2019	1,683,000	434	3,878	1.077	4,177	5,757	2.102	12,099
2019-2020	2,360,000	438	5,388	1.051	5,663	5,899	2.146	12,661
2020-2021	3,779,000	373	10,131	1.025	10,384	6,049	2.189	13,243

Average Limited Severity: \$7,066
Average 15/16-18/19 Limited Severity: 5,563
Average 17/18-20/21 Limited Severity: 6,117

Selected Limited Severity: \$6,200
Prior: \$6,200

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.

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

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)
2000-2001	566	566	566	0.0		1.107	
2001-2002	678	678	678	479.4	1.414	1.101	1.557
2002-2003	755	755	755	520.2	1.451	1.096	1.590
2003-2004	627	627	627	530.2	1.182	1.090	1.288
2004-2005	566	566	566	532.4	1.063	1.084	1.152
2005-2006	562	562	562	527.9	1.065	1.079	1.149
2006-2007	576	576	576	536.5	1.074	1.074	1.153
2007-2008	662	662	662	552.4	1.198	1.069	1.281
2008-2009	590	591	590	558.4	1.057	1.064	1.125
2009-2010	518	519	518	530.0	0.977	1.059	1.035
2010-2011	418	419	418	463.7	0.901	1.054	0.950
2011-2012	433	434	433	442.6	0.978	1.049	1.026
2012-2013	496	497	496	434.7	1.141	1.044	1.191
2013-2014	445	448	445	418.1	1.064	1.039	1.105
2014-2015	485	490	485	422.2	1.149	1.034	1.188
2015-2016	496	502	496	428.9	1.157	1.030	1.192
2016-2017	514	516	514	445.6	1.154	1.025	1.183
2017-2018	492	499	492	456.5	1.078	1.020	1.100
2018-2019	434	429	434	459.4	0.945	1.015	0.959
2019-2020	438	405	438	456.8	0.959	1.010	0.969
2020-2021	373	342	373	450.7	0.828	1.005	0.832
Total	11,124	11,083	11,124	9,646.6			1.156
15/16-19/20	2,374	2,351	2,374	2,247.2			1.078
(H) Selected Frequency:							1.100
Prior:							1.200
Program Year:				2021-2022	2022-2023		
(I) Trend Factor:				1.000	1.005		
(J) Selected Frequency:				1.100	1.106		
(K) Est. Payroll (\$000,000):				462.3	476.2		
(L) Ultimate Claims:				509	527		

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).

- (G) (E) x (F).
 (H) The selected frequency of 1.100 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).

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

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

Frequency and Severity Method
Reported Claim Count Development

Accident Year	Claims Reported as of 12/31/2021 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2000-2001	566	1.000	566	
2001-2002	678	1.000	678	1.557
2002-2003	755	1.000	755	1.591
2003-2004	627	1.000	627	1.289
2004-2005	566	1.000	566	1.153
2005-2006	562	1.000	562	1.149
2006-2007	576	1.000	576	1.153
2007-2008	662	1.000	662	1.281
2008-2009	590	1.000	590	1.124
2009-2010	518	1.000	518	1.035
2010-2011	418	1.000	418	0.950
2011-2012	433	1.000	433	1.026
2012-2013	496	1.000	496	1.191
2013-2014	445	1.000	445	1.106
2014-2015	485	1.000	485	1.188
2015-2016	496	1.001	496	1.191
2016-2017	512	1.003	514	1.182
2017-2018	489	1.006	492	1.099
2018-2019	430	1.010	434	0.959
2019-2020	431	1.017	438	0.968
2020-2021	353	1.057	373	0.832
Total	11,088		11,124	1.156

Notes:

(A) Provided by the Authority.

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

(C) (A) x (B).

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

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

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

Frequency and Severity Method
Closed Claim Count Development

Accident Year	Claims Closed as of 12/31/2021 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2000-2001	566	1.000	566	
2001-2002	678	1.000	678	1.557
2002-2003	755	1.000	755	1.591
2003-2004	627	1.000	627	1.289
2004-2005	566	1.000	566	1.153
2005-2006	562	1.000	562	1.149
2006-2007	576	1.000	576	1.153
2007-2008	662	1.000	662	1.281
2008-2009	590	1.001	591	1.126
2009-2010	518	1.002	519	1.037
2010-2011	418	1.003	419	0.952
2011-2012	432	1.004	434	1.029
2012-2013	495	1.005	497	1.194
2013-2014	445	1.007	448	1.113
2014-2015	485	1.010	490	1.200
2015-2016	495	1.014	502	1.206
2016-2017	506	1.019	516	1.187
2017-2018	486	1.026	499	1.115
2018-2019	411	1.044	429	0.948
2019-2020	363	1.115	405	0.896
2020-2021	209	1.635	342	0.763
Total	10,845		11,083	1.152

Notes:

- (A) Provided by the Authority.
 (B) From \$100K and \$1M Rate Analysis Appendix D, Page 7.
 (C) (A) x (B).
 (D) (C) / [\$100K and \$1M Rate Analysis Appendix D, Page 3, (D)] x [\$100K and \$1M Rate Ar

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

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

Accident Year	Claims Reported as of:													
	6 Months	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months	138 Months	150 Months	162 Months
2000-2001			594	597	605	589	589	590	590	607	607	608	608	608
2001-2002		686	717	719	707	709	710	710	722	722	723	723	723	723
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	
2010-2011	168	494	505	506	508	509	510	510	510	510	513	514		
2011-2012	129	452	465	467	470	471	471	470	470	470	470			
2012-2013	169	499	520	523	523	524	525	527	528	528				
2013-2014	144	455	467	471	473	466	466	466	467					
2014-2015	161	489	510	514	502	503	504	512						
2015-2016	170	487	502	490	492	492	497							
2016-2017	108	501	508	511	512	512								
2017-2018	152	473	481	483	489									
2018-2019	123	394	421	430										
2019-2020	144	413	431											
2020-2021	124	353												
2021-2022	151													

Reported Claim Count Development Factors:

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months	138-150 Months	150-162 Months	162-174 Months
2000-2001			1.005	1.013	0.974	1.000	1.002	1.000	1.029	1.000	1.002	1.000	1.000	1.000
2001-2002		1.045	1.003	0.983	1.003	1.001	1.000	1.017	1.000	1.001	1.000	1.000	1.000	1.000
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	
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		
2010-2011	2.940	1.022	1.002	1.004	1.002	1.002	1.000	1.000	1.000	1.006	1.002			
2011-2012	3.504	1.029	1.004	1.006	1.002	1.000	0.998	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					
2013-2014	3.160	1.026	1.009	1.004	0.985	1.000	1.000	1.002						
2014-2015	3.037	1.043	1.008	0.977	1.002	1.002	1.016							
2015-2016	2.865	1.031	0.976	1.004	1.000	1.010								
2016-2017	4.639	1.014	1.006	1.002	1.000									
2017-2018	3.112	1.017	1.004	1.012										
2018-2019	3.203	1.069	1.021											
2019-2020	2.868	1.044												
2020-2021	2.847													
Average Claim-Weighted Averages														
3-yr	2.967	1.041	1.010	1.006	1.001	1.004	1.007	1.001	1.000	1.002	1.009	1.002	1.000	1.000
4-yr	3.007	1.034	1.001	0.998	0.997	1.004	1.005	1.001	1.000	0.995	1.004	1.002	1.000	1.000
Comparative Factors Prior														
2.644	1.140	1.018	1.007	1.006	1.004	1.004	1.004	1.003	1.002	1.001	1.000	1.001	1.000	1.000
3.207	1.035	1.007	1.004	1.003	1.002	1.001	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Selected	3.063	1.040	1.007	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	3.238	1.057	1.017	1.010	1.006	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000

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

Closed Claim Development

Claims Closed as of:

Accident Year	6 Months	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months	138 Months	150 Months	162 Months
2000-2001			544	583	593	582	587	589	589	607	607	607	607	608
2001-2002		474	664	700	698	705	707	709	721	721	722	723	722	723
2002-2003	44	536	734	766	783	789	791	805	805	805	806	806	806	806
2003-2004	36	465	585	636	648	649	662	663	666	666	667	667	667	667
2004-2005	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	
2010-2011	46	331	470	497	503	507	509	509	510	510	513	514		
2011-2012	27	285	421	451	459	467	470	469	469	469	469			
2012-2013	36	332	471	506	515	518	524	526	527	527				
2013-2014	28	304	430	456	467	464	465	466	467					
2014-2015	23	354	457	491	492	501	504	512						
2015-2016	43	336	450	470	481	488	496							
2016-2017	19	316	465	491	499	506								
2017-2018	22	310	445	473	486									
2018-2019	19	234	366	411										
2019-2020	36	227	363											
2020-2021	18	209												
2021-2022	41													

Closed Claim Count Development Factors:

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months	138-150 Months	150-162 Months	162-174 Months
2000-2001			1.072	1.017	0.981	1.009	1.003	1.000	1.031	1.000	1.000	1.000	1.002	1.000
2001-2002		1.401	1.054	0.997	1.010	1.003	1.003	1.017	1.000	1.001	1.001	0.999	1.001	1.000
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	
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		
2010-2011	7.196	1.420	1.057	1.012	1.008	1.004	1.000	1.002	1.000	1.006	1.002			
2011-2012	10.556	1.477	1.071	1.018	1.017	1.006	0.998	1.000	1.000	1.000				
2012-2013	9.222	1.419	1.074	1.018	1.006	1.012	1.004	1.002	1.000					
2013-2014	10.857	1.414	1.060	1.024	0.994	1.002	1.002	1.002						
2014-2015	15.391	1.291	1.074	1.002	1.018	1.006	1.016							
2015-2016	7.814	1.339	1.044	1.023	1.015	1.016								
2016-2017	16.632	1.472	1.056	1.016	1.014									
2017-2018	14.091	1.435	1.063	1.027										
2018-2019	12.316	1.564	1.123											
2019-2020	6.306	1.599												
2020-2021	11.611													
Average Claim-Weighted Averages	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months	138-150 Months	150-162 Months	162-174 Months
Average Claim-Weighted Averages	10.099	1.407	1.065	1.016	1.008	1.007	1.004	1.002	1.003	0.999	1.002	1.001	1.000	1.000
3-yr	9.178	1.523	1.078	1.022	1.016	1.008	1.007	1.001	1.000	1.002	1.009	1.002	1.000	1.000
4-yr	10.316	1.508	1.069	1.017	1.010	1.009	1.005	1.002	1.000	0.995	1.004	1.002	1.000	1.000
Comparative Factors	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months	138-150 Months	150-162 Months	162-174 Months
Prior	3.502	1.514	1.119	1.051	1.032	1.022	1.017	1.014	1.012	1.009	1.009	1.006	1.005	1.003
Prior	10.781	1.428	1.059	1.015	1.007	1.005	1.004	1.003	1.002	1.001	1.001	1.001	1.001	1.001
Selected	10.093	1.466	1.068	1.018	1.007	1.005	1.004	1.003	1.002	1.001	1.001	1.001	1.001	1.001
Cumulated	16.503	1.635	1.115	1.044	1.026	1.019	1.014	1.010	1.007	1.005	1.004	1.003	1.002	1.001

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

Loss Trend Factors

Accident Year	Benefit Level Factor (A)	Factor to 2021-2022 Loss Rate Level (B)	Factor to 2022-2023 Loss Rate Level (C)	Factor to 2023-2024 Loss Rate Level (D)	Factor to 2024-2025 Loss Rate Level (E)	Factor to 2021-2022 Frequency Level (F)	Factor to 2022-2023 Frequency Level (G)	Factor to 2023-2024 Frequency Level (H)	Factor to 2024-2025 Frequency Level (I)	Factor to 2021-2022 Severity Level (J)
2000-2001	1.000	1.862	1.918	1.976	2.035	1.107	1.113	1.118	1.124	1.679
2001-2002	1.000	1.808	1.862	1.918	1.976	1.101	1.107	1.112	1.118	1.638
2002-2003	1.000	1.755	1.808	1.862	1.918	1.096	1.101	1.106	1.112	1.598
2003-2004	1.000	1.704	1.755	1.808	1.862	1.090	1.095	1.100	1.106	1.559
2004-2005	1.000	1.654	1.704	1.755	1.808	1.084	1.089	1.095	1.100	1.521
2005-2006	1.000	1.606	1.654	1.704	1.755	1.079	1.084	1.090	1.095	1.484
2006-2007	1.000	1.559	1.606	1.654	1.704	1.074	1.079	1.085	1.090	1.448
2007-2008	1.000	1.513	1.559	1.606	1.654	1.069	1.074	1.080	1.085	1.412
2008-2009	1.000	1.469	1.514	1.559	1.606	1.064	1.069	1.075	1.080	1.378
2009-2010	1.000	1.426	1.469	1.514	1.559	1.059	1.064	1.070	1.075	1.344
2010-2011	1.000	1.385	1.427	1.470	1.514	1.054	1.059	1.065	1.070	1.312
2011-2012	1.000	1.345	1.385	1.427	1.470	1.049	1.054	1.060	1.065	1.280
2012-2013	1.000	1.306	1.345	1.385	1.427	1.044	1.050	1.055	1.060	1.249
2013-2014	1.000	1.267	1.305	1.345	1.385	1.039	1.045	1.050	1.055	1.218
2014-2015	1.000	1.231	1.268	1.306	1.345	1.034	1.040	1.045	1.050	1.188
2015-2016	1.000	1.195	1.231	1.268	1.306	1.030	1.035	1.040	1.045	1.160
2016-2017	1.000	1.160	1.195	1.231	1.268	1.025	1.030	1.035	1.040	1.132
2017-2018	1.000	1.126	1.160	1.195	1.231	1.020	1.025	1.030	1.035	1.104
2018-2019	1.000	1.093	1.126	1.160	1.195	1.015	1.020	1.025	1.030	1.077
2019-2020	1.000	1.061	1.093	1.126	1.160	1.010	1.015	1.020	1.025	1.051
2020-2021	1.000	1.030	1.061	1.093	1.126	1.005	1.010	1.015	1.020	1.025
2021-2022	1.000	1.000	1.030	1.061	1.093	1.000	1.005	1.010	1.015	1.000
2022-2023	1.000	--	1.000	1.030	1.061	--	1.000	1.005	1.010	--
2023-2024	1.000	--	--	1.000	1.030	--	--	1.000	1.005	--
2024-2025	1.000	--	--	--	1.000	--	--	--	1.000	--

Notes:

- (A) No benefit level adjustment applied.
 (B) - (E) (A) adjusted for a 3.0% annual loss rate trend.
 (F) - (I) (A) adjusted for a 0.5% annual frequency trend.
 (J) (A) adjusted for a 2.5% annual severity trend.

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

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

Residual Trend Factors

Accident Year	Initial Estimate of Ultimate Limited Losses (A)	Ultimate Reported Claims (B)	BLF (C)	Adjusted Limited Severity (D)	Trended Payroll (\$00) (E)	Ultimate Frequency (F)
2000-2001	\$2,192,130	566	1.000	3,873		
2001-2002	2,847,057	678	1.000	4,199	4,793,823	1.414
2002-2003	4,646,965	755	1.000	6,155	5,201,926	1.451
2003-2004	3,509,537	627	1.000	5,597	5,302,373	1.182
2004-2005	2,444,607	566	1.000	4,319	5,323,509	1.063
2005-2006	2,947,359	562	1.000	5,244	5,279,351	1.065
2006-2007	3,128,576	576	1.000	5,432	5,365,043	1.074
2007-2008	3,147,259	662	1.000	4,754	5,523,940	1.198
2008-2009	2,711,703	590	1.000	4,596	5,584,172	1.057
2009-2010	2,538,522	518	1.000	4,901	5,300,275	0.977
2010-2011	2,013,526	418	1.000	4,817	4,637,189	0.901
2011-2012	2,825,000	433	1.000	6,524	4,425,587	0.978
2012-2013	3,309,000	496	1.000	6,671	4,346,745	1.141
2013-2014	2,229,780	445	1.000	5,011	4,181,204	1.064
2014-2015	2,938,392	485	1.000	6,059	4,221,572	1.149
2015-2016	3,142,000	496	1.000	6,335	4,288,766	1.157
2016-2017	2,943,000	514	1.000	5,726	4,455,964	1.154
2017-2018	1,886,000	492	1.000	3,833	4,565,477	1.078
2018-2019	1,623,000	434	1.000	3,740	4,594,102	0.945
2019-2020	2,344,000	438	1.000	5,352	4,567,802	0.959
2020-2021	3,698,000	373	1.000	9,914	4,506,728	0.828

Severity Trend FactorsFrequency Trend Factors

2009-2010 through 2018-2019	0.972	1.011
2010-2011 through 2019-2020	0.969	1.002
2015-2016 through 2019-2020	0.927	0.944
Prior	1.030	1.005
Default	1.030	0.975

Selected Residual Trend	1.025	1.005
-------------------------	-------	-------

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.

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

Calculation of Discount Factors

Payment Year (A)	Payment Pattern (B)	Return on Investment (C)	Discounted Reserves (D)	Undiscounted Reserves (E)	Discount Factor (F)
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.0%	2.0%	0.000	0.000	1.000
15	0.0%	2.0%	0.000	0.000	1.000
14	0.1%	2.0%	0.001	0.001	0.990
13	0.2%	2.0%	0.003	0.003	0.984
12	0.2%	2.0%	0.005	0.005	0.975
11	0.3%	2.0%	0.008	0.008	0.968
10	0.5%	2.0%	0.012	0.013	0.965
9	1.2%	2.0%	0.024	0.024	0.967
8	2.2%	2.0%	0.045	0.047	0.968
7	4.4%	2.0%	0.088	0.091	0.969
6	6.4%	2.0%	0.150	0.155	0.967
5	10.5%	2.0%	0.251	0.260	0.965
4	20.9%	2.0%	0.452	0.468	0.966
3	25.3%	2.0%	0.694	0.721	0.962
2	19.1%	2.0%	0.870	0.913	0.953
1	8.7%	2.0%	0.939	1.000	0.939

(G) Discount Factor for Future Funding:	2021-2022	0.948
	2022-2023	0.948

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, $87.0\% = [69.4\% / 1.020] + [19.1\% / (1.010)]$.
- (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 0.95, on a discounted basis, \$0.95 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%	1.827	1.547
90%	1.581	1.385
85%	1.433	1.290
80%	1.322	1.218
75%	1.234	1.161
70%	1.159	1.112
65%	1.093	1.069
60%	1.033	1.030
55%	0.979	0.994
50%	0.926	0.960
45%	0.877	0.927
40%	0.829	0.895
35%	0.782	0.864
30%	0.734	0.832
25%	0.684	0.798

To read table: For the above retention, there is a 90% chance that final loss settlements will be less than 1.581 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 (\$100K and \$1M Analysis)

Incurred Losses as of 12/31/21

Accident Year (A)	Unlimited Incurred (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Incurred (E)	Incurred Over SIR (F)	Incurred Over \$100,000 (G)	Incurred Capped at \$100,000 (H)	Incurred \$100,000 to SIR Layer (I)	Incurred Capped at SIR (J)	Incurred Capped at SIR & Aggregate (K)
2000-2001	\$3,911,857	\$0	\$0	\$3,911,857	\$0	\$1,719,728	\$2,192,130	\$1,719,728	\$3,911,857	\$3,911,857
2001-2002	7,249,504	0	0	7,249,504	1,452,906	4,402,447	2,847,057	2,949,541	5,796,598	5,796,598
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	4,547,760	0	0	4,547,760	0	1,419,184	3,128,576	1,419,184	4,547,760	4,547,760
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	5,484,881	0	0	5,484,881	120,835	2,773,179	2,711,703	2,652,344	5,364,046	5,364,046
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	6,315,380	0	0	6,315,380	22,224	3,490,733	2,824,647	3,468,509	6,293,156	6,293,156
2012-2013	6,833,017	0	0	6,833,017	0	3,524,416	3,308,601	3,524,416	6,833,017	6,833,017
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	8,501,264	0	0	8,501,264	2,240,574	5,365,803	3,135,461	3,125,229	6,260,691	6,260,691
2016-2017	35,651,100	0	0	35,651,100	27,554,111	32,720,056	2,931,044	5,165,945	8,096,989	8,096,989
2017-2018	2,646,622	0	0	2,646,622	0	773,258	1,873,364	773,258	2,646,622	2,646,622
2018-2019	2,313,337	0	0	2,313,337	0	717,128	1,596,209	717,128	2,313,337	2,313,337
2019-2020	2,327,142	0	0	2,327,142	0	66,812	2,260,330	66,812	2,327,142	2,327,142
2020-2021	33,801,806	0	0	33,801,806	29,250,008	31,269,779	2,532,027	2,019,771	4,551,798	4,551,798
2021-2022	465,421	0	0	465,421	0	50,000	415,421	50,000	465,421	465,421
Total	\$179,826,857	\$0	\$0	\$179,826,857	\$72,017,498	\$121,654,340	\$58,172,517	\$49,636,841	\$107,809,359	\$107,809,359

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.

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

Paid Losses as of 12/31/21

Accident Year (A)	Unlimited Paid (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Paid (E)	Paid Over SIR (F)	Paid Over \$100,000 (G)	Paid Capped at \$100,000 (H)	Paid \$100,000 to SIR Layer (I)	Paid Capped at SIR (J)	Paid Capped at SIR & Aggregate (K)
2000-2001	\$3,911,857	\$0	\$0	\$3,911,857	\$0	\$1,719,728	\$2,192,130	\$1,719,728	\$3,911,857	\$3,911,857
2001-2002	7,249,504	0	0	7,249,504	1,452,906	4,402,447	2,847,057	2,949,541	5,796,598	5,796,598
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	4,547,760	0	0	4,547,760	0	1,419,184	3,128,576	1,419,184	4,547,760	4,547,760
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	5,484,881	0	0	5,484,881	120,835	2,773,179	2,711,703	2,652,344	5,364,046	5,364,046
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	6,251,455	0	0	6,251,455	22,224	3,426,808	2,824,647	3,404,584	6,229,231	6,229,231
2012-2013	6,415,654	0	0	6,415,654	0	3,107,052	3,308,601	3,107,052	6,415,654	6,415,654
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	8,367,272	0	0	8,367,272	2,240,574	5,231,811	3,135,461	2,991,237	6,126,699	6,126,699
2016-2017	34,479,534	0	0	34,479,534	27,178,799	31,645,510	2,834,023	4,466,711	7,300,734	7,300,734
2017-2018	2,520,086	0	0	2,520,086	0	719,295	1,800,791	719,295	2,520,086	2,520,086
2018-2019	1,852,726	0	0	1,852,726	0	515,432	1,337,293	515,432	1,852,726	1,852,726
2019-2020	1,128,779	0	0	1,128,779	0	0	1,128,779	0	1,128,779	1,128,779
2020-2021	10,740,183	0	0	10,740,183	9,000,000	9,947,057	793,126	947,057	1,740,183	1,740,183
2021-2022	40,902	0	0	40,902	0	0	40,902	0	40,902	40,902
Total	\$152,768,357	\$0	\$0	\$152,768,357	\$51,392,178	\$98,269,320	\$54,499,037	\$46,877,142	\$101,376,178	\$101,376,178

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.

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

Case Reserves as of 12/31/21

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)
2000-2001	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
2001-2002	0	0	0	0	0	0	0	0	0	0
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	63,925	0	0	63,925	0	63,925	0	63,925	63,925	63,925
2012-2013	417,364	0	0	417,364	0	417,364	0	417,364	417,364	417,364
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	133,992	0	0	133,992	0	133,992	0	133,992	133,992	133,992
2016-2017	1,171,566	0	0	1,171,566	375,312	1,074,546	97,020	699,234	796,254	796,254
2017-2018	126,536	0	0	126,536	0	53,963	72,573	53,963	126,536	126,536
2018-2019	460,612	0	0	460,612	0	201,696	258,916	201,696	460,612	460,612
2019-2020	1,198,363	0	0	1,198,363	0	66,812	1,131,551	66,812	1,198,363	1,198,363
2020-2021	23,061,623	0	0	23,061,623	20,250,008	21,322,722	1,738,901	1,072,714	2,811,615	2,811,615
2021-2022	424,519	0	0	424,519	0	50,000	374,519	50,000	424,519	424,519
Total	\$27,058,500	\$0	\$0	\$27,058,500	\$20,625,320	\$23,385,020	\$3,673,480	\$2,759,700	\$6,433,180	\$6,433,180

Notes:

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

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

Claim Counts as of 12/31/21

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)
2000-2001	566	0	0	566	566	0	0	566	0	0
2001-2002	678	0	0	678	678	0	0	678	0	0
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	576	0	0	576	576	0	0	576	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	518	0	0	518	518	0	0	518	0	0
2010-2011	418	0	0	418	418	0	0	418	0	0
2011-2012	433	0	0	433	432	0	0	432	1	1
2012-2013	496	0	0	496	495	0	0	495	1	1
2013-2014	445	0	0	445	445	0	0	445	0	0
2014-2015	485	0	0	485	485	0	0	485	0	0
2015-2016	496	0	0	496	495	0	0	495	1	1
2016-2017	512	0	0	512	506	0	0	506	6	6
2017-2018	489	0	0	489	486	0	0	486	3	3
2018-2019	430	0	0	430	411	0	0	411	19	19
2019-2020	431	0	0	431	363	0	0	363	68	68
2020-2021	353	0	0	353	209	0	0	209	144	144
2021-2022	151	0	0	151	41	0	0	41	110	110
Total	11,239	0	0	11,239	10,886	0	0	10,886	353	353

Notes:

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

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

Exposure Measures

Accident Year	Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
2000-2001			
2001-2002	2,926,632	1.638	4,793,823
2002-2003	3,255,273	1.598	5,201,926
2003-2004	3,401,137	1.559	5,302,373
2004-2005	3,500,006	1.521	5,323,509
2005-2006	3,557,514	1.484	5,279,351
2006-2007	3,705,140	1.448	5,365,043
2007-2008	3,909,370	1.413	5,523,940
2008-2009	4,049,436	1.379	5,584,172
2009-2010	3,940,725	1.345	5,300,275
2010-2011	3,534,443	1.312	4,637,189
2011-2012	3,457,490	1.280	4,425,587
2012-2013	3,480,180	1.249	4,346,745
2013-2014	3,430,028	1.219	4,181,204
2014-2015	3,550,523	1.189	4,221,572
2015-2016	3,697,212	1.160	4,288,766
2016-2017	3,936,364	1.132	4,455,964
2017-2018	4,135,396	1.104	4,565,477
2018-2019	4,265,647	1.077	4,594,102
2019-2020	4,346,148	1.051	4,567,802
2020-2021	4,396,808	1.025	4,506,728
2021-2022	4,622,980	1.000	4,622,980
2022-2023	4,761,670	1.000	4,761,670

Notes:

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

PLAN JPA - Liability

Funding Guidelines for Outstanding Liabilities at
June 30, 2022

(A) Estimated Ultimate Losses Incurred through 6/30/22: (From Reserve Appendix F)	\$124,887,000
(B) Estimated Paid Losses through 6/30/22: (From Reserve Appendix F)	106,464,000
(C) Estimated Liability for Claims Outstanding at 6/30/22: (From Reserve Appendix F)	<u>\$18,423,000</u>
(D) Estimated Liability for Outstanding Claims Administration Fees at 6/30/22: (From Reserve Not Included)	2,303,000
(E) Total Outstanding Liability for Claims at 6/30/22: ((C) + (D))	<u>\$20,726,000</u>
(F) Reserve Discount Factor (Based on a Discount Rate of 2.0%.): (Reserve Appendix H, Page 1, (H))	0.956
(G) Discounted Outstanding Liability for Claims at 6/30/22: ((E) x (F))	<u>\$19,808,000</u>

Confidence Level of Adequacy:	Marginally Acceptable 70%	75%	Recommended 80%	85%	Conservative 90%
(H) Confidence Level Factor: (From Reserve Appendix I)	1.109	1.155	1.210	1.278	1.370
(I) Margin for Adverse Experience: ((G) x [(H) - 1])	2,159,000	3,070,000	4,160,000	5,507,000	7,329,000
(J) Total Required Assets at 6/30/22: ((G) + (I))	<u>\$21,967,000</u>	<u>\$22,878,000</u>	<u>\$23,968,000</u>	<u>\$25,315,000</u>	<u>\$27,137,000</u>
(K) Estimated Total Assets at 6/30/22: (From Reserve Appendix K)	48,829,000	48,829,000	48,829,000	48,829,000	48,829,000
(L) Indicated Funding Redundancy/ (Deficiency): ((K) - (J))	<u>\$26,862,000</u>	<u>\$25,951,000</u>	<u>\$24,861,000</u>	<u>\$23,514,000</u>	<u>\$21,692,000</u>

PLAN JPA - Liability

IBNR as of 6/30/22 at Expected Claims Level

Accident Year	Estimated Ultimate (A)	Reported as of 12/31/21 (B)	Estimated IBNR as of 12/31/21 (C)	Estimated Percent of IBNR Reported Between 1/1/22 and 6/30/22 (D)	Estimated IBNR Reported (E)	Estimated IBNR as of 6/30/22 (F)
1986-2001	\$30,004,000	\$30,003,175	\$825	100.0%	\$825	\$0
2001-2002	4,627,263	4,627,263	0	100.0%	0	0
2002-2003	8,812,482	8,812,482	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	3,471,639	3,471,639	0	100.0%	0	0
2009-2010	2,352,952	2,352,952	0	33.3%	0	0
2010-2011	2,076,846	2,076,846	0	33.2%	0	0
2011-2012	3,917,000	3,878,185	38,815	19.8%	8,000	30,815
2012-2013	3,845,000	3,788,438	56,562	19.8%	11,000	45,562
2013-2014	6,959,081	6,959,081	0	19.6%	0	0
2014-2015	5,644,000	5,429,951	214,049	19.4%	42,000	172,049
2015-2016	5,216,000	4,948,195	267,805	11.0%	29,000	238,805
2016-2017	8,049,000	7,845,241	203,759	9.0%	18,000	185,759
2017-2018	1,146,000	868,680	277,320	17.0%	47,000	230,320
2018-2019	2,871,000	1,002,487	1,868,513	28.6%	534,000	1,334,513
2019-2020	4,018,000	367,323	3,650,677	25.7%	938,000	2,712,677
2020-2021	8,808,000	4,118,968	4,689,032	21.4%	1,003,000	3,686,032
2021-2022	5,446,000	60,000	2,663,000	10.4%	560,000	4,826,000
Totals	\$124,887,037	\$108,233,680	\$13,930,357		\$3,190,825	\$13,462,532

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 1/1/22 and 6/30/22. 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 6/30/22. 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)
1986-2001	\$30,003,175	\$30,002,392	\$30,003,175	\$30,002,392	\$30,003,978	\$30,004,000
2001-2002	4,627,263	4,627,263	4,627,263	4,627,263	4,627,260	4,627,263
2002-2003	8,812,482	8,812,482	8,812,482	8,812,482	8,812,496	8,812,482
2003-2004	2,574,481	2,574,481	2,574,481	2,574,481	2,574,480	2,574,481
2004-2005	1,874,487	1,874,487	1,874,487	1,874,487	1,874,484	1,874,487
2005-2006	4,756,022	4,756,022	4,756,022	4,756,022	4,756,022	4,756,022
2006-2007	1,662,124	1,662,124	1,662,124	1,662,124	1,662,122	1,662,124
2007-2008	6,755,660	6,755,660	6,755,660	6,755,660	6,755,664	6,755,660
2008-2009	3,475,111	3,475,111	3,475,112	3,475,112	3,471,638	3,471,639
2009-2010	2,360,011	2,360,011	2,360,001	2,360,001	2,352,960	2,352,952
2010-2011	2,089,307	2,089,307	2,089,295	2,089,295	2,076,841	2,076,846
2011-2012	3,916,967	3,852,403	3,917,351	3,853,426	3,917,000	3,917,000
2012-2013	3,845,265	3,421,640	3,846,103	3,428,739	3,844,995	3,845,000
2013-2014	7,133,058	7,133,058	7,126,126	7,126,126	6,959,085	6,959,081
2014-2015	5,647,149	5,706,879	5,636,206	5,695,911	5,429,952	5,644,000
2015-2016	5,205,501	5,314,880	5,203,296	5,303,580	5,206,000	5,216,000
2016-2017	8,339,491	8,254,815	8,129,171	7,597,815	8,400,000	8,049,000
2017-2018	953,811	1,152,825	1,337,953	2,359,627	2,800,000	1,146,000
2018-2019	1,268,146	1,402,392	2,161,253	3,452,368	4,000,000	2,871,000
2019-2020	647,223	278,777	2,974,041	4,871,427	5,200,000	4,018,000
2020-2021	16,875,412	54,232,020	9,076,279	8,693,377	5,600,000	8,808,000
Totals						\$119,441,037
Projected Losses for the Year 2021-2022 (G)						\$5,446,000
Projected Losses for the Year 2022-2023 (H)						\$6,000,000

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 \$100,000 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)
1986-2001	\$30,003,175	\$30,002,392	\$30,003,175	\$30,002,392	\$30,003,978	\$30,004,000
2001-2002	4,627,263	4,627,263	4,627,263	4,627,263	4,627,260	4,627,263
2002-2003	8,812,482	8,812,482	8,812,482	8,812,482	8,812,496	8,812,482
2003-2004	2,574,481	2,574,481	2,574,481	2,574,481	2,574,480	2,574,481
2004-2005	1,874,487	1,874,487	1,874,487	1,874,487	1,874,484	1,874,487
2005-2006	4,756,022	4,756,022	4,756,022	4,756,022	4,756,022	4,756,022
2006-2007	1,662,124	1,662,124	1,662,124	1,662,124	1,662,122	1,662,124
2007-2008	6,755,660	6,755,660	6,755,660	6,755,660	6,755,664	6,755,660
2008-2009	3,475,111	3,475,111	3,475,112	3,475,112	3,471,638	3,471,639
2009-2010	2,360,011	2,360,011	2,360,001	2,360,001	2,352,960	2,352,952
2010-2011	2,089,307	2,089,307	2,089,295	2,089,295	2,076,841	2,076,846
2011-2012	3,916,967	3,852,403	3,917,351	3,853,426	3,917,000	3,917,000
2012-2013	3,845,265	3,421,640	3,846,103	3,428,739	3,844,995	3,845,000
2013-2014	7,133,058	7,133,058	7,126,126	7,126,126	6,959,085	6,959,081
2014-2015	5,647,149	5,706,879	5,636,206	5,695,911	5,429,952	5,644,000
2015-2016	5,205,501	5,314,880	5,203,296	5,303,580	5,206,000	5,216,000
2016-2017	8,339,491	8,254,815	8,129,171	7,597,815	8,400,000	8,049,000
2017-2018	953,811	1,152,825	1,337,953	2,359,627	2,800,000	1,146,000
2018-2019	1,268,146	1,402,392	2,161,253	3,452,368	4,000,000	2,871,000
2019-2020	647,223	278,777	2,974,041	4,871,427	5,200,000	4,018,000
2020-2021	16,875,412	54,232,020	9,076,279	8,693,377	5,600,000	8,808,000
Totals						\$119,441,037
			Projected Losses for the Year 2021-2022 (G)			\$7,032,000
			Projected Losses for the Year 2022-2023 (H)			\$7,748,000

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 12/31/21 (B)	Reported Loss Development Factor (C)	Ultimate Program Losses (D)	Program Reported Losses of 12/31/21 (E)	Reported Loss Development Factor (F)	Ultimate Program Losses (G)
1986-2001	\$30,003,175	1.000	\$30,003,175	\$30,003,175	1.000	\$30,003,175
2001-2002	4,627,263	1.000	4,627,263	4,627,263	1.000	4,627,263
2002-2003	8,812,482	1.000	8,812,482	8,812,482	1.000	8,812,482
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	4,756,022	1.000	4,756,022	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	6,755,660	1.000	6,755,660	6,755,660	1.000	6,755,660
2008-2009	3,471,639	1.001	3,475,111	3,471,639	1.001	3,475,111
2009-2010	2,352,952	1.003	2,360,011	2,352,952	1.003	2,360,011
2010-2011	2,076,846	1.006	2,089,307	2,076,846	1.006	2,089,307
2011-2012	3,878,185	1.010	3,916,967	3,878,185	1.010	3,916,967
2012-2013	3,788,438	1.015	3,845,265	3,788,438	1.015	3,845,265
2013-2014	6,959,081	1.025	7,133,058	6,959,081	1.025	7,133,058
2014-2015	5,429,951	1.040	5,647,149	5,429,951	1.040	5,647,149
2015-2016	4,948,195	1.052	5,205,501	4,948,195	1.052	5,205,501
2016-2017	7,845,241	1.063	8,339,491	7,845,241	1.063	8,339,491
2017-2018	868,680	1.098	953,811	868,680	1.098	953,811
2018-2019	1,002,487	1.265	1,268,146	1,002,487	1.265	1,268,146
2019-2020	367,323	1.762	647,223	367,323	1.762	647,223
2020-2021	4,118,968	4.097	16,875,412	4,118,968	4.097	16,875,412
Totals	\$108,173,680		\$122,822,146	\$108,173,680		\$122,822,146

Notes:

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

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

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

PLAN JPA - Liability
Reported Loss Development

Accident Year	Program Losses Reported as of:										
	6 Months	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months
2000-2001			1,029,802	1,075,802	1,110,538	1,151,880	1,736,208	1,709,846	1,709,846	1,709,846	1,709,846
2001-2002		486,199	2,720,670	2,906,359	3,303,530	4,806,236	6,530,242	4,585,777	4,573,678	4,573,678	4,664,570
2002-2003	567,543	1,906,336	4,062,177	8,370,243	9,217,066	8,542,877	8,721,640	8,719,727	8,808,032	8,850,963	8,792,658
2003-2004	4,001	184,321	558,456	670,955	1,173,162	1,318,511	1,591,251	1,881,919	2,790,812	2,568,802	2,569,681
2004-2005		671,598	1,275,449	1,852,243	1,904,110	1,876,140	1,884,486	1,876,140	1,876,140	1,876,140	1,876,140
2005-2006	25,000	422,143	1,922,276	2,886,625	3,514,764	4,881,587	4,993,818	5,096,734	5,171,734	4,812,387	4,775,006
2006-2007	250,000	429,839	388,247	544,541	885,717	1,181,310	1,717,627	1,656,699	1,656,563	1,656,563	1,656,563
2007-2008	228,140	748,802	1,944,679	3,425,750	4,743,123	7,031,234	6,805,660	6,755,660	6,755,660	6,755,660	6,755,660
2008-2009	40,000	593,853	2,272,388	4,424,148	5,587,036	5,819,751	3,573,895	3,528,864	3,528,864	3,528,864	3,528,864
2009-2010	588,210	3,130,545	3,852,129	3,616,630	3,528,002	3,528,002	2,483,987	2,463,987	2,441,417	2,441,417	2,441,417
2010-2011		3,235,361	13,599,043	6,660,508	1,961,674	2,096,846	2,046,846	2,046,846	2,076,846	2,076,846	2,076,846
2011-2012	25,000	6,136,433	10,300,736	3,657,810	3,711,615	3,660,880	3,809,185	3,878,185	3,878,185	3,878,185	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	
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		
2014-2015		2,581,639	3,391,765	4,496,980	5,649,691	5,428,532	5,429,951	5,429,951			
2015-2016		816,550	4,031,962	4,652,451	5,078,739	5,077,844	4,948,195				
2016-2017	10,002	1,838,105	4,617,897	6,101,188	7,084,535	7,845,241					
2017-2018		213,377	680,850	921,662	868,680						
2018-2019		5,000	568,156	1,002,487							
2019-2020		63,500	367,323								
2020-2021	2,330,000	4,118,968									
2021-2022	60,000										

Reported Loss Development Factors:

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months
2000-2001			1.045	1.032	1.037	1.507	0.985	1.000	1.000	1.000	1.000
2001-2002		5.596	1.068	1.137	1.455	1.359	0.702	0.997	1.000	1.020	0.989
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		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	1.000	1.000	1.000	0.965
2008-2009	14.846	3.827	1.947	1.263	1.042	0.614	0.987	1.000	1.000	1.000	1.000
2009-2010	5.322	1.230	0.939	0.975	1.000	0.704	0.992	0.991	1.000	1.000	1.000
2010-2011		4.203	0.490	0.295	1.069	0.976	1.000	1.015	1.000	1.000	1.000
2011-2012	245.457	1.679	0.355	1.015	0.986	1.041	1.018	1.000	1.000	1.000	
2012-2013	188.851	0.597	0.759	0.937	1.188	0.974	1.056	1.547	1.000		
2013-2014	3.040	1.340	4.399	1.087	1.017	0.997	0.988	1.000			
2014-2015		1.314	1.326	1.256	0.961	1.000	1.000				
2015-2016		4.938	1.154	1.092	1.000	0.974					
2016-2017	183.774	2.512	1.321	1.161	1.107						
2017-2018		3.191	1.354	0.943							
2018-2019		113.631	1.764								
2019-2020		5.785									
2020-2021	1.768										
Average	59.531	8.682	1.437	1.128	1.124	1.051	0.992	1.076	0.989	1.000	0.997
Dollar-Weighted											
Averages											
3-yr		5.734	1.368	1.116	1.030	0.991	1.003	1.101	1.000	1.000	1.000
4-yr		2.941	1.281	1.155	1.027	0.989	1.006	1.089	1.000	1.000	0.984
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	1.334	1.166	1.053	1.018	1.016	1.015	1.010	1.005	1.004
Selected	5.500	2.325	1.393	1.152	1.033	1.010	1.011	1.015	1.010	1.005	1.004
Cumulated	22.534	4.097	1.762	1.265	1.098	1.063	1.052	1.040	1.025	1.015	1.010

PLAN JPA - Liability
Reported Loss Development

Accident Year	Program Losses Reported as of:										
	138 Months	150 Months	162 Months	174 Months	186 Months	198 Months	210 Months	222 Months	234 Months	246 Months	258 Months
2000-2001	1,709,846	1,874,146	1,860,684	1,860,684	1,860,684	1,860,684	1,860,684	1,860,684	1,860,684	1,860,684	2,876,099
2001-2002	4,615,125	4,643,008	4,627,263	4,627,263	4,627,263	4,627,263	4,627,263	4,627,263	4,627,263	4,627,263	
2002-2003	8,866,771	8,864,201	8,864,200	8,864,200	8,864,200	8,832,841	8,832,841	8,832,841	8,832,841		
2003-2004	2,569,681	2,569,681	2,569,681	2,569,681	2,569,681	2,569,681	2,569,681	2,569,681			
2004-2005	1,876,140	1,876,140	1,876,140	1,876,140	1,876,140	1,876,140	1,876,140				
2005-2006	4,775,006	4,775,006	4,775,006	4,775,006	4,775,006	4,775,006					
2006-2007	1,656,563	1,656,563	1,679,200	1,662,124	1,662,124						
2007-2008	6,517,383	6,755,660	6,755,660	6,755,660							
2008-2009	3,528,864	3,528,864	3,527,823								
2009-2010	2,441,417	2,441,417									
2010-2011	2,076,846										
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											

Reported Loss Development Factors:

	138-150 Months	150-162 Months	162-174 Months	174-186 Months	186-198 Months	198-210 Months	210-222 Months	222-234 Months	234-246 Months	246-258 Months	258-Ult. Months
2000-2001	1.096	0.993	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.546	
2001-2002	1.006	0.997	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2002-2003	1.000	1.000	1.000	1.000	0.996	1.000	1.000	1.000			
2003-2004	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2004-2005	1.000	1.000	1.000	1.000	1.000	1.000					
2005-2006	1.000	1.000	1.000	1.000	1.000						
2006-2007	1.000	1.014	0.990	1.000							
2007-2008	1.037	1.000	1.000								
2008-2009	1.000	1.000									
2009-2010	1.000										
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
Average Dollar-Weighted Averages	1.014	1.000	0.999	1.000	0.999	1.000	1.000	1.000	1.000	1.546	
3-yr	1.019	1.002	0.999	1.000	1.000	1.000	1.000	1.000			
4-yr	1.017	1.001	0.999	1.000	0.998	1.000	1.000				
Comparative Factors	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Prior	1.003	1.002	1.001	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

PLAN JPA - Liability

Paid Loss Development

Accident Year (A)	Program Paid Losses as of 12/31/21 (B)	Paid Loss Development Factor (C)	Ultimate Program Losses (D)	Program Paid Losses of 12/31/21 (E)	Paid Loss Development Factor (F)	Ultimate Program Losses (G)
1986-2001	\$30,002,392	1.000	\$30,002,392	\$30,002,392	1.000	\$30,002,392
2001-2002	4,627,263	1.000	4,627,263	4,627,263	1.000	4,627,263
2002-2003	8,812,482	1.000	8,812,482	8,812,482	1.000	8,812,482
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	4,756,022	1.000	4,756,022	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	6,755,660	1.000	6,755,660	6,755,660	1.000	6,755,660
2008-2009	3,471,639	1.001	3,475,111	3,471,639	1.001	3,475,111
2009-2010	2,352,952	1.003	2,360,011	2,352,952	1.003	2,360,011
2010-2011	2,076,846	1.006	2,089,307	2,076,846	1.006	2,089,307
2011-2012	3,814,260	1.010	3,852,403	3,814,260	1.010	3,852,403
2012-2013	3,371,074	1.015	3,421,640	3,371,074	1.015	3,421,640
2013-2014	6,959,081	1.025	7,133,058	6,959,081	1.025	7,133,058
2014-2015	5,429,951	1.051	5,706,879	5,429,951	1.051	5,706,879
2015-2016	4,814,203	1.104	5,314,880	4,814,203	1.104	5,314,880
2016-2017	6,678,653	1.236	8,254,815	6,678,653	1.236	8,254,815
2017-2018	814,717	1.415	1,152,825	814,717	1.415	1,152,825
2018-2019	707,921	1.981	1,402,392	707,921	1.981	1,402,392
2019-2020	56,239	4.957	278,777	56,239	4.957	278,777
2020-2021	2,431,166	22.307	54,232,020	2,431,166	22.307	54,232,020
Totals	\$104,043,613		\$159,739,029	\$104,043,613		\$159,739,029

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 DevelopmentProgram Losses Paid as of:

Accident Year	6 Months	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months
2000-2001			917,795	1,045,181	1,051,918	1,061,561	1,705,561	1,709,846	1,709,846	1,709,846	1,709,846
2001-2002		309,735	1,134,971	2,673,383	3,181,741	3,268,324	3,280,242	4,573,678	4,573,678	4,573,678	4,613,136
2002-2003	150,543	1,228,821	1,665,669	6,933,745	8,246,287	8,190,377	8,708,241	8,719,727	8,719,727	8,742,645	8,772,745
2003-2004	4,000	77,051	495,103	608,305	921,312	1,087,642	1,376,804	1,647,154	2,608,353	2,568,802	2,569,681
2004-2005		81,598	417,717	1,814,469	1,878,960	1,876,140	1,876,140	1,876,140	1,876,140	1,876,140	1,876,140
2005-2006		247,187	294,551	1,141,504	2,514,423	3,122,718	4,717,976	4,734,927	4,753,612	4,756,021	4,775,006
2006-2007	6,182	16,629	124,634	476,923	689,869	1,110,840	1,669,292	1,656,563	1,656,563	1,656,563	1,656,563
2007-2008		73,131	687,414	1,833,480	3,126,455	5,793,113	6,755,660	6,755,660	6,755,660	6,755,660	6,755,660
2008-2009	20,033	75,913	531,423	2,267,616	2,681,095	3,030,640	3,494,736	3,528,864	3,528,864	3,528,864	3,528,864
2009-2010	219,495	304,644	724,295	2,093,891	2,352,952	2,372,163	2,421,490	2,438,686	2,441,417	2,441,417	2,441,417
2010-2011		249,199	684,682	1,176,359	1,846,866	2,046,846	2,046,846	2,046,846	2,076,846	2,076,846	2,076,846
2011-2012	14,083	197,650	1,183,434	2,859,227	3,523,538	3,619,018	3,764,045	3,787,597	3,797,983	3,811,937	3,814,260
2012-2013		550,184	901,080	1,725,493	1,819,616	2,017,440	2,270,574	2,351,992	3,352,812	3,371,074	
2013-2014		128,965	746,799	5,850,808	6,724,237	6,722,157	6,932,649	6,959,081	6,959,081		
2014-2015		1,676,100	2,183,993	2,667,604	5,339,202	5,428,532	5,429,951				
2015-2016		16,532	226,123	3,422,237	4,335,681	4,610,479	4,814,203				
2016-2017		900	1,406,078	4,536,037	4,970,143	6,678,653					
2017-2018		56,752	356,919	777,179	814,717						
2018-2019			167,664	707,921							
2019-2020			56,239								
2020-2021		2,431,166									
2021-2022											

Paid Loss Development Factors:

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months
2000-2001			1.139	1.006	1.009	1.607	1.003	1.000	1.000	1.000	1.000
2001-2002		3.664	2.355	1.190	1.027	1.004	1.394	1.000	1.000	1.009	1.000
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	
2012-2013		1.638	1.915	1.055	1.109	1.125	1.036	1.426	1.005		
2013-2014		5.791	7.835	1.149	1.000	1.031	1.004	1.000			
2014-2015		1.303	1.221	2.001	1.017	1.000	1.000				
2015-2016		13.678	15.134	1.267	1.063	1.044					
2016-2017		1,562.309	3.226	1.096	1.344						
2017-2018		6.289	2.177	1.048							
2018-2019			4.222								
2019-2020											
2020-2021											

	6-18 Months	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months
Average Dollar-Weighted Averages	8.221	96.693	3.717	1.334	1.160	1.158	1.044	1.074	1.000	1.001	0.997
3-yr			3.119	1.159	1.142	1.025	1.007	1.077	1.003	1.000	1.000
4-yr			4.378	1.356	1.097	1.036	1.007	1.069	1.003	1.000	0.984
Comparative 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	2.521	1.400	1.145	1.120	1.050	1.025	1.010	1.005	1.004
Selected	9.100	4.500	2.502	1.400	1.145	1.120	1.050	1.025	1.010	1.005	1.004
Cumulated	202.994	22.307	4.957	1.981	1.415	1.236	1.104	1.051	1.025	1.015	1.010

PLAN JPA - Liability
Paid Loss Development

Accident Year	Program Losses Paid as of:										
	138 Months	150 Months	162 Months	174 Months	186 Months	198 Months	210 Months	222 Months	234 Months	246 Months	258 Months
2000-2001	1,709,846	1,804,869	1,860,684	1,860,684	1,860,684	1,860,684	1,860,684	1,860,684	1,860,684	1,860,684	2,876,099
2001-2002	4,615,125	4,615,701	4,627,263	4,627,263	4,627,263	4,627,263	4,627,263	4,627,263	4,627,263	4,627,263	
2002-2003	8,809,636	8,825,154	8,832,114	8,832,841	8,832,841	8,832,841	8,832,841	8,832,841	8,832,841		
2003-2004	2,569,681	2,569,681	2,569,681	2,569,681	2,569,681	2,569,681	2,569,681	2,569,681			
2004-2005	1,876,140	1,876,140	1,876,140	1,876,140	1,876,140	1,876,140	1,876,140				
2005-2006	4,775,006	4,775,006	4,775,006	4,775,006	4,775,006	4,775,006					
2006-2007	1,656,563	1,656,563	1,656,563	1,662,124	1,662,124						
2007-2008	6,517,383	6,755,660	6,755,660	6,755,660							
2008-2009	3,528,864	3,528,864	3,527,823								
2009-2010	2,441,417	2,441,417									
2010-2011	2,076,846										
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
2021-2022											

Paid Loss Development Factors:

	138-150 Months	150-162 Months	162-174 Months	174-186 Months	186-198 Months	198-210 Months	210-222 Months	222-234 Months	234-246 Months	246-258 Months	258-Ult. Months
2000-2001	1.056	1.031	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.546	
2001-2002	1.000	1.003	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2002-2003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000			
2003-2004	1.000	1.000	1.000	1.000	1.000	1.000	1.000				
2004-2005	1.000	1.000	1.000	1.000	1.000	1.000					
2005-2006	1.000	1.000	1.000	1.000	1.000						
2006-2007	1.000	1.000	1.003	1.000							
2007-2008	1.037	1.000	1.000								
2008-2009	1.000	1.000									
2009-2010	1.000										
2010-2011											
2011-2012											
2012-2013											
2013-2014											
2014-2015											
2015-2016											
2016-2017											
2017-2018											
2018-2019											
2019-2020											
2020-2021											
Average	1.010	1.004	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.546	
Dollar-Weighted											
Averages											
3-yr	1.019	1.000	1.000	1.000	1.000	1.000	1.000	1.000			
4-yr	1.017	1.000	1.000	1.000	1.000	1.000	1.000				
Comparative											
Factors	1.006	1.004	1.004	1.002	1.002	1.001	1.001	1.001	1.001	1.001	1.000
Prior	1.003	1.002	1.001	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

PLAN JPA - Liability
Exposure and Development Method
Based on Reported Losses

Accident Year	Trended Payroll (\$00) (A)	Reported Losses as of 12/31/21 (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)
1986-2001	4,660,711	30,003,175	1.000	0.000	6.438	0	30,003,175
2001-2002	5,056,647	4,627,263	1.000	0.000	0.915	0	4,627,263
2002-2003	5,498,758	8,812,482	1.000	0.000	1.603	0	8,812,482
2003-2004	5,606,805	2,574,481	1.000	0.000	0.459	0	2,574,481
2004-2005	6,401,988	1,874,487	1.000	0.000	0.293	0	1,874,487
2005-2006	6,377,662	4,756,022	1.000	0.000	0.746	0	4,756,022
2006-2007	6,522,170	1,662,124	1.000	0.000	0.255	0	1,662,124
2007-2008	6,739,631	6,755,660	1.000	0.000	1.002	0	6,755,660
2008-2009	6,797,113	3,471,639	1.001	0.001	0.511	3,473	3,475,112
2009-2010	6,402,621	2,352,952	1.003	0.003	0.367	7,049	2,360,001
2010-2011	5,763,632	2,076,846	1.006	0.006	0.360	12,449	2,089,295
2011-2012	4,805,609	3,878,185	1.010	0.010	0.815	39,166	3,917,351
2012-2013	4,582,006	3,788,438	1.015	0.015	0.839	57,665	3,846,103
2013-2014	4,441,748	6,959,081	1.025	0.024	1.567	167,045	7,126,126
2014-2015	4,504,358	5,429,951	1.040	0.038	1.205	206,255	5,636,206
2015-2016	4,232,637	4,948,195	1.052	0.049	1.230	255,101	5,203,296
2016-2017	4,254,965	7,845,241	1.063	0.059	1.131	283,930	8,129,171
2017-2018	4,379,345	868,680	1.098	0.089	1.204	469,273	1,337,953
2018-2019	4,324,756	1,002,487	1.265	0.209	1.282	1,158,766	2,161,253
2019-2020	4,417,328	367,323	1.762	0.432	1.366	2,606,718	2,974,041
2020-2021	4,506,728	4,118,968	4.097	0.756	1.455	4,957,311	9,076,279
Totals	110,277,218	\$108,173,680				\$10,224,201	\$118,397,881

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) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

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

PLAN JPA - Liability
Exposure and Development Method
Based on Paid Losses

Accident Year	Trended Payroll (\$00) (A)	Paid Losses as of 12/31/21 (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)
1986-2001	4,660,711	30,002,392	1.000	0.000	6.438	0	30,002,392
2001-2002	5,056,647	4,627,263	1.000	0.000	0.915	0	4,627,263
2002-2003	5,498,758	8,812,482	1.000	0.000	1.603	0	8,812,482
2003-2004	5,606,805	2,574,481	1.000	0.000	0.459	0	2,574,481
2004-2005	6,401,988	1,874,487	1.000	0.000	0.293	0	1,874,487
2005-2006	6,377,662	4,756,022	1.000	0.000	0.746	0	4,756,022
2006-2007	6,522,170	1,662,124	1.000	0.000	0.255	0	1,662,124
2007-2008	6,739,631	6,755,660	1.000	0.000	1.002	0	6,755,660
2008-2009	6,797,113	3,471,639	1.001	0.001	0.511	3,473	3,475,112
2009-2010	6,402,621	2,352,952	1.003	0.003	0.367	7,049	2,360,001
2010-2011	5,763,632	2,076,846	1.006	0.006	0.360	12,449	2,089,295
2011-2012	4,805,609	3,814,260	1.010	0.010	0.815	39,166	3,853,426
2012-2013	4,582,006	3,371,074	1.015	0.015	0.839	57,665	3,428,739
2013-2014	4,441,748	6,959,081	1.025	0.024	1.567	167,045	7,126,126
2014-2015	4,504,358	5,429,951	1.051	0.049	1.205	265,960	5,695,911
2015-2016	4,232,637	4,814,203	1.104	0.094	1.230	489,377	5,303,580
2016-2017	4,254,965	6,678,653	1.236	0.191	1.131	919,162	7,597,815
2017-2018	4,379,345	814,717	1.415	0.293	1.204	1,544,910	2,359,627
2018-2019	4,324,756	707,921	1.981	0.495	1.282	2,744,447	3,452,368
2019-2020	4,417,328	56,239	4.957	0.798	1.366	4,815,188	4,871,427
2020-2021	4,506,728	2,431,166	22.307	0.955	1.455	6,262,211	8,693,377
Totals	110,277,218	\$104,043,613				\$17,328,102	\$121,371,715

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) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

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

PLAN JPA - Liability
Exposure and Development Method

Accident Year	Trended Payroll (\$00) (A)	Ultimate Program Losses (B)	Trend Factor (C)	Trended Program Losses (D)	Trended Program Loss Rate (E)	Program Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
1986-2001	4,660,711	30,004,000	3.756	112,695,024	24.180	6.438	1.000	6.438
2001-2002	5,056,647	4,627,263	3.526	16,315,729	3.227	0.915	1.000	0.915
2002-2003	5,498,758	8,812,482	3.311	29,178,128	5.306	1.603	1.000	1.603
2003-2004	5,606,805	2,574,481	3.109	8,004,061	1.428	0.459	1.000	0.459
2004-2005	6,401,988	1,874,487	2.920	5,473,502	0.855	0.293	1.000	0.293
2005-2006	6,377,662	4,756,022	2.742	13,041,012	2.045	0.746	1.000	0.746
2006-2007	6,522,170	1,662,124	2.575	4,279,969	0.656	0.255	1.000	0.255
2007-2008	6,739,631	6,755,660	2.417	16,328,430	2.423	1.002	1.000	1.002
2008-2009	6,797,113	3,471,639	2.270	7,880,621	1.159	0.511	1.000	0.511
2009-2010	6,402,621	2,352,952	2.132	5,016,494	0.784	0.367	1.000	0.367
2010-2011	5,763,632	2,076,846	2.002	4,157,846	0.721	0.360	1.000	0.360
2011-2012	4,805,609	3,917,000	1.879	7,360,043	1.532	0.815	1.000	0.815
2012-2013	4,582,006	3,845,000	1.764	6,782,580	1.480	0.839	1.000	0.839
2013-2014	4,441,748	6,959,081	1.656	11,524,238	2.595	1.567	1.000	1.567
2014-2015	4,504,358	5,429,951	1.555	8,443,574	1.875	1.205	1.000	1.205
2015-2016	4,232,637	5,206,000	1.460	7,600,760	1.796	1.230	1.000	1.230
2016-2017	4,254,965	8,339,000	1.371	11,432,769	2.687	1.131	1.000	1.131
2017-2018	4,379,345	1,103,000	1.287	1,419,561	0.324	1.204	1.000	1.204
2018-2019	4,324,756	1,335,000	1.209	1,614,015	0.373	1.282	1.000	1.282
2019-2020	4,417,328	647,000	1.135	734,345	0.166	1.366	1.000	1.366
2020-2021	4,506,728	4,729,000	1.065	5,036,385	1.118	1.455	1.000	1.455
Total/Avg	110,277,218	\$110,477,988		\$284,319,086	\$2.578			
13/14-18/19	26,137,809	28,372,032		42,034,917	1.608			
14/15-19/20	26,113,389	22,059,951		31,245,024	1.197			
Selected Program Rate:					\$1.550			
Prior:					\$1.611			

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 2015-2016 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

Accident Year	Ultimate Program Severity (A)	Adjusted Ultimate Claims (B)	Ultimate Program Losses (C)
1986-2001	\$169,514	177	\$30,003,978
2001-2002	308,484	15	4,627,260
2002-2003	314,732	28	8,812,496
2003-2004	128,724	20	2,574,480
2004-2005	208,276	9	1,874,484
2005-2006	279,766	17	4,756,022
2006-2007	118,723	14	1,662,122
2007-2008	281,486	24	6,755,664
2008-2009	204,214	17	3,471,638
2009-2010	117,648	20	2,352,960
2010-2011	159,757	13	2,076,841
2011-2012	195,850	20	3,917,000
2012-2013	183,095	21	3,844,995
2013-2014	463,939	15	6,959,085
2014-2015	301,664	18	5,429,952
2015-2016	260,300	20	5,206,000
2016-2017	400,000	21	8,400,000
2017-2018	400,000	7	2,800,000
2018-2019	400,000	10	4,000,000
2019-2020	400,000	13	5,200,000
2020-2021	400,000	14	5,600,000
Total		513	\$120,324,977

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.

PLAN JPA - Liability

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)
1986-2001	\$30,004,000	177	\$169,514	1.000	\$169,514	\$169,514	1.000	\$169,514
2001-2002	4,627,263	15	308,484	1.000	308,484	308,484	1.000	308,484
2002-2003	8,812,482	28	314,732	1.000	314,732	314,732	1.000	314,732
2003-2004	2,574,481	20	128,724	1.000	128,724	128,724	1.000	128,724
2004-2005	1,874,487	9	208,276	1.000	208,276	208,276	1.000	208,276
2005-2006	4,756,022	17	279,766	1.000	279,766	279,766	1.000	279,766
2006-2007	1,662,124	14	118,723	1.000	118,723	118,723	1.000	118,723
2007-2008	6,755,660	24	281,486	1.000	281,486	281,486	1.000	281,486
2008-2009	3,471,639	17	204,214	1.000	204,214	204,214	1.000	204,214
2009-2010	2,352,952	20	117,648	1.000	117,648	117,648	1.000	117,648
2010-2011	2,076,846	13	159,757	1.000	159,757	159,757	1.000	159,757
2011-2012	3,917,000	20	195,850	1.000	195,850	195,850	1.000	195,850
2012-2013	3,845,000	21	183,095	1.000	183,095	183,095	1.000	183,095
2013-2014	6,959,081	15	463,939	1.000	463,939	463,939	1.000	463,939
2014-2015	5,429,951	18	301,664	1.000	301,664	301,664	1.000	301,664
2015-2016	5,206,000	20	260,300	1.000	260,300	260,300	1.000	260,300
2016-2017	8,339,000	21	397,095	1.000	397,095	400,000	1.000	400,000
2017-2018	1,103,000	7	157,571	1.000	157,571	400,000	1.000	400,000
2018-2019	2,807,000	10	280,700	1.000	280,700	400,000	1.000	400,000
2019-2020	3,923,000	13	301,769	1.000	301,769	400,000	1.000	400,000
2020-2021	8,885,000	14	634,643	1.000	634,643	400,000	1.000	400,000

Average Program Severity: \$260,379
Average 15/16-20/21 Program Severity: 338,680

Selected Program Severity: \$400,000
Prior: \$445,000

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.

PLAN JPA - Liability

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)
1986-2001	177	176	177	466.1	0.380	3.756	1.427
2001-2002	15	15	15	505.7	0.030	3.526	0.106
2002-2003	28	28	28	549.9	0.051	3.311	0.169
2003-2004	20	20	20	560.7	0.036	3.109	0.112
2004-2005	9	9	9	640.2	0.014	2.920	0.041
2005-2006	17	17	17	637.8	0.027	2.742	0.074
2006-2007	14	14	14	652.2	0.021	2.575	0.054
2007-2008	24	24	24	674.0	0.036	2.417	0.087
2008-2009	17	17	17	679.7	0.025	2.270	0.057
2009-2010	20	20	20	640.3	0.031	2.132	0.066
2010-2011	13	13	13	576.4	0.023	2.002	0.046
2011-2012	20	19	20	480.6	0.042	1.879	0.079
2012-2013	21	20	21	458.2	0.046	1.764	0.081
2013-2014	15	15	15	444.2	0.034	1.656	0.056
2014-2015	18	18	18	450.4	0.040	1.555	0.062
2015-2016	20	19	20	423.3	0.047	1.460	0.069
2016-2017	21	15	21	425.5	0.049	1.371	0.067
2017-2018	7	5	7	437.9	0.016	1.287	0.021
2018-2019	10	3	10	432.5	0.023	1.209	0.028
2019-2020	13	0	13	441.7	0.029	1.135	0.033
2020-2021	51	0	14	450.7	0.031	1.065	0.033
Total	550	467	513	11,027.7			0.125
15/16-19/20	71	42	71	2,160.9			0.043

(H) Selected Frequency: 0.035
Prior: 0.035

Program Year:	2021-2022	2022-2023
(I) Trend Factor:	1.000	1.065
(J) Selected Frequency:	0.035	0.037
(K) Est. Payroll (\$000,000):	462.3	476.2
(L) Ultimate Claims:	16	18

Notes:

- (A) From Reserve Appendix D, Page 4, (C).
 (B) From Reserve Appendix D, Page 5, (C).
 (C) Selected from (A) and (B).
 (D) From Reserve Appendix M, Column (C) / 10,000.
 (E) (C) / (D).
 (F) From Reserve Appendix E, Page 1, Column (H).
 (G) (E) x (F).
 (H) The selected frequency of 0.035 is based on (G).
 (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 12/31/2021 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
1986-2001	177	1.000	177	1.426
2001-2002	15	1.000	15	0.105
2002-2003	28	1.000	28	0.169
2003-2004	20	1.000	20	0.111
2004-2005	9	1.000	9	0.041
2005-2006	17	1.000	17	0.073
2006-2007	14	1.000	14	0.055
2007-2008	24	1.000	24	0.086
2008-2009	17	1.000	17	0.057
2009-2010	20	1.001	20	0.067
2010-2011	13	1.001	13	0.045
2011-2012	20	1.001	20	0.078
2012-2013	21	1.002	21	0.081
2013-2014	15	1.003	15	0.056
2014-2015	18	1.004	18	0.062
2015-2016	20	1.005	20	0.069
2016-2017	21	1.015	21	0.068
2017-2018	7	1.040	7	0.021
2018-2019	8	1.196	10	0.028
2019-2020	9	1.435	13	0.033
2020-2021	21	2.440	51	0.121
Total	514		550	0.129

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 12/31/2021 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
1986-2001	176	1.000	176	1.418
2001-2002	15	1.000	15	0.105
2002-2003	28	1.000	28	0.169
2003-2004	20	1.000	20	0.111
2004-2005	9	1.000	9	0.041
2005-2006	17	1.000	17	0.073
2006-2007	14	1.000	14	0.055
2007-2008	24	1.000	24	0.086
2008-2009	17	1.001	17	0.057
2009-2010	20	1.002	20	0.067
2010-2011	13	1.003	13	0.045
2011-2012	19	1.004	19	0.074
2012-2013	20	1.005	20	0.077
2013-2014	15	1.006	15	0.056
2014-2015	18	1.007	18	0.062
2015-2016	19	1.008	19	0.066
2016-2017	15	1.009	15	0.048
2017-2018	5	1.010	5	0.015
2018-2019	3	1.011	3	0.008
2019-2020	0	3.033	0	
2020-2021	0	10.616	0	
Total	467		467	0.120

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

Claims Reported as of:														
Accident Year	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months	138 Months	150 Months	162 Months	
2000-2001					13	12	12	12	12	12	12	13	13	
2001-2002				13	13	14	14	14	14	15	15	15	15	
2002-2003			26	25	27	27	27	29	29	28	28	28	28	
2003-2004		11	12	18	19	19	19	20	20	20	20	20	20	
2004-2005	4	5	9	10	9	10	9	9	9	9	9	9	9	
2005-2006	4	13	13	14	16	16	16	16	16	16	16	16	16	
2006-2007	9	11	10	11	12	14	14	14	14	14	14	14	14	
2007-2008	7	16	23	25	25	25	24	24	24	24	23	24	24	
2008-2009	12	16	17	17	17	17	17	17	17	17	17	17	17	
2009-2010	18	25	20	20	20	20	20	20	20	20	20	20	20	
2010-2011	15	18	16	14	14	13	13	13	13	13	13			
2011-2012	19	19	20	20	20	20	20	20	20	20				
2012-2013	23	23	22	22	21	20	20	21	21					
2013-2014	7	14	15	16	15	15	15	15						
2014-2015	11	21	21	18	18	18	18							
2015-2016	10	18	20	20	20	20								
2016-2017	6	19	19	21	21									
2017-2018	4	8	7	7										
2018-2019	1	5	8											
2019-2020	2	9												
2020-2021	21													

Reported Claim Count Development Factors:

	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months	138-150 Months	150-162 Months	162-174 Months	
2000-2001					0.923	1.000	1.000	1.000	1.000	1.000	1.083	1.000	1.000	
2001-2002				1.000	1.077	1.000	1.000	1.000	1.071	1.000	1.000	1.000	1.000	
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	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	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	2.286	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	1.333	1.063	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000		
2009-2010	1.389	0.800	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				
2011-2012	1.000	1.053	1.000	1.000	1.000	1.000	1.000	1.000	1.000					
2012-2013	1.000	0.957	1.000	0.955	0.952	1.000	1.050	1.000						
2013-2014	2.000	1.071	1.067	0.938	1.000	1.000	1.000							
2014-2015	1.909	1.000	0.857	1.000	1.000	1.000								
2015-2016	1.800	1.111	1.000	1.000	1.000									
2016-2017	3.167	1.000	1.105	1.000										
2017-2018	2.000	0.875	1.000											
2018-2019	5.000	1.600												
2019-2020	4.500													
Average Claim-Weighted Averages														
3-yr	3.143	1.063	1.043	1.000	1.000	1.000	1.018	1.000	1.000	1.000	1.017	1.000	1.000	
4-yr	3.154	1.080	0.985	0.987	0.986	1.000	1.015	1.000	1.000	0.986	1.014	1.000	1.000	
Comparative Factors Prior														
1.136	1.018	1.005	1.005	1.004	1.004	1.004	1.002	1.002	1.001	1.000	1.000	1.000	1.000	
1.700	1.200	1.150	1.025	1.010	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000	
Selected														
1.700	1.200	1.150	1.025	1.010	1.001	1.001	1.001	1.001	1.001	1.000	1.000	1.001	1.000	
Cumulated														
2.440	1.435	1.196	1.040	1.015	1.005	1.004	1.003	1.002	1.001	1.001	1.001	1.001	1.000	

PLAN JPA - Liability
Closed Claim Development

Accident Year	Claims Closed as of:												
	18 Months	30 Months	42 Months	54 Months	66 Months	78 Months	90 Months	102 Months	114 Months	126 Months	138 Months	150 Months	162 Months
2000-2001					11	11	12	12	12	12	12	12	13
2001-2002				8	11	12	14	14	14	14	15	14	15
2002-2003			15	23	25	26	27	27	27	27	27	27	27
2003-2004		9	11	13	13	14	15	18	20	20	20	20	20
2004-2005	1	1	7	7	9	9	9	9	9	9	9	9	9
2005-2006	2	3	9	11	12	14	14	14	15	16	16	16	16
2006-2007	1	3	7	8	9	12	14	14	14	14	14	14	13
2007-2008		2	11	17	22	24	24	24	24	24	23	24	24
2008-2009	1	5	9	11	13	16	17	17	17	17	17	17	17
2009-2010	2	6	13	18	18	19	19	20	20	20	20	20	
2010-2011		4	9	11	13	13	13	13	13	13	13		
2011-2012	1	3	11	13	18	19	20	19	19	19			
2012-2013	1	5	15	17	17	20	19	20	20				
2013-2014	1	6	9	12	15	14	15	15					
2014-2015	3	7	8	18	18	18	18						
2015-2016	1	3	20	14	17	19							
2016-2017	1	19	10	11	15								
2017-2018	4	1	2	5									
2018-2019		1	3										
2019-2020													
2020-2021													

Closed Claim Count Development Factors:

	18-30 Months	30-42 Months	42-54 Months	54-66 Months	66-78 Months	78-90 Months	90-102 Months	102-114 Months	114-126 Months	126-138 Months	138-150 Months	150-162 Months	162-174 Months
2000-2001					1.000	1.091	1.000	1.000	1.000	1.000	1.000	1.083	1.000
2001-2002				1.375	1.091	1.167	1.000	1.000	1.000	1.071	0.933	1.071	1.000
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	
2009-2010	3.000	2.167	1.385	1.000	1.056	1.000	1.053	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			
2011-2012	3.000	3.667	1.182	1.385	1.056	1.053	0.950	1.000	1.000				
2012-2013	5.000	3.000	1.133	1.000	1.176	0.950	1.053	1.000					
2013-2014	6.000	1.500	1.333	1.250	0.933	1.071	1.000						
2014-2015	2.333	1.143	2.250	1.000	1.000	1.000							
2015-2016	3.000	6.667	0.700	1.214	1.118								
2016-2017	19.000	0.526	1.100	1.364									
2017-2018	0.250	2.000	2.500										
2018-2019		3.000											
2019-2020													
Average Claim-Weighted Averages													
3-yr		0.714	0.938	1.163	1.020	1.000	1.000	1.000	1.000	1.000	1.017	0.982	1.019
4-yr		1.458	1.200	1.182	1.060	1.014	1.000	1.000	1.000	0.986	1.014	0.986	1.016
Comparative Factors													
Prior	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
Selected	3.500	3.000	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001	1.001
Cumulated	10.616	3.033	1.011	1.010	1.009	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 2021-2022 Loss Rate Level (B)	Factor to 2022-2023 Loss Rate Level (C)	Factor to 2023-2024 Loss Rate Level (D)	Factor to 2024-2025 Loss Rate Level (E)	Factor to 2021-2022 Frequency Level (F)	Factor to 2022-2023 Frequency Level (G)	Factor to 2023-2024 Frequency Level (H)	Factor to 2024-2025 Frequency Level (I)	Factor to 2021-2022 Severity Level (J)
1986-2001	1.000	3.756	4.001	4.260	4.537	3.756	4.001	4.260	4.537	1.000
2001-2002	1.000	3.526	3.757	4.000	4.260	3.526	3.757	4.000	4.260	1.000
2002-2003	1.000	3.311	3.527	3.756	4.000	3.311	3.527	3.756	4.000	1.000
2003-2004	1.000	3.109	3.312	3.527	3.756	3.109	3.312	3.527	3.756	1.000
2004-2005	1.000	2.920	3.110	3.312	3.527	2.920	3.110	3.312	3.527	1.000
2005-2006	1.000	2.742	2.921	3.110	3.312	2.742	2.921	3.110	3.312	1.000
2006-2007	1.000	2.575	2.743	2.920	3.110	2.575	2.743	2.920	3.110	1.000
2007-2008	1.000	2.417	2.575	2.742	2.920	2.417	2.575	2.742	2.920	1.000
2008-2009	1.000	2.270	2.418	2.575	2.742	2.270	2.418	2.575	2.742	1.000
2009-2010	1.000	2.132	2.271	2.418	2.575	2.132	2.271	2.418	2.575	1.000
2010-2011	1.000	2.002	2.132	2.270	2.418	2.002	2.132	2.270	2.418	1.000
2011-2012	1.000	1.879	2.002	2.131	2.270	1.879	2.002	2.131	2.270	1.000
2012-2013	1.000	1.764	1.879	2.001	2.131	1.764	1.879	2.001	2.131	1.000
2013-2014	1.000	1.656	1.765	1.879	2.001	1.656	1.765	1.879	2.001	1.000
2014-2015	1.000	1.555	1.657	1.764	1.879	1.555	1.657	1.764	1.879	1.000
2015-2016	1.000	1.460	1.556	1.656	1.764	1.460	1.556	1.656	1.764	1.000
2016-2017	1.000	1.371	1.460	1.555	1.656	1.371	1.460	1.555	1.656	1.000
2017-2018	1.000	1.287	1.371	1.460	1.555	1.287	1.371	1.460	1.555	1.000
2018-2019	1.000	1.209	1.287	1.371	1.460	1.209	1.287	1.371	1.460	1.000
2019-2020	1.000	1.135	1.209	1.287	1.371	1.135	1.209	1.287	1.371	1.000
2020-2021	1.000	1.065	1.135	1.208	1.287	1.065	1.135	1.208	1.287	1.000
2021-2022	1.000	1.000	1.065	1.134	1.208	1.000	1.065	1.134	1.208	1.000
2022-2023	1.000	--	1.000	1.065	1.134	--	1.000	1.065	1.134	--
2023-2024	1.000	--	--	1.000	1.065	--	--	1.000	1.065	--
2024-2025	1.000	--	--	--	1.000	--	--	--	1.000	--

Notes:

- (A) No benefit level adjustment applied.
 (B) - (E) (A) adjusted for a 6.5% annual loss rate trend.
 (F) - (I) (A) adjusted for a 6.5% annual frequency trend.
 (J) (A) adjusted for a 0.0% 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.

PLAN JPA - Liability

Residual Trend Factors

Accident Year	Initial Estimate of Ultimate Limited Losses (A)	Ultimate Reported Claims (B)	BLF (C)	Adjusted Limited Severity (D)	Trended Payroll (\$00) (E)	Ultimate Frequency (F)
1986-2001	\$30,004,000	177	1.000	169,514	4,660,711	0.380
2001-2002	4,627,263	15	1.000	308,484	5,056,647	0.030
2002-2003	8,812,482	28	1.000	314,732	5,498,758	0.051
2003-2004	2,574,481	20	1.000	128,724	5,606,805	0.036
2004-2005	1,874,487	9	1.000	208,276	6,401,988	0.014
2005-2006	4,756,022	17	1.000	279,766	6,377,662	0.027
2006-2007	1,662,124	14	1.000	118,723	6,522,170	0.021
2007-2008	6,755,660	24	1.000	281,486	6,739,631	0.036
2008-2009	3,471,639	17	1.000	204,214	6,797,113	0.025
2009-2010	2,352,952	20	1.000	117,648	6,402,621	0.031
2010-2011	2,076,846	13	1.000	159,757	5,763,632	0.023
2011-2012	3,917,000	20	1.000	195,850	4,805,609	0.042
2012-2013	3,845,000	21	1.000	183,095	4,582,006	0.046
2013-2014	6,959,081	15	1.000	463,939	4,441,748	0.034
2014-2015	5,429,951	18	1.000	301,664	4,504,358	0.040
2015-2016	5,206,000	20	1.000	260,300	4,232,637	0.047
2016-2017	8,339,000	21	1.000	397,095	4,254,965	0.049
2017-2018	1,103,000	7	1.000	157,571	4,379,345	0.016
2018-2019	1,335,000	10	1.000	133,500	4,324,756	0.023
2019-2020	647,000	13	1.000	49,769	4,417,328	0.029
2020-2021	4,729,000	14	1.000	337,786	4,506,728	0.031

Severity Trend FactorsFrequency Trend Factors

2007-2008 through 2016-2017	1.080	1.062
2008-2009 through 2017-2018	1.068	1.015
2009-2010 through 2018-2019	1.032	0.976
Prior	1.000	1.065
Default	1.030	0.975

Selected Residual Trend	1.000	1.065
-------------------------	-------	-------

Notes:

- (A) Selected average of results from Reserve Appendix A and Reserve Appendix B.
- (B) Reserve Appendix D, Page 3, Column (C).
- (C) Reserve Appendix E, Page 1, (A).
- (D) $(A) \times (C) / (B)$.
- (E) From Reserve Appendix M, Column (C).
- (F) $(B) / (E) \times 10,000$.

PLAN JPA - Liability
Payment and Reserve Forecast

<u>Accident Year</u>	<u>As of 12/31/2021</u>	<u>Calendar Period</u>	
		<u>1/1/2022 to 6/30/2022</u>	<u>7/1/2022 to 6/30/2023</u>
Prior			
Ultimate Loss	\$47,892,713	\$47,892,713	\$47,892,713
Paid in Calendar Period	-	1,608	
Paid to Date	47,891,105	47,892,713	47,892,713
Outstanding Liability	1,608		
2005-2006			
Ultimate Loss	\$4,756,022	\$4,756,022	\$4,756,022
Paid in Calendar Period	-		
Paid to Date	4,756,022	4,756,022	4,756,022
Outstanding Liability			
2006-2007			
Ultimate Loss	\$1,662,124	\$1,662,124	\$1,662,124
Paid in Calendar Period	-		
Paid to Date	1,662,124	1,662,124	1,662,124
Outstanding Liability			
2007-2008			
Ultimate Loss	\$6,755,660	\$6,755,660	\$6,755,660
Paid in Calendar Period	-		
Paid to Date	6,755,660	6,755,660	6,755,660
Outstanding Liability			
2008-2009			
Ultimate Loss	\$3,471,639	\$3,471,639	\$3,471,639
Paid in Calendar Period	-		
Paid to Date	3,471,639	3,471,639	3,471,639
Outstanding Liability			
2009-2010			
Ultimate Loss	\$2,352,952	\$2,352,952	\$2,352,952
Paid in Calendar Period	-		
Paid to Date	2,352,952	2,352,952	2,352,952
Outstanding Liability			
2010-2011			
Ultimate Loss	\$2,076,846	\$2,076,846	\$2,076,846
Paid in Calendar Period	-		
Paid to Date	2,076,846	2,076,846	2,076,846
Outstanding Liability			
2011-2012			
Ultimate Loss	\$3,917,000	\$3,917,000	\$3,917,000
Paid in Calendar Period	-	20,343	41,034
Paid to Date	3,814,260	3,834,603	3,875,637
Outstanding Liability	102,740	82,397	41,363

PLAN JPA - Liability

Payment and Reserve Forecast

<u>Accident Year</u>	<u>As of 12/31/2021</u>	<u>Calendar Period</u>	
		<u>1/1/2022 to 6/30/2022</u>	<u>7/1/2022 to 6/30/2023</u>
2012-2013			
Ultimate Loss	\$3,845,000	\$3,845,000	\$3,845,000
Paid in Calendar Period	-	93,837	125,809
Paid to Date	3,371,074	3,464,911	3,590,720
Outstanding Liability	473,926	380,089	254,280
2013-2014			
Ultimate Loss	\$6,959,081	\$6,959,081	\$6,959,081
Paid in Calendar Period	-		
Paid to Date	6,959,081	6,959,081	6,959,081
Outstanding Liability			
2014-2015			
Ultimate Loss	\$5,644,000	\$5,644,000	\$5,644,000
Paid in Calendar Period	-	32,107	84,421
Paid to Date	5,429,951	5,462,058	5,546,479
Outstanding Liability	214,049	181,942	97,521
2015-2016			
Ultimate Loss	\$5,216,000	\$5,216,000	\$5,216,000
Paid in Calendar Period	-	40,180	176,469
Paid to Date	4,814,203	4,854,383	5,030,852
Outstanding Liability	401,797	361,617	185,148
2016-2017			
Ultimate Loss	\$8,049,000	\$8,049,000	\$8,049,000
Paid in Calendar Period	-	348,068	509,095
Paid to Date	6,678,653	7,026,721	7,535,816
Outstanding Liability	1,370,347	1,022,279	513,184
2017-2018			
Ultimate Loss	\$1,146,000	\$1,146,000	\$1,146,000
Paid in Calendar Period	-	57,975	112,330
Paid to Date	814,717	872,692	985,022
Outstanding Liability	331,283	273,308	160,978
2018-2019			
Ultimate Loss	\$2,871,000	\$2,871,000	\$2,871,000
Paid in Calendar Period	-	441,268	666,341
Paid to Date	707,921	1,149,189	1,815,530
Outstanding Liability	2,163,079	1,721,811	1,055,470
2019-2020			
Ultimate Loss	\$4,018,000	\$4,018,000	\$4,018,000
Paid in Calendar Period	-	752,735	1,251,520
Paid to Date	56,239	808,974	2,060,494
Outstanding Liability	3,961,761	3,209,026	1,957,506

PLAN JPA - Liability

Payment and Reserve Forecast

<u>Accident Year</u>	<u>As of</u> <u>12/31/2021</u>	<u>Calendar Period</u>	
		<u>1/1/2022</u> <u>to</u> <u>6/30/2022</u>	<u>7/1/2022</u> <u>to</u> <u>6/30/2023</u>
2020-2021			
Ultimate Loss	\$8,808,000	\$8,808,000	\$8,808,000
Paid in Calendar Period	-	522,900	1,533,731
Paid to Date	2,431,166	2,954,066	4,487,797
Outstanding Liability	6,376,834	5,853,934	4,320,203
2021-2022			
Ultimate Loss	\$2,723,000	\$5,446,000	\$5,446,000
Paid in Calendar Period	-	108,920	539,045
Paid to Date	-	108,920	647,965
Outstanding Liability	2,723,000	5,337,080	4,798,035
2022-2023			
Ultimate Loss	-	-	\$6,000,000
Paid in Calendar Period	-	-	150,000
Paid to Date	-	-	150,000
Outstanding Liability	-	-	5,850,000
Totals			
Ultimate Loss	\$122,164,037	\$124,887,037	\$130,887,037
Paid in Calendar Period	-	2,419,941	5,189,795
Paid to Date	104,043,613	106,463,554	111,653,349
Outstanding Liability	18,120,424	18,423,483	19,233,688
Total Outstanding ULAE	2,265,053	2,302,935	2,404,211
Outstanding Liability plus ULAE	20,385,477	20,726,418	21,637,899

Notes appear on the next page.

PLAN JPA - Liability

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 2019-2020, \$752,735 is expected to be paid between 1/1/22 and 6/30/22, \$808,974 will have been paid by 6/30/22, and the reserve for remaining payments on these claims should be \$3,209,026.
- 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, $\$1,251,520 = \$3,209,026 \times 39.0\%$.
- Paid to Date is Paid in Calendar Period plus Paid to Date from previous calendar period. For example, $\$2,060,494 = \$1,251,520 + \$808,974$.
- Outstanding Liability is Ultimate Loss minus Paid to Date. For example, $\$3,209,026 = \$4,018,000 - \$808,974$.

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>Liabilities as of 12/31/21:</u>		<u>Expected</u>	<u>Discounted</u>
<u>Current (Short Term)</u>	Loss and ALAE:	\$4,750,617	\$4,703,812
	ULAE:	0	0
	Short-Term Loss and LAE:	\$4,750,617	\$4,703,812
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$13,369,807	\$12,582,059
	ULAE:	2,265,053	2,160,734
	Long-Term Loss and LAE:	\$15,634,860	\$14,742,793
<u>Total Liability</u>	Loss and ALAE:	\$18,120,424	\$17,285,871
	ULAE:	2,265,053	2,160,734
	Total Loss and LAE:	\$20,385,477	\$19,446,605
<u>Liabilities as of 6/30/22:</u>			
<u>Current (Short Term)</u>	Loss and ALAE:	\$5,039,795	\$4,990,141
	ULAE:	0	0
	Short-Term Loss and LAE:	\$5,039,795	\$4,990,141
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$13,383,688	\$12,617,505
	ULAE:	2,302,935	2,200,955
	Long-Term Loss and LAE:	\$15,686,623	\$14,818,460
<u>Total Liability</u>	Loss and ALAE:	\$18,423,483	\$17,607,646
	ULAE:	2,302,935	2,200,955
	Total Loss and LAE:	\$20,726,418	\$19,808,601

		<u>Discounted with a Margin for Contingencies</u>				
		<u>70%</u>	<u>75%</u>	<u>80%</u>	<u>85%</u>	<u>90%</u>
		<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>	<u>Confidence</u>
<u>Liabilities as of 12/31/21:</u>						
<u>Current (Short Term)</u>	Loss and ALAE:	\$5,216,528	\$5,432,903	\$5,691,613	\$6,011,472	\$6,444,222
	ULAE:	0	0	0	0	0
	Short-Term Loss and LAE:	\$5,216,528	\$5,432,903	\$5,691,613	\$6,011,472	\$6,444,222
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$13,953,503	\$14,532,278	\$15,224,291	\$16,079,871	\$17,237,421
	ULAE:	2,396,254	2,495,648	2,614,488	2,761,418	2,960,206
	Long-Term Loss and LAE:	\$16,349,757	\$17,027,926	\$17,838,779	\$18,841,289	\$20,197,627
<u>Total Liability</u>	Loss and ALAE:	\$19,170,031	\$19,965,181	\$20,915,904	\$22,091,343	\$23,681,643
	ULAE:	2,396,254	2,495,648	2,614,488	2,761,418	2,960,206
	Total Loss and LAE:	\$21,566,285	\$22,460,829	\$23,530,392	\$24,852,761	\$26,641,849
<u>Liabilities as of 6/30/22:</u>						
<u>Current (Short Term)</u>	Loss and ALAE:	\$5,534,066	\$5,763,613	\$6,038,071	\$6,377,400	\$6,836,493
	ULAE:	0	0	0	0	0
	Short-Term Loss and LAE:	\$5,534,066	\$5,763,613	\$6,038,071	\$6,377,400	\$6,836,493
<u>Non-Current (Long Term)</u>	Loss and ALAE:	\$13,992,813	\$14,573,218	\$15,267,181	\$16,125,172	\$17,285,982
	ULAE:	2,440,860	2,542,103	2,663,155	2,812,820	3,015,308
	Long-Term Loss and LAE:	\$16,433,673	\$17,115,321	\$17,930,336	\$18,937,992	\$20,301,290
<u>Total Liability</u>	Loss and ALAE:	\$19,526,879	\$20,336,831	\$21,305,252	\$22,502,572	\$24,122,475
	ULAE:	2,440,860	2,542,103	2,663,155	2,812,820	3,015,308
	Total Loss and LAE:	\$21,967,739	\$22,878,934	\$23,968,407	\$25,315,392	\$27,137,783

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 12/31/21 (A)	Discount Factor (B)	Discounted Reserve at 12/31/21 (C)	Full Value of Reserve at 6/30/22 (D)	Discount Factor (E)	Discounted Reserve at 6/30/22 (F)
1986-2001	\$1,608	1.000	\$1,608	\$0	1.000	\$0
2001-2002	0	1.000	0	0	1.000	0
2002-2003	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	0.995	0	0	1.000	0
2009-2010	0	0.985	0	0	0.990	0
2010-2011	0	0.978	0	0	0.980	0
2011-2012	102,740	0.972	99,824	82,397	0.976	80,388
2012-2013	473,926	0.966	457,970	380,089	0.968	367,780
2013-2014	0	0.966	0	0	0.965	0
2014-2015	214,049	0.967	207,086	181,942	0.967	175,860
2015-2016	401,797	0.969	389,350	361,617	0.968	350,179
2016-2017	1,370,347	0.968	1,326,893	1,022,279	0.970	991,279
2017-2018	331,283	0.966	319,881	273,308	0.967	264,263
2018-2019	2,163,079	0.964	2,084,237	1,721,811	0.964	1,660,278
2019-2020	3,961,761	0.959	3,801,140	3,209,026	0.963	3,089,778
2020-2021	6,376,834	0.949	6,053,953	5,853,934	0.956	5,596,797
2021-2022	2,723,000	0.934	2,543,929	5,337,080	0.943	5,031,044
Totals	\$18,120,424		\$17,285,871	\$18,423,483		\$17,607,646

(G) Discount Factor at 12/31/21 for Overall Reserve: 0.954
 (H) Discount Factor at 6/30/22 for Overall Reserve: 0.956

Notes:

- (A) From Reserve Appendix F, Outstanding Liability at 12/31/21.
- (B) Based on Reserve Appendix H, Page 2, Column (E).
- (C) (A) x (B).
- (D) From Reserve Appendix F, Outstanding Liability at 6/30/22.
- (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
95%	1.864	1.532
90%	1.606	1.370
85%	1.451	1.278
80%	1.335	1.210
75%	1.243	1.155
70%	1.165	1.109
65%	1.096	1.069
60%	1.033	1.032
55%	0.976	0.998
50%	0.922	0.966
45%	0.871	0.936
40%	0.820	0.906
35%	0.771	0.876
30%	0.721	0.846
25%	0.670	0.814

To read table: For the above retention, there is a 90% chance that final loss settlements will be less than 1.606 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 Year Start Date	Policy Year End Date	Policy Year	Self-Insured Retention	
			Per Occurrence	Aggregate
7/1/1986	6/30/2001	1986-2001	\$7,000,000	(none)
7/1/2001	6/30/2002	2001-2002	5,000,000	(none)
7/1/2002	6/30/2003	2002-2003	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)
Third Party Claims Administrator			Begin Date	End Date
Sedgwick				Current

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

PLAN JPA - Liability

Estimated Total Assets as of 6/30/22

(A) Estimated Total Assets as of 6/30/21:	\$49,957,000
(B) <u>Total Income to Fund during 2021-2022</u>	
Premiums:	\$16,725,000
Interest:	0
Total Income:	<u>\$16,725,000</u>
(C) <u>Total Payments from Fund during 2021-2022</u>	
Loss Payments:	\$5,857,000
Excess Insurance:	9,768,000
Other:	<u>2,228,000</u>
Total Payments:	<u>\$17,853,000</u>
(D) <u>Estimated Total Assets as of 6/30/22:</u>	\$48,829,000

Notes:

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

PLAN JPA - Liability

Incurred Losses as of 12/31/21

Accident Year (A)	Unlimited Incurred (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Incurred (E)	Incurred Over SIR (F)	Incurred Over \$100,000 (G)	Incurred Capped at \$100,000 (H)	Incurred \$100,000 to SIR Layer (I)	Incurred Capped at SIR (J)	Incurred Capped at SIR & Aggregate (K)
1986-2001	\$29,856,449	\$146,726	\$0	\$30,003,175	\$0	\$0	\$30,003,175	\$0	\$30,003,175	\$30,003,175
2001-2002	4,627,263	0	0	4,627,263	0	0	4,627,263	0	4,627,263	4,627,263
2002-2003	8,832,841	(20,359)	0	8,812,482	0	0	8,812,482	0	8,812,482	8,812,482
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	0	4,756,022	0	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	0	6,755,660	0	6,755,660	6,755,660
2008-2009	3,527,823	(56,184)	0	3,471,639	0	0	3,471,639	0	3,471,639	3,471,639
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	2,076,846	0	0	2,076,846	0	0	2,076,846	0	2,076,846	2,076,846
2011-2012	3,878,185	0	0	3,878,185	0	0	3,878,185	0	3,878,185	3,878,185
2012-2013	3,788,438	0	0	3,788,438	0	0	3,788,438	0	3,788,438	3,788,438
2013-2014	6,959,081	0	0	6,959,081	0	0	6,959,081	0	6,959,081	6,959,081
2014-2015	5,429,951	0	0	5,429,951	0	0	5,429,951	0	5,429,951	5,429,951
2015-2016	4,948,195	0	0	4,948,195	0	0	4,948,195	0	4,948,195	4,948,195
2016-2017	7,845,241	0	0	7,845,241	0	0	7,845,241	0	7,845,241	7,845,241
2017-2018	868,680	0	0	868,680	0	0	868,680	0	868,680	868,680
2018-2019	1,002,487	0	0	1,002,487	0	0	1,002,487	0	1,002,487	1,002,487
2019-2020	367,323	0	0	367,323	0	0	367,323	0	367,323	367,323
2020-2021	4,118,968	0	0	4,118,968	0	0	4,118,968	0	4,118,968	4,118,968
2021-2022	60,000	0	0	60,000	0	0	60,000	0	60,000	60,000
Total	\$108,267,798	-\$34,120	\$0	\$108,233,678	\$0	\$0	\$108,233,678	\$0	\$108,233,678	\$108,233,678

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority.
- (C) Adjustments to Accounting
- (D)
- (E) (B) + (C) - (D).
- (F) Sum of incurred losses in excess of SIR.
- (G) Sum of incurred losses in excess of \$100,000.
- (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

Paid Losses as of 12/31/21

Accident Year (A)	Unlimited Paid (B)	Additions to Losses (C)	Subtractions from Losses (D)	Adjusted Paid (E)	Paid Over SIR (F)	Paid Over \$100,000 (G)	Paid Capped at \$100,000 (H)	Paid \$100,000 to SIR Layer (I)	Paid Capped at SIR (J)	Paid Capped at SIR & Aggregate (K)
1986-2001	\$29,855,666	\$146,726	\$0	\$30,002,392	\$0	\$0	\$30,002,392	\$0	\$30,002,392	\$30,002,392
2001-2002	4,627,263	0	0	4,627,263	0	0	4,627,263	0	4,627,263	4,627,263
2002-2003	8,832,841	(20,359)	0	8,812,482	0	0	8,812,482	0	8,812,482	8,812,482
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	0	4,756,022	0	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	0	6,755,660	0	6,755,660	6,755,660
2008-2009	3,527,823	(56,184)	0	3,471,639	0	0	3,471,639	0	3,471,639	3,471,639
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	2,076,846	0	0	2,076,846	0	0	2,076,846	0	2,076,846	2,076,846
2011-2012	3,814,260	0	0	3,814,260	0	0	3,814,260	0	3,814,260	3,814,260
2012-2013	3,371,074	0	0	3,371,074	0	0	3,371,074	0	3,371,074	3,371,074
2013-2014	6,959,081	0	0	6,959,081	0	0	6,959,081	0	6,959,081	6,959,081
2014-2015	5,429,951	0	0	5,429,951	0	0	5,429,951	0	5,429,951	5,429,951
2015-2016	4,814,203	0	0	4,814,203	0	0	4,814,203	0	4,814,203	4,814,203
2016-2017	6,678,653	0	0	6,678,653	0	0	6,678,653	0	6,678,653	6,678,653
2017-2018	814,717	0	0	814,717	0	0	814,717	0	814,717	814,717
2018-2019	707,921	0	0	707,921	0	0	707,921	0	707,921	707,921
2019-2020	56,239	0	0	56,239	0	0	56,239	0	56,239	56,239
2020-2021	2,431,166	0	0	2,431,166	0	0	2,431,166	0	2,431,166	2,431,166
2021-2022	0	0	0	0	0	0	0	0	0	0
Total	\$104,077,734	-\$34,120	\$0	\$104,043,614	\$0	\$0	\$104,043,614	\$0	\$104,043,614	\$104,043,614

Notes:

- (A) Years are 7/1 to 6/30.
- (B) Provided by the Authority.
- (C) Adjustments to Accounting
- (D)
- (E) (B) + (C) - (D).
- (F) Sum of paid losses in excess of SIR.
- (G) Sum of paid losses in excess of \$100,000.
- (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

Case Reserves as of 12/31/21

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)
1986-2001	\$783	\$0	\$0	\$783	\$0	\$0	\$783	\$0	\$783	\$783
2001-2002	0	0	0	0	0	0	0	0	0	0
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	63,925	0	0	63,925	0	0	63,925	0	63,925	63,925
2012-2013	417,364	0	0	417,364	0	0	417,364	0	417,364	417,364
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	133,992	0	0	133,992	0	0	133,992	0	133,992	133,992
2016-2017	1,166,588	0	0	1,166,588	0	0	1,166,588	0	1,166,588	1,166,588
2017-2018	53,963	0	0	53,963	0	0	53,963	0	53,963	53,963
2018-2019	294,565	0	0	294,565	0	0	294,565	0	294,565	294,565
2019-2020	311,084	0	0	311,084	0	0	311,084	0	311,084	311,084
2020-2021	1,687,802	0	0	1,687,802	0	0	1,687,802	0	1,687,802	1,687,802
2021-2022	60,000	0	0	60,000	0	0	60,000	0	60,000	60,000
Total	\$4,190,065	\$0	\$0	\$4,190,065	\$0	\$0	\$4,190,065	\$0	\$4,190,065	\$4,190,065

Notes:

- (A) Years are 7/1 to 6/30.
 (B) Reserve Appendix L, Page 1, Column (B) - Reserve Appendix L, Page 2, Column (B).
 (C) Reserve Appendix L, Page 1, Column (C) - Reserve Appendix L, Page 2, Column (C).
 (D) Reserve Appendix L, Page 1, Column (D) - Reserve Appendix L, Page 2, Column (D).
 (E) (B) + (C) - (D).
 (F) Sum of case reserves in excess of SIR.
 (G) Sum of case reserves in excess of \$100,000.
 (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 12/31/21

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)
1986-2001	177	0	0	177	176	0	0	176	1	1
2001-2002	15	0	0	15	15	0	0	15	0	0
2002-2003	28	0	0	28	28	0	0	28	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	17	0	0	17	17	0	0	17	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	19	0	0	19	1	1
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	21	0	0	21	15	0	0	15	6	6
2017-2018	7	0	0	7	5	0	0	5	2	2
2018-2019	8	0	0	8	3	0	0	3	5	5
2019-2020	9	0	0	9	0	0	0	0	9	9
2020-2021	21	0	0	21	0	0	0	0	21	21
2021-2022	2	0	0	2	0	0	0	0	2	2
Total	516	0	0	516	467	0	0	467	49	49

Notes:

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

PLAN JPA - Liability

Exposure Measures

Accident Year	Total Payroll (\$00) (A)	Inflation Trend Factor (B)	Trended Payroll (\$00) (C)
1986-2001	2,775,885	1.679	4,660,711
2001-2002	3,087,086	1.638	5,056,647
2002-2003	3,441,025	1.598	5,498,758
2003-2004	3,596,411	1.559	5,606,805
2004-2005	4,209,065	1.521	6,401,988
2005-2006	4,297,616	1.484	6,377,662
2006-2007	4,504,261	1.448	6,522,170
2007-2008	4,769,732	1.413	6,739,631
2008-2009	4,929,016	1.379	6,797,113
2009-2010	4,760,313	1.345	6,402,621
2010-2011	4,393,012	1.312	5,763,632
2011-2012	3,754,382	1.280	4,805,609
2012-2013	3,668,540	1.249	4,582,006
2013-2014	3,643,764	1.219	4,441,748
2014-2015	3,788,358	1.189	4,504,358
2015-2016	3,648,825	1.160	4,232,637
2016-2017	3,758,803	1.132	4,254,965
2017-2018	3,966,798	1.104	4,379,345
2018-2019	4,015,558	1.077	4,324,756
2019-2020	4,202,976	1.051	4,417,328
2020-2021	4,396,808	1.025	4,506,728
2021-2022	4,622,980	1.000	4,622,980
2022-2023	4,761,670	1.000	4,761,670

Notes:

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

March 10, 2022

Agenda Item 7.B.

FINANCIAL MATTERS

SUBJECT: Property Program Updates and Draft Actuarial Report

BACKGROUND AND HISTORY:

PLAN JPA's current Property Program structure is:



The preliminary actuarial report provides funding analysis for the 2022/23 year. The actuary was able to compile the report using loss run and estimated insured property values as of December 31, 2021.

Property Program	Discount Factor	Expected	70%	75%
2022/23	2.0%	\$ 1,079,000	\$ 1,294,000	\$ 1,404,000
2021/22	2.0%	860,000	1,023,000	1,103,000
	Change	219,000	271,000	301,000
	% Change	25.5%	26.5%	27.3%

In 2022/23, PLAN's Property Program pooled layer is experiencing an increase of \$271,000, or 26.5%, over 2021/22, at the 70% confidence level. This is due to an increase in Total Insured Values (TIV) of 9.4% over prior year's insured values. However, TIV information is still being collected by Alliant. In addition, the actuarial report may need to be modified if the coverage structure of PLAN's participation in Alliant Property Insurance Program (APIP) changes. The current Property Program is \$500K per occurrence with no pool aggregate deductible.

March 10, 2022

Agenda Item 7.B.
Page 2

STAFF RECOMMENDATION:

None. Information only.

REFERENCE MATERIALS ATTACHED:

- Draft Property Program Actuarial Report as of March 4, 2022



Bickmore — Actuarial

Actuarial Review of the Self-Insured Property Program

Forecast for Program Year 2022-23

Presented to
PLAN JPA

March 4, 2022 - DRAFT

Friday, March 4, 2022

Mr. Jon Paulsen
Pool Administrator
Pooled Liability Assurance Network Joint Powers Authority
1750 Creekside Oaks Drive, Suite 200
Sacramento, CA 95833

Re: Actuarial Review of the Self-Insured Property Program

Dear Mr. Paulsen:

As you requested, we have completed our review of the Authority's self-insured property program (the PLAN JPA). Assuming a pool deductible of \$500,000 and a member deductible of \$5,000, we estimate the ultimate cost of claims and expenses for claims incurred during the 2022-23 program year to be \$1,079,000 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 2022-23 claims translates to a rate of \$0.035 per \$100 TIV.

The table below shows our funding recommendations for PLAN JPA for the 2022-23 fiscal year.

PLAN JPA Self-Insured Property Program Loss and ALAE Funding Guidelines for 2022-23 PLAN JPA Deductible of \$500,000, Member Deductible of \$5,000						
	Expected	Marginally Acceptable 70% CL	Recommended Range			Conservative 90% CL
			Low 75% CL	Target 80% CL	High 85% CL	
Loss and ALAE	\$1,101,000					
Investment Income Offset	(22,000)					
Discounted Loss and ALAE	\$1,079,000	\$1,294,000	\$1,404,000	\$1,534,000	\$1,697,000	\$1,917,000
Excess Insurance	5,572,000	5,572,000	5,572,000	5,572,000	5,572,000	5,572,000
Total Funding	\$6,651,000	\$6,866,000	\$6,976,000	\$7,106,000	\$7,269,000	\$7,489,000
Rate per \$100 of 2022-23 TIV	\$0.213	\$0.220	\$0.223	\$0.227	\$0.232	\$0.240

DRAFT

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, Mike Harrington at (916) 244-1162 or David Kim at (916) 244-1166 with any questions you may have concerning this report.

Sincerely,

Bickmore Actuarial

DRAFT

Becky Richard, ACAS, MAAA
Senior Actuarial Manager, Bickmore Actuarial
Associate, Casualty Actuarial Society
Member, American Academy of Actuaries

DRAFT

Mike Harrington, FCAS, MAAA
President and Principal, Bickmore Actuarial
Fellow, Casualty Actuarial Society
Member, American Academy of Actuaries

DRAFT

David Kim, MA
Senior Actuarial Analyst, Bickmore Actuarial

TABLE OF CONTENTS

I. BACKGROUND	5
II. CONCLUSIONS AND RECOMMENDATIONS	6
A. COSTS OF 2022-23 CLAIMS	6
B. PROGRAM FUNDING: GOALS AND OBJECTIVES	7
C. HISTORICAL TRENDS	9
D. COMPARISON WITH OUR PREVIOUS RESULTS	11
E. DATA ISSUES	16
III. ASSUMPTIONS AND LIMITATIONS	17
IV. GLOSSARY OF ACTUARIAL TERMS	19
V. EXHIBITS	21
VI. APPENDICES	26

I. BACKGROUND

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

Effective July 1, 2021, PLAN JPA property deductible will increase to \$500K per occurrence, with no annual aggregate.

PLAN JPA purchases excess insurance up to \$1 billion 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 and #30. The specific objectives of the study are to estimate PLAN JPA's ultimate loss cost for 2022-23 and provide funding guidelines to meet these future costs.

II. CONCLUSIONS AND RECOMMENDATIONS

A. COSTS OF 2022-23 CLAIMS

The following chart shows our funding recommendations for the PLAN JPA property program for the 2022-23 fiscal year assuming a \$500K PLAN JPA deductible and member deductibles of \$5,000.

PLAN JPA Self-Insured Property Program Loss and ALAE Funding Guidelines for 2022-23 PLAN JPA Deductible of \$500,000, Member Deductible of \$5,000						
	Expected	Marginally Acceptable 70% CL	Recommended Range			Conservative 90% CL
			Low 75% CL	Target 80% CL	High 85% CL	
Loss and ALAE	\$1,101,000					
Investment Income Offset	(22,000)					
Discounted Loss and ALAE	\$1,079,000	\$1,294,000	\$1,404,000	\$1,534,000	\$1,697,000	\$1,917,000
Excess Insurance	5,572,000	5,572,000	5,572,000	5,572,000	5,572,000	5,572,000
Total Funding	\$6,651,000	\$6,866,000	\$6,976,000	\$7,106,000	\$7,269,000	\$7,489,000
Rate per \$100 of 2022-23 TIV	\$0.213	\$0.220	\$0.223	\$0.227	\$0.232	\$0.240

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 Statements #10 and #30.

GASB #10 and #30 do not address funding requirements. They do, however, allow a range of funded amounts to be recognized for accounting purposes, specifically GASB #10 and #30 allow recognition of a funding margin for unexpectedly adverse loss experience.

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

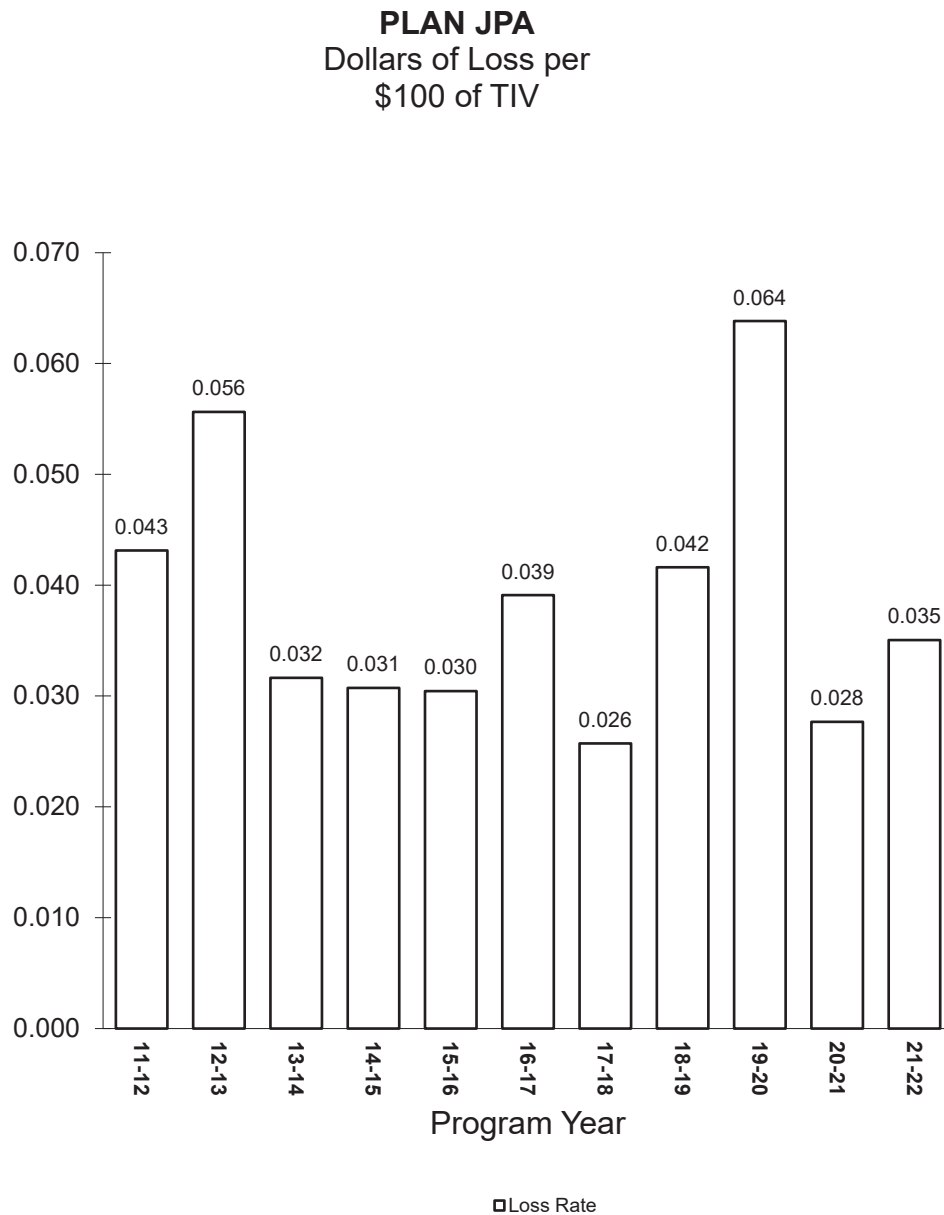
We also strongly believe, however, that the confidence level to which any future year is funded should be evaluated in light of the relative certainty of the

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.

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

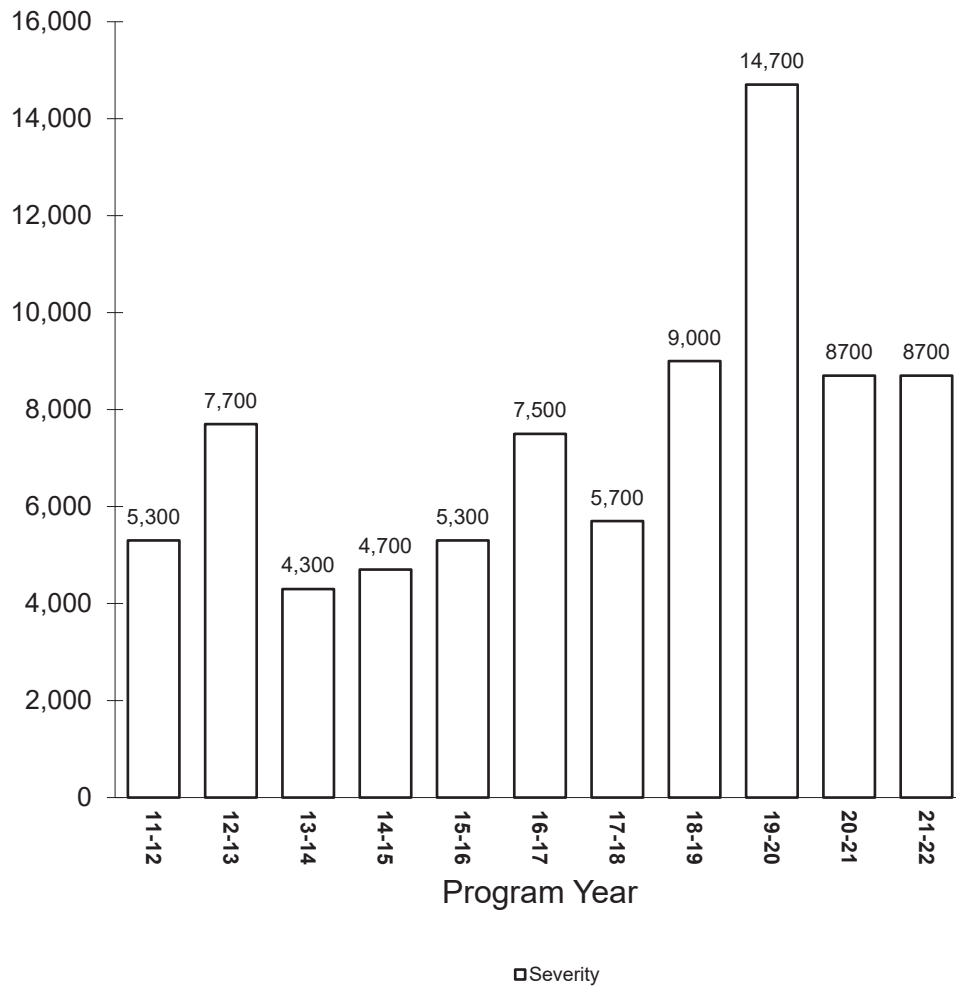
C. HISTORICAL TRENDS

PLAN JPA's loss rate (dollars of loss per \$100 of TIV) has remained relatively stable over the past eight years, with the exception of 2019-20. The projected 2021-22 loss rate of \$0.035 is based on the most recent eight years.



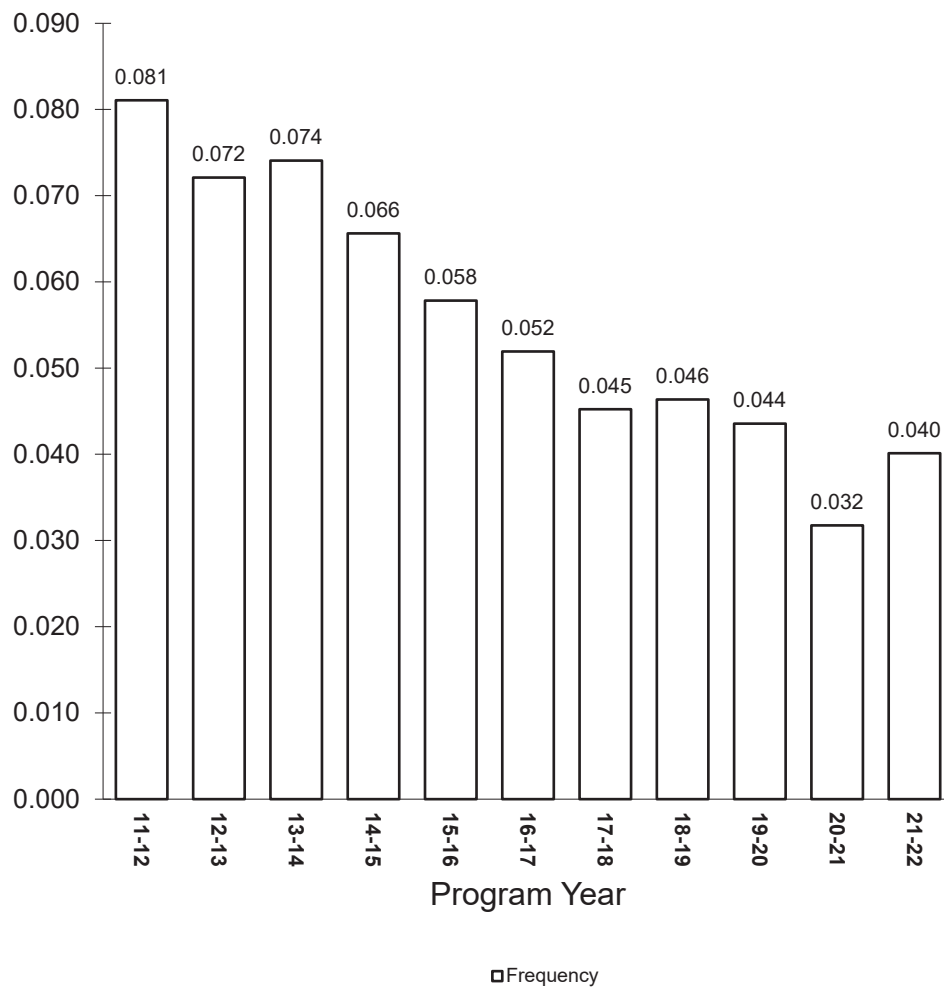
The program's cost per claim has generally increased since 2013-14. The projected 2021-22 severity of \$8,700 is based on this increasing trend.

PLAN JPA
Dollars of Loss per Claim



PLAN JPA's claims frequency per \$1 million of TIV has generally decreased over the past ten years. The projected 2021-22 frequency of 0.040 is based on the decreasing trend.

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



D. COMPARISON WITH OUR PREVIOUS RESULTS

The prior report for the Authority was dated August 4, 2021.. In the table below we display actual versus expected development of incurred losses and ALAE by accident year between the December 31, 2020 evaluation date of the prior report and the December 31, 2021 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
2000-01	\$0	\$0	\$0
2001-02	0	0	0
2002-03	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	0	0	0
2012-13	0	0	0
2013-14	0	0	0
2014-15	0	0	0
2015-16	1,000	0	(1,000)
2016-17	1,000	320,000	319,000
2017-18	1,000	15,000	14,000
2018-19	11,000	31,000	20,000
2019-20	29,000	864,000	835,000
2020-21	614,000	339,000	(275,000)
Total	\$657,000	\$1,569,000	\$912,000

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 2020-21 would increase by \$657,000 between the two evaluation dates. However, actual development was approximately \$1,569,000; or about \$912,000 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, 2020 evaluation date of the prior report and the December 31, 2021 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
2000-01	\$0	\$0	\$0
2001-02	0	0	0
2002-03	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	0	0	0
2012-13	0	0	0
2013-14	0	0	0
2014-15	0	0	0
2015-16	61,000	17,000	(44,000)
2016-17	1,000	95,000	94,000
2017-18	15,000	35,000	20,000
2018-19	51,000	59,000	8,000
2019-20	180,000	1,006,000	826,000
2020-21	627,000	501,000	(126,000)
Total	\$935,000	\$1,713,000	\$778,000

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 2020-21 would increase by \$935,000 between the two evaluation dates. However, actual development was approximately \$1,713,000; or about \$778,000 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
2000-01	\$0	\$0	\$0
2001-02	0	0	0
2002-03	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	878,000	878,000	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	695,000	695,000	0
2016-17	591,000	911,000	320,000
2017-18	606,000	620,000	14,000
2018-19	1,020,000	1,041,000	21,000
2019-20	846,000	1,700,000	854,000
2020-21	1,014,000	758,000	(256,000)
Total	\$8,399,000	\$9,352,000	\$953,000

As shown, overall we have increased our estimated ultimate losses by \$953,000 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 2021-22 year was \$860,000 at the discounted, expected level. That amount included allocated loss adjustment expenses (ALAE), and a discount for anticipated investment income, but excluded unallocated loss adjustment expenses (ULAE). Our current estimate for the 2022-23 year is \$1,079,000 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 2021-22 Deductible = \$500,000	Current Report 2022-23 Deductible = \$500,000	Change
(A) Ultimate Loss and ALAE:	870,000	\$1,101,000	\$231,000
(B) Offset for Investment Income:	(10,000)	(22,000)	(12,000)
(C) Total Recommended Funding:	860,000	\$1,079,000	\$219,000
(D) Funding per \$100 of TIV:	0.0303	\$0.0350	\$0.005

As you can see, our funding recommendations at the discounted, expected level have increased between 2020-21 and 2022-23, as shown in our prior and current reports respectively.

Our estimates of ultimate loss and ALAE have increased by \$231,000 primarily due an increase in our projected rate. Investment income is expected to be higher. The net change due to the above factors is an overall increase of \$219,000 in our annual funding estimate for loss and ALAE.

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, 2021.

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 0.5% per year. We have assumed that the average claim size increases at 2.5% per year and that the average number of claims per \$1 million decreases at 2.0% per year.
- We have assumed that TIV increase 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 2022-2023 (Pool Layer: \$5,000 - \$500,000)
One-Year Funding Plan

			Dollar Amount	TIV Rate	
(A) Estimated Ultimate Losses Incurred in Accident Year 2022-2023: (From Not Included)			\$1,101,000	\$0.035	
(B) Estimated Claims Administration Fees Incurred in Accident Year 2022-2023: (From Exhibit 3, Page 1, item (L))			0	0.000	
(C) Total Claims Costs Incurred in Accident Year 2022-2023: ((A) + (B))			\$1,101,000	\$0.035	
(D) Loss Discount Factor (Based on a Discount Rate of 2.0%.): (Appendix F, , (G))			0.980		
(E) Discounted Total Claims Costs Incurred in Accident Year 2022-2023: ((C) x (D))			\$1,079,000	\$0.035	
	Marginally Acceptable		Recommended		Conservative
	70%	75%	80%	85%	90%
(F) Confidence Level Factor: (From Appendix G)	1.199	1.301	1.422	1.573	1.777
(G) Margin for Adverse Experience: ((E) x [(F) - 1])	215,000	325,000	455,000	618,000	838,000
(H) Recommended Funding in 2022-2023 for Claims Costs: ((E) + (G))	\$1,294,000	\$1,404,000	\$1,534,000	\$1,697,000	\$1,917,000
(I) Budgeted Excess Costs: (Provided by the Pool)	5,572,000	5,572,000	5,572,000	5,572,000	5,572,000
(J) Recommended Funding in 2022-2023 for Claims Costs, Other Expenses, and Non Claims Related Expenses: ((H) + (I))	\$6,866,000	\$6,976,000	\$7,106,000	\$7,269,000	\$7,489,000
(I) Rate per \$100 of TIV: ((H) / \$31,265,001)	\$0.220	\$0.223	\$0.227	\$0.233	\$0.240

TIV rates are per hundred dollars of 2022-2023 TIV of \$3,126,500,100.

PLAN JPA - Property

Estimated Ultimate Program Losses

Accident Year	Reported Loss Development Method (A)	Paid Loss Development Method (B)	Exposure Method Based on Reported Losses (C)	Exposure Method Based on Paid Losses (D)	Frequency-Severity Method (E)	Selected Estimate of Ultimate Losses (F)
2012-2013	1,211,570	1,217,628	1,211,570	1,218,506	1,360,562	1,211,570
2013-2014	768,874	775,794	768,874	776,607	867,060	768,874
2014-2015	768,041	778,794	768,041	780,105	870,348	768,041
2015-2016	731,198	700,999	731,328	703,265	790,812	695,000
2016-2017	1,191,307	706,627	1,190,523	716,240	989,175	911,000
2017-2018	626,084	650,877	630,264	669,701	918,216	620,000
2018-2019	1,067,285	1,088,659	1,066,512	1,085,218	1,006,648	1,041,000
2019-2020	2,579,725	2,491,309	2,493,425	2,318,202	1,035,648	1,700,000
2020-2021	959,581	945,732	988,208	1,021,077	800,226	758,000
Totals						\$9,351,339
Projected Losses for the Year 2021-2022 (G)						\$1,165,000
Projected Losses for the Year 2022-2023 (H)						\$1,282,000

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	694,403	651,245	694,403	651,245	694,980	695,000
2016-2017	910,380	685,380	910,380	685,380	865,755	911,000
2017-2018	619,885	621,743	619,885	622,597	799,733	620,000
2018-2019	1,040,239	1,015,345	1,040,239	1,014,376	872,436	1,041,000
2019-2020	1,692,974	1,706,427	1,685,333	1,681,425	894,012	1,700,000
2020-2021	713,332	745,763	730,548	811,679	687,474	758,000
Totals						\$9,351,339
Projected Losses for the Year 2021-2022 (G)						\$996,000
Projected Losses for the Year 2022-2023 (H)						\$1,091,000

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	1,211,570	1.044	1,264,879	27,201,491	0.047
2013-2014	768,874	1.039	798,860	29,628,198	0.027
2014-2015	768,041	1.034	794,154	29,715,314	0.027
2015-2016	695,000	1.030	715,850	26,482,176	0.027
2016-2017	911,000	1.025	933,775	26,375,931	0.035
2017-2018	620,000	1.020	632,400	26,612,275	0.024
2018-2019	1,041,000	1.015	1,056,615	26,946,252	0.039
2019-2020	1,700,000	1.010	1,717,000	27,996,278	0.061
2020-2021	758,000	1.005	761,790	28,080,356	0.027
Totals	\$9,351,339		\$9,596,192	275,091,195	\$0.035
16/17-19/20	4,272,000		4,339,790	107,930,736	0.040
17/18-20/21	4,119,000		4,167,805	109,635,161	0.038
(F) Selected Limited Rate:					\$0.035
Prior \$250K Rate:					\$0.031
Program Year:		2021-2022	2022-2023		
(G) Factor to SIR:		1.170	1.175		
(H) Trend Factor:		1.000	1.005		
(I) Program Rate:		\$0.041	\$0.041		
(J) Trended TIV (\$00):		28,416,607	31,265,001		
(K) Projected Program Losses:		1,165,000	1,282,000		
(L) Projected ULAE:		0	0		
(M) Projected Loss and ULAE:		\$1,165,000	\$1,282,000		
Member Ded	Ded Fact	2021-2022 Funding	2022-2023 Funding		
0	1.00	1,165,000	1,282,000		
5,000	0.86	1,000,000	1,101,000		
10,000	0.76	890,000	980,000		
15,000	0.69	809,000	890,000		
25,000	0.59	692,000	762,000		

PLAN JPA - Property

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) $(A) \times (B)$.
- (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) $(F) \times (G) \times (H)$.
- (J) From Appendix I, Column (C).
- (K) $(I) \times (J)$.
- (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.

PLAN JPA - Property
Reported Loss Development

Accident Year (A)	Limited Reported Losses as of 12/31/21 (B)	Reported Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Reported Losses of 12/31/21 (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	694,403	1.000	694,403	729,739	1.002	731,198
2016-2017	910,380	1.000	910,380	1,185,380	1.005	1,191,307
2017-2018	619,885	1.000	619,885	619,885	1.010	626,084
2018-2019	1,040,239	1.000	1,040,239	1,040,239	1.026	1,067,285
2019-2020	1,674,554	1.011	1,692,974	2,424,554	1.064	2,579,725
2020-2021	666,665	1.070	713,332	816,665	1.175	959,581
Totals	\$9,232,465		\$9,297,552	\$10,442,801		\$10,781,519

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. Interpolated to apply to data as of 12/31/21.
- (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. Interpolated to apply to data as of 12/31/21.
- (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 - Property
Paid Loss Development

Accident Year (A)	Limited Paid Losses as of 12/31/21 (B)	Paid Loss Development Factor (C)	Ultimate Limited Losses (D)	Program Paid Losses of 12/31/21 (E)	Paid Loss Development Factor (F)	Ultimate Program Losses (G)
2012-2013	1,211,570	1.000	1,211,570	1,211,570	1.005	1,217,628
2013-2014	768,874	1.000	768,874	768,874	1.009	775,794
2014-2015	768,041	1.000	768,041	768,041	1.014	778,794
2015-2016	651,245	1.000	651,245	686,581	1.021	700,999
2016-2017	685,380	1.000	685,380	685,380	1.031	706,627
2017-2018	619,883	1.003	621,743	619,883	1.050	650,877
2018-2019	1,004,298	1.011	1,015,345	1,004,298	1.084	1,088,659
2019-2020	1,647,130	1.036	1,706,427	2,170,130	1.148	2,491,309
2020-2021	538,457	1.385	745,763	599,703	1.577	945,732
Totals	\$8,772,732		\$9,052,242	\$9,392,314		\$10,236,907

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. Interpolated to apply to data as of 12/31/21.
- (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. Interpolated to apply to data as of 12/31/21.
- (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 - Property
Exposure and Development Method
Based on Reported Losses

Accident Year	Trended TIV (\$00) (A)	Reported Losses as of 12/31/21 (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	27,201,491	1,211,570	1.000	0.000	0.051	0	1,211,570
2013-2014	29,628,198	768,874	1.000	0.000	0.029	0	768,874
2014-2015	29,715,314	768,041	1.000	0.000	0.029	0	768,041
2015-2016	26,482,176	729,739	1.002	0.002	0.030	1,589	731,328
2016-2017	26,375,931	1,185,380	1.005	0.005	0.039	5,143	1,190,523
2017-2018	26,612,275	619,885	1.010	0.010	0.039	10,379	630,264
2018-2019	26,946,252	1,040,239	1.026	0.025	0.039	26,273	1,066,512
2019-2020	27,996,278	2,424,554	1.064	0.060	0.041	68,871	2,493,425
2020-2021	28,080,356	816,665	1.175	0.149	0.041	171,543	988,208
Totals	275,091,195	\$10,442,801				\$283,798	\$10,726,599

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) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

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

PLAN JPA - Property
Exposure and Development Method
Based on Paid Losses

Accident Year	Trended TIV (\$00) (A)	Paid Losses as of 12/31/21 (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	27,201,491	1,211,570	1.005	0.005	0.051	6,936	1,218,506
2013-2014	29,628,198	768,874	1.009	0.009	0.029	7,733	776,607
2014-2015	29,715,314	768,041	1.014	0.014	0.029	12,064	780,105
2015-2016	26,482,176	686,581	1.021	0.021	0.030	16,684	703,265
2016-2017	26,375,931	685,380	1.031	0.030	0.039	30,860	716,240
2017-2018	26,612,275	619,883	1.050	0.048	0.039	49,818	669,701
2018-2019	26,946,252	1,004,298	1.084	0.077	0.039	80,920	1,085,218
2019-2020	27,996,278	2,170,130	1.148	0.129	0.041	148,072	2,318,202
2020-2021	28,080,356	599,703	1.577	0.366	0.041	421,374	1,021,077
Totals	275,091,195	\$9,392,314				\$777,431	\$10,169,745

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) $(A) \times (D) \times (E)$.
- (G) $(B) + (F)$.

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

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	27,201,491	1,211,570	1.044	1,264,879	0.047	0.045	1.123	0.051
2013-2014	29,628,198	768,874	1.039	798,860	0.027	0.026	1.128	0.029
2014-2015	29,715,314	768,041	1.034	794,154	0.027	0.026	1.133	0.029
2015-2016	26,482,176	695,000	1.030	715,850	0.027	0.026	1.138	0.030
2016-2017	26,375,931	911,000	1.025	933,775	0.035	0.034	1.143	0.039
2017-2018	26,612,275	620,000	1.020	632,400	0.024	0.034	1.148	0.039
2018-2019	26,946,252	1,041,000	1.015	1,056,615	0.039	0.034	1.154	0.039
2019-2020	27,996,278	1,700,000	1.010	1,717,000	0.061	0.035	1.158	0.041
2020-2021	28,080,356	730,000	1.005	733,650	0.026	0.035	1.164	0.041
Total/Avg	275,091,195	\$9,323,339		\$9,568,052	\$0.035			
15/16-19/20	134,412,912	4,967,000		5,055,640	0.038			
16/17-20/21	136,011,092	5,002,000		5,073,440	0.037			
Selected Limited Rate:					\$0.035			
Prior:					\$0.030			

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 2015-2016 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	8,666	157	1,360,562
2013-2014	4,817	180	867,060
2014-2015	5,307	164	870,348
2015-2016	5,991	132	790,812
2016-2017	8,175	121	989,175
2017-2018	8,424	109	918,216
2018-2019	8,678	116	1,006,648
2019-2020	8,928	116	1,035,648
2020-2021	9,198	87	800,226
Total		1,347	\$9,620,445

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.

PLAN JPA - Property
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	1.249	9,639	7,717	1.123	8,666
2013-2014	768,874	180	4,272	1.218	5,203	4,272	1.128	4,817
2014-2015	768,041	164	4,683	1.188	5,563	4,683	1.133	5,307
2015-2016	695,000	132	5,265	1.160	6,107	5,265	1.138	5,991
2016-2017	911,000	121	7,529	1.132	8,523	7,155	1.143	8,175
2017-2018	620,000	109	5,688	1.104	6,280	7,337	1.148	8,424
2018-2019	1,041,000	116	8,974	1.077	9,665	7,521	1.154	8,678
2019-2020	1,700,000	116	14,655	1.051	15,402	7,707	1.158	8,928
2020-2021	771,000	87	8,862	1.025	9,084	7,902	1.164	9,198
Average Limited Severity:					\$8,228			
Average 15/16-19/20 Limited Severity:					9,195			
Average 16/17-20/21 Limited Severity:					9,791			
Selected Limited Severity:					\$8,100			
Prior:					\$7,000			

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.

PLAN JPA - Property

Frequency and Severity Method
Projection of Ultimate Claims

Accident Year	Reported Claim Development (A)	Closed Claim Development (B)	Selected Ultimate Claims (C)	Trended TIV (\$000,000) (D)	Claim Frequency (E)	Trend Factor (F)	Trended Claim Frequency (G)
2012-2013	157	159	157	2,720.1	0.058	0.834	0.048
2013-2014	180	182	180	2,962.8	0.061	0.851	0.052
2014-2015	164	166	164	2,971.5	0.055	0.868	0.048
2015-2016	132	133	132	2,648.2	0.050	0.886	0.044
2016-2017	121	123	121	2,637.6	0.046	0.904	0.042
2017-2018	109	109	109	2,661.2	0.041	0.922	0.038
2018-2019	116	113	116	2,694.6	0.043	0.942	0.041
2019-2020	116	96	116	2,799.6	0.041	0.961	0.039
2020-2021	87	71	87	2,808.0	0.031	0.980	0.030
Total	1,347	1,319	1,347	27,509.1			0.043
15/16-19/20	594	574	594	13,441.3			0.041

(H) Selected Frequency: 0.040
Prior: 0.044

Program Year:	2021-2022	2022-2023
(I) Trend Factor:	1.000	0.980
(J) Selected Frequency:	0.040	0.039
(K) Est. TIV (\$000,000):	2,841.7	3,126.5
(L) Ultimate Claims:	114	122

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 .040 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.

PLAN JPA - Property
Frequency and Severity Method
Reported Claim Count Development

Accident Year	Claims Reported as of 12/31/2021 (A)	Reported Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2012-2013	157	1.000	157	0.048
2013-2014	180	1.000	180	0.052
2014-2015	164	1.000	164	0.048
2015-2016	132	1.000	132	0.044
2016-2017	121	1.000	121	0.041
2017-2018	109	1.000	109	0.038
2018-2019	116	1.000	116	0.041
2019-2020	114	1.017	116	0.040
2020-2021	76	1.145	87	0.030
Total	1,334		1,347	0.043

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 12/31/2021 (A)	Closed Claim Development Factor (B)	Ultimate Claims (C)	Trended Claim Frequency (D)
2012-2013	157	1.012	159	0.049
2013-2014	180	1.013	182	0.052
2014-2015	164	1.014	166	0.048
2015-2016	131	1.015	133	0.044
2016-2017	120	1.021	123	0.042
2017-2018	106	1.033	109	0.038
2018-2019	107	1.054	113	0.040
2019-2020	86	1.118	96	0.033
2020-2021	47	1.509	71	0.025
Total	1,263		1,319	0.042

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 2021-2022 Loss Rate Level (B)	Factor to 2022-2023 Loss Rate Level (C)	Factor to 2023-2024 Loss Rate Level (D)	Factor to 2024-2025 Loss Rate Level (E)	Factor to 2021-2022 Frequency Level (F)	Factor to 2022-2023 Frequency Level (G)	Factor to 2023-2024 Frequency Level (H)	Factor to 2024-2025 Frequency Level (I)	Factor to 2021-2022 Severity Level (J)
2000-2001	1.000	1.107	1.113	1.118	1.124	0.655	0.642	0.629	0.616	1.679
2001-2002	1.000	1.101	1.107	1.112	1.118	0.668	0.655	0.642	0.629	1.638
2002-2003	1.000	1.096	1.101	1.106	1.112	0.682	0.669	0.655	0.642	1.598
2003-2004	1.000	1.090	1.095	1.100	1.106	0.696	0.682	0.668	0.655	1.559
2004-2005	1.000	1.084	1.089	1.095	1.100	0.710	0.696	0.682	0.668	1.521
2005-2006	1.000	1.079	1.084	1.090	1.095	0.725	0.710	0.696	0.682	1.484
2006-2007	1.000	1.074	1.079	1.085	1.090	0.740	0.725	0.710	0.696	1.448
2007-2008	1.000	1.069	1.074	1.080	1.085	0.755	0.740	0.724	0.710	1.412
2008-2009	1.000	1.064	1.069	1.075	1.080	0.769	0.754	0.739	0.724	1.378
2009-2010	1.000	1.059	1.064	1.070	1.075	0.785	0.770	0.754	0.739	1.344
2010-2011	1.000	1.054	1.059	1.065	1.070	0.801	0.785	0.769	0.754	1.312
2011-2012	1.000	1.049	1.054	1.060	1.065	0.817	0.801	0.785	0.769	1.280
2012-2013	1.000	1.044	1.050	1.055	1.060	0.834	0.818	0.801	0.785	1.249
2013-2014	1.000	1.039	1.045	1.050	1.055	0.851	0.834	0.817	0.801	1.218
2014-2015	1.000	1.034	1.040	1.045	1.050	0.868	0.851	0.834	0.817	1.188
2015-2016	1.000	1.030	1.035	1.040	1.045	0.886	0.869	0.851	0.834	1.160
2016-2017	1.000	1.025	1.030	1.035	1.040	0.904	0.886	0.868	0.851	1.132
2017-2018	1.000	1.020	1.025	1.030	1.035	0.922	0.904	0.886	0.868	1.104
2018-2019	1.000	1.015	1.020	1.025	1.030	0.942	0.923	0.904	0.886	1.077
2019-2020	1.000	1.010	1.015	1.020	1.025	0.961	0.942	0.922	0.904	1.051
2020-2021	1.000	1.005	1.010	1.015	1.020	0.980	0.960	0.941	0.922	1.025
2021-2022	1.000	1.000	1.005	1.010	1.015	1.000	0.980	0.960	0.941	1.000
2022-2023	1.000	--	1.000	1.005	1.010	--	1.000	0.980	0.960	--
2023-2024	1.000	--	--	1.000	1.005	--	--	1.000	0.980	--
2024-2025	1.000	--	--	--	1.000	--	--	--	1.000	--

Notes:

- (A) No benefit level adjustment applied.
 (B) - (E) (A) adjusted for a 0.5% annual loss rate trend.
 (F) - (I) (A) adjusted for a -2.0% annual frequency trend.
 (J) (A) adjusted for a 2.5% annual severity trend.

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

PLAN JPA - Property
Calculation of Discount Factors

Payment Year (A)	Payment Pattern (B)	Return on Investment (C)	Discounted Reserves (D)	Undiscounted Reserves (E)	Discount Factor (F)
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.1%	2.0%	0.001	0.001	0.990
15	0.0%	2.0%	0.001	0.001	0.971
14	0.1%	2.0%	0.002	0.002	0.971
13	0.1%	2.0%	0.003	0.003	0.965
12	0.2%	2.0%	0.005	0.005	0.963
11	0.1%	2.0%	0.006	0.006	0.952
10	0.3%	2.0%	0.008	0.009	0.952
9	0.5%	2.0%	0.013	0.014	0.954
8	0.7%	2.0%	0.020	0.021	0.953
7	0.9%	2.0%	0.029	0.030	0.952
6	1.2%	2.0%	0.040	0.042	0.950
5	2.6%	2.0%	0.065	0.068	0.953
4	3.7%	2.0%	0.100	0.105	0.954
3	6.7%	2.0%	0.165	0.172	0.957
2	40.1%	2.0%	0.559	0.573	0.975
1	42.7%	2.0%	0.970	1.000	0.970

(G) Discount Factor for Future Funding:	2021-2022	0.980
	2022-2023	0.980

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, $55.9\% = [16.5\% / 1.020] + [40.1\% / (1.010)]$.
- (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 0.98, on a discounted basis, \$0.98 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%	2.118	2.202
90%	1.777	1.831
85%	1.573	1.610
80%	1.422	1.445
75%	1.301	1.313
70%	1.199	1.202
65%	1.109	1.103
60%	1.029	1.016
55%	0.955	0.934
50%	0.886	0.860
45%	0.821	0.789
40%	0.758	0.721
35%	0.696	0.658
30%	0.635	0.597
25%	0.573	0.538

To read table: For the above retention, there is a 90% chance that final loss settlements will be less than 1.777 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 12/31/21

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	729,739	0	0	729,739	0	35,337	694,403	35,337	729,739	729,739
2016-2017	1,585,380	0	0	1,585,380	400,000	675,000	910,380	275,000	1,185,380	1,185,380
2017-2018	619,885	0	0	619,885	0	0	619,885	0	619,885	619,885
2018-2019	1,040,239	0	0	1,040,239	0	0	1,040,239	0	1,040,239	1,040,239
2019-2020	3,944,554	0	0	3,944,554	1,520,000	2,270,000	1,674,554	750,000	2,424,554	2,424,554
2020-2021	816,665	0	0	816,665	0	150,000	666,665	150,000	816,665	816,665
2021-2022	533,239	0	0	533,239	0	110,400	422,839	110,400	533,239	533,239
Total	\$12,896,039	\$0	\$0	\$12,896,039	\$1,920,000	\$3,240,737	\$9,655,303	\$1,320,737	\$10,976,039	\$10,976,039

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 12/31/21

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)
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	686,581	0	0	686,581	0	35,337	651,245	35,337	686,581	686,581
2016-2017	685,380	0	0	685,380	0	0	685,380	0	685,380	685,380
2017-2018	619,883	0	0	619,883	0	0	619,883	0	619,883	619,883
2018-2019	1,004,298	0	0	1,004,298	0	0	1,004,298	0	1,004,298	1,004,298
2019-2020	2,465,130	0	0	2,465,130	295,000	818,000	1,647,130	523,000	2,170,130	2,170,130
2020-2021	599,703	0	0	599,703	0	61,245	538,457	61,245	599,703	599,703
2021-2022	1,369	0	0	1,369	0	0	1,369	0	1,369	1,369
Total	\$9,688,682	\$0	\$0	\$9,688,682	\$295,000	\$914,582	\$8,774,100	\$619,582	\$9,393,682	\$9,393,682

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.

PLAN JPA - Property

Case Reserves as of 12/31/21

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	43,158	0	0	43,158	0	0	43,158	0	43,158	43,158
2016-2017	900,000	0	0	900,000	400,000	675,000	225,000	275,000	500,000	500,000
2017-2018	2	0	0	2	0	0	2	0	2	2
2018-2019	35,941	0	0	35,941	0	0	35,941	0	35,941	35,941
2019-2020	1,479,424	0	0	1,479,424	1,225,000	1,452,000	27,424	227,000	254,424	254,424
2020-2021	216,962	0	0	216,962	0	88,755	128,208	88,755	216,962	216,962
2021-2022	531,871	0	0	531,871	0	110,400	421,471	110,400	531,871	531,871
Total	\$3,207,357	\$0	\$0	\$3,207,357	\$1,625,000	\$2,326,155	\$881,203	\$701,155	\$1,582,357	\$1,582,357

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 12/31/21

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	132	0	0	132	131	0	0	131	1	1
2016-2017	121	0	0	121	120	0	0	120	1	1
2017-2018	109	0	0	109	106	0	0	106	3	3
2018-2019	116	0	0	116	107	0	0	107	9	9
2019-2020	114	0	0	114	86	0	0	86	28	28
2020-2021	76	0	0	76	47	0	0	47	29	29
2021-2022	34	0	0	34	9	0	0	9	25	25
Total	1,368	0	0	1,368	1,272	0	0	1,272	96	96

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

Accident Year	Total TIV (\$00) (A)	Inflation Trend Factor (B)	Trended TIV (\$00) (C)
2014-2015	24,991,854	1.189	29,715,314
2015-2016	22,829,462	1.160	26,482,176
2016-2017	23,300,292	1.132	26,375,931
2017-2018	24,105,322	1.104	26,612,275
2018-2019	25,019,733	1.077	26,946,252
2019-2020	26,637,753	1.051	27,996,278
2020-2021	27,395,469	1.025	28,080,356
2021-2022	28,416,607	1.000	28,416,607
2022-2023	31,265,001	1.000	31,265,001

Notes:

- (A) Provided by the Pool.
- (B) Based on 2.5%.
- (C) (A) x (B).

March 10, 2022

Agenda Item 7.C.

FINANCIAL MATTERS

SUBJECT: Review of the Preliminary 2022/23 Operating Budget

BACKGROUND AND HISTORY:

Enclosed is Preliminary Operating Budget (Budget) for PLAN JPA for the 2022/23 Fiscal Year. The funding model is similar to what PLAN has approved in the past, contributions are capped at 50% for 2022/23, whereas the cap in 2021/22 was limited to a 40% change year over year. Funding rates were compiled by PLAN's actuary. 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's Self-Insured Retention (SIR) is up to \$1 million above each member's SIR, currently \$25K, \$50K, \$100K, and \$250K. PLAN JPA joined California Affiliated Risk Management Authority (CARMA) JPA in 2021/22 at the \$9 million excess of \$1 million layer. Above CARMA's pooled layer, PLAN purchases Reinsurance and Excess above \$10 million; these coverage layers are the same as the prior year.
- For the Property Program, member contributions are presented at the 70% CL with a 2% discount factor. The proposed coverage is losses pooled from member's SIR up to \$500K per occurrence with zero aggregate deductible and excess coverage purchased up to \$1 billion.

The major components of the Budget are outlined below:

1. Overall Rates for Coverage

With an increase in estimated payroll of 6.4% and 9.4% increase in Total Insured Values, combined with 20% CARMA and Reinsurance/Excess estimations and excess Property premiums of 27%, the budgeted contributions are projected to increase from \$22 million to \$26.1 million for 2022/23. An increase of 19% over the prior year. Below is a summary by program.

Liability Program (Page 2)

The Liability program is projecting a 15% increase in contribution over the 2022/23 Approved Budget. Three members are capped at the 50% change in 2022/23, compared to fifteen members capped at 40% in 2021/22. The underlying assumption used in compiling the preliminary budget include:

- *Payroll* – overall, is estimated to increase by 6.4% from prior year, with twenty-four members of the twenty-eight, experiencing a 15.2% average increase. The 2022/23 estimated payroll is based upon the actual payroll collected on a quarterly basis, annualized with a conservative 2.5% trend increase.

March 10, 2022

Agenda Item 7.C.
Page 2

- *Primary Funding Layer* – increase of 7.9% from prior year mainly due to estimated payroll increasing.
- *Insurance cost* – The insurance cost is projected to increase by 20% over the prior year.
 - CARMA is projected to increase by 20%.
 - Reinsurance and Excess are projected to increase by 20%.
- *Administrative Expenses* – budgeted to increase of 5.1% in administration expenses. 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 2016/17 through 2020/21. The losses were limited to \$250,000 per occurrence. Creditability 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 Cost:

Administrative costs are split between fixed and variable costs. The fixed costs (33%) are allocated among the members evenly. The remaining variable 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 2016/17 to 2020/21. The allocation of administrative costs is same as it has been in the past years.

Property Program (Page 3)

The Property program is projected to increase 33.3% in 2022/23, over the 2021/22 Approved Budget. The proposed budget includes:

- Funding the 2022/2 program year at the **70% CL**, similar to prior year;
- Increasing the Total Insured Value (TIV) by 9.4%; these are preliminary numbers as Alliant is still gathering the data;
- Excess premium includes a 27% rate increase. The proposed rate increase takes into the account the same property coverage as 2021/22 of \$500K per occurrence, with no aggregate deductible;
- Excess Cyber liability is projected to increase 150%; and
- Actuarial Report, dated on March 4, 2022, was used to compile the proposed contributions for 2022/23.

2. Claims Expense

The overall claims expenses for program year 2022/23 is budgeted at the expected CL and expected to increase by 10.6% over 2021/22. The Liability Program is projected to increase by 7.8% due to payroll, and the Property Program is projected to increase 25.5% due to both increases in TIV and claims activity.

3. Insurance Expense

Total insurance expense is projected to increase by 20.8% over the prior year budget. The Liability Program is projected to increase 15.5% as the liability market continues ever slightly to harden, while the Property Program is also projected to increase 27% as the property market is continuing an upward trend. Excess Cyber Coverage is projected to increase by 136.4% due to high dollar payouts in the cyber market, while employment liability is estimated to decrease 12.9% over prior year actuals. These are conservative estimates and will be revised once we get more information from Alliant.

4. Risk Management Grants

Risk Management Grants, which are being funded out of equity, is budgeted at \$500,000, similar to prior year budget.

5. Administration Expenses

Administrative expenses are projected to increase by 5.1% over the prior year. The 2022/23 proposed budget includes the following line item variances from the prior year:

- Program Administration: contractual 3% increase from prior year;
- Financial Audit: contractual 5% increase from the prior year;
- Actuarial Studies: 3.5% increase for additional studies;
- Claims Admin & Audit: contractual 3% increase for claims administration, management of APD claims of \$30K, and claims audit cost of \$6K budgeted for in 2022/23;
- Legal Counsel: proposing a 36.7% or \$15K increase from prior year budget for increase in legal services of claims activity and coverage opinion;
- Risk Control Services: projected 5% increase over prior year, actual will be brought forward to PLAN Board meeting in June;
- Other Insurance: projected 3% increase for Deadly Weapon Response, E&O and Crime coverage;
- Meetings & Conferences: in anticipation of in-person meetings for the 2022/23 program year, proposing an increase of \$15K due to rising costs of meetings/conferences in Bay Area cities.
- Allowance for Contingencies: in 2021/22 PLAN JPA agreed to subsize portion of cyber assessments, which was an unexpected cost not originally budgeted for; continue with \$10K for 2022/23, similar to prior year.

STAFF RECOMMENDATION:

None. Information Only.

REFERENCE MATERIALS ATTACHED:

- Preliminary Operating Budget for 2022/23

PLAN JPA

Preliminary Contribution Worksheet for 2022/2023

Summary of Contributions by Program

Member	Liability Program	Property Program	Employment Liability	2022/23 Total Contributions	Prior Year Comparison			Payroll Comparison			Ex-mod Comparison		
					2021/22 Total Contributions	Increase/ (Decrease)	Percent Change	Estimated Payroll 2022/23	Estimated Payroll 2021/22	% Change	2022/23	2021/22	Change
	Page 2	Page 3											
American Canyon	\$ 428,818	\$ 175,848	\$ 56,662	\$ 661,327	\$ 550,928	\$ 110,399	20%	\$ 8,503,800	\$ 6,738,943	26.2%	58%	61%	-4.8%
Atherton	300,788	42,370	31,594	374,752	296,677	78,075	26%	7,486,700	5,103,982	46.7%	140%	130%	7.4%
Benicia	892,705	539,255	-	1,431,960	1,186,508	245,452	21%	23,954,000	22,887,654	4.7%	114%	87%	30.6%
Burlingame	860,940	454,601	-	1,315,541	1,026,832	288,710	28%	27,115,100	22,895,189	18.4%	107%	82%	30.3%
Campbell	853,704	234,113	-	1,087,817	990,012	97,805	10%	23,557,700	22,756,074	3.5%	73%	82%	-11.1%
Colma	120,301	62,798	-	183,099	155,780	27,319	18%	4,065,300	3,973,521	2.3%	100%	77%	30.2%
Cupertino	953,448	272,776	-	1,226,224	914,250	311,973	34%	25,593,400	23,860,889	7.3%	44%	39%	13.7%
Dublin	1,062,626	545,393	-	1,608,019	1,138,084	469,935	41%	10,171,800	9,733,186	4.5%	109%	84%	30.1%
East Palo Alto	713,774	80,009	-	793,783	551,587	242,196	44%	14,354,600	9,453,047	51.9%	132%	117%	12.8%
Foster City	642,425	370,005	-	1,012,430	707,592	304,838	43%	24,874,900	19,827,337	25.5%	40%	31%	29.4%
Half Moon Bay	262,323	72,816	-	335,139	293,662	41,477	14%	4,748,600	4,089,523	16.1%	82%	76%	7.9%
Hillsborough	373,156	189,682	-	562,838	507,590	55,248	11%	12,861,200	11,138,285	15.5%	83%	91%	-8.9%
Los Altos Hills	203,281	40,212	-	243,493	264,370	(20,877)	-8%	2,817,400	3,005,980	-6.3%	121%	172%	-29.7%
Los Gatos	601,373	156,866	-	758,239	703,807	54,432	8%	20,772,900	22,378,814	-7.2%	39%	48%	-19.3%
Millbrae	535,272	248,774	-	784,046	687,282	96,764	14%	8,016,500	7,733,077	3.7%	165%	231%	-28.6%
Milpitas	1,776,038	584,969	-	2,361,007	1,726,611	634,396	37%	62,317,100	64,362,249	-3.2%	83%	87%	-4.8%
Morgan Hill	1,178,704	364,736	-	1,543,440	1,426,547	116,892	8%	30,223,300	29,567,808	2.2%	93%	114%	-18.1%
Newark	1,033,447	299,225	-	1,332,672	1,192,473	140,199	12%	22,383,200	21,770,775	2.8%	103%	98%	5.2%
Pacifica	1,051,710	530,018	-	1,581,728	1,445,676	136,052	9%	21,633,500	19,531,220	10.8%	136%	151%	-9.9%
Portola Valley	118,975	34,557	-	153,532	134,526	19,006	14%	2,093,500	1,721,873	21.6%	81%	81%	0.2%
Ross	91,797	18,526	-	110,323	101,650	8,673	9%	2,612,300	2,447,463	6.7%	70%	70%	0.0%
San Bruno	1,329,008	257,299	-	1,586,307	1,445,909	140,398	10%	32,064,600	31,136,941	3.0%	132%	143%	-7.6%
San Carlos	781,017	146,992	-	928,009	1,075,117	(147,107)	-14%	10,624,400	8,395,419	26.5%	259%	369%	-29.9%
Saratoga	645,462	113,537	-	758,999	516,860	242,139	47%	8,436,600	7,444,257	13.3%	153%	140%	9.2%
South San Francisco	1,376,492	863,750	-	2,240,242	2,063,357	176,885	9%	48,319,000	51,563,560	-6.3%	58%	73%	-20.5%
Suisun City	584,838	103,440	-	688,278	467,826	220,452	47%	9,635,800	7,836,131	23.0%	97%	75%	30.2%
Tiburon	233,237	37,482	-	270,719	215,958	54,761	25%	4,579,200	3,862,568	18.6%	103%	79%	30.1%
Woodside	160,523	25,482	15,985	201,990	174,420	27,570	16%	2,350,600	2,121,729	10.8%	129%	99%	30.0%
Total	\$ 19,166,182	\$ 6,865,533	\$ 104,240	\$ 26,135,955	\$ 21,961,891	\$ 4,174,064	19%	\$ 476,167,000	\$ 447,337,492	6.4%			
P/Y	16,725,152	5,149,872	\$86,867	21,961,891									
Incr./(Decr.)	\$ 2,441,030	\$ 1,715,661	\$ 17,373	\$ 4,174,064									
% Change	15%	33%	20%	19%									

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.

Employment Liability coverage is through Employment Risk Management Authority (ERMA).

PLAN JPA

Preliminary Contribution Worksheet for 2022/2023

Liability Program Contribution Schedule

Pool Funding @ 60% Confidence Level, 2.0% Discount Factor

Members	Member SIR	Funding for Losses SIR-\$1M	Reinsurance/Excess Insurance			Administration Expense	Deposit from PY 50%	Unallocated Contributions	Members capped at 50%	Uncapped Members	Allocation of Contributions	2022/23 60% CL Liability Budget	Budget Comparison	
			CARMA \$9M x \$1M	Rein/Excess \$20M x \$10M	Total Insurance								2021/22 60% CL Liability Budget	Percent Increase / (Decrease)
			Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	Note 8	Note 9	Note 10	Note 10	Note 10
American Canyon	\$25,000	\$ 74,249	\$ 181,601	\$ 111,110	\$ 292,711	\$ 59,299	\$549,375	\$ 426,259	-	\$ 426,259	\$ 428,818	\$ 428,818	\$ 366,250	17.1%
Atherton	\$25,000	157,010	60,202	36,834	97,036	44,947	362,127	298,993	-	298,993	300,788	300,788	241,418	24.6%
Benicia	\$25,000	406,546	236,679	144,809	381,488	99,343	1,147,421	887,377	-	887,377	892,705	892,705	764,947	16.7%
Burlingame	\$250,000	191,796	259,682	158,883	418,565	245,441	1,015,706	855,802	-	855,802	860,940	860,940	677,137	27.1%
Campbell	\$100,000	183,678	362,582	221,841	584,423	80,508	1,221,645	848,609	-	848,609	853,704	853,704	814,430	4.8%
Colma	\$50,000	53,231	14,483	8,861	23,344	43,008	160,484	119,583	-	119,583	120,301	120,301	106,989	12.4%
Cupertino	\$250,000	74,188	512,066	313,301	825,367	48,203	1,062,890	947,758	-	947,758	953,448	953,448	708,593	34.6%
Dublin	\$50,000	145,196	564,786	345,557	910,343	67,274	1,062,626	1,122,813	1,062,626	-	-	1,062,626	708,417	50.0%
East Palo Alto	\$100,000	201,964	264,955	162,109	427,064	80,486	746,714	709,514	-	709,514	713,774	713,774	497,809	43.4%
Foster City	\$100,000	106,622	286,710	175,420	462,130	69,839	693,498	638,591	-	638,591	642,425	642,425	462,332	39.0%
Half Moon Bay	\$50,000	50,918	107,457	65,746	173,203	36,636	356,781	260,757	-	260,757	262,323	262,323	237,854	10.3%
Hillsborough	\$50,000	140,567	99,443	60,843	160,286	70,076	543,617	370,929	-	370,929	373,156	373,156	362,411	3.0%
Los Altos Hills	\$25,000	50,785	73,244	44,814	118,058	33,225	349,268	202,068	-	202,068	203,281	203,281	232,845	-12.7%
Los Gatos	\$50,000	107,079	269,197	164,705	433,902	56,803	880,541	597,784	-	597,784	601,373	601,373	587,027	2.4%
Millbrae	\$100,000	140,686	196,503	120,228	316,731	74,660	735,026	532,077	-	532,077	535,272	535,272	490,017	9.2%
Milpitas	\$100,000	552,618	660,537	404,141	1,064,678	148,142	1,924,917	1,765,438	-	1,765,438	1,776,038	1,776,038	1,283,278	38.4%
Morgan Hill	\$100,000	298,746	413,574	253,040	666,614	206,309	1,722,860	1,171,669	-	1,171,669	1,178,704	1,178,704	1,148,573	2.6%
Newark	\$100,000	245,712	426,538	260,972	687,510	94,057	1,444,731	1,027,279	-	1,027,279	1,033,447	1,033,447	963,154	7.3%
Pacifica	\$50,000	385,060	330,779	202,383	533,162	127,211	1,543,967	1,045,433	-	1,045,433	1,051,710	1,051,710	1,029,311	2.2%
Portola Valley	\$25,000	25,263	39,809	24,356	64,165	28,837	161,910	118,265	-	118,265	118,975	118,975	107,940	10.2%
Ross	\$25,000	27,341	22,235	13,604	35,839	28,069	132,843	91,249	-	91,249	91,797	91,797	88,562	3.7%
San Bruno	\$100,000	450,194	392,290	240,018	632,308	238,574	1,883,625	1,321,076	-	1,321,076	1,329,008	1,329,008	1,255,750	5.8%
San Carlos	\$100,000	292,712	260,276	159,246	419,522	64,122	1,445,244	776,356	-	776,356	781,017	781,017	963,496	-18.9%
Saratoga	\$25,000	193,507	266,666	163,156	429,822	48,955	645,462	672,284	645,462	-	-	645,462	430,308	50.0%
South San Francisco	\$100,000	299,668	586,087	358,590	944,677	123,932	2,214,459	1,368,277	-	1,368,277	1,376,492	1,376,492	1,476,306	-6.8%
Suisun City	\$25,000	139,577	252,139	154,268	406,407	52,548	584,838	598,532	584,838	-	-	584,838	389,892	50.0%
Tiburon	\$50,000	61,774	82,551	50,508	133,059	37,012	282,461	231,845	-	231,845	233,237	233,237	188,307	23.9%
Woodside	\$25,000	45,312	49,132	30,061	79,193	35,060	212,702	159,565	-	159,565	160,523	160,523	141,801	13.2%
Total		\$ 5,101,999	\$ 7,272,203	\$ 4,449,404	\$ 11,721,608	\$ 2,342,576		\$ 19,166,182	\$ 2,292,926	\$ 16,772,553	\$ 16,873,256	\$ 19,166,182	\$ 16,725,154	15%
Prior Year		4,728,999	6,060,168	3,707,831	9,768,000	2,228,157						16,725,154		
Incr./(Decr.)		373,000	1,212,035	741,573	1,953,608	114,419						2,441,028		
% Change		7.9%	20.0%	20.0%	20.0%	5.1%						15%		

NOTES:

Note 1: Member Selected Self-Insured Retention
 Note 2: Adjusted funding needed for SIR to \$1,000,000 at the 60% confidence level from draft Actuarial Study dated March 4, 2022.
 Note 3: Insurance estimated 20% increase; allocation based upon draft actuarial study dated March 4, 2022
 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: Unallocated contributions: (Note 2 + Note 3 + Note 4)
 Note 6: Capping members who have more than 50% change in contributions from the prior year.
 Note 7: Members with contributions below the 50% cap.
 Note 8: Allocation of remaining contributions among uncapped members.
 Note 9: Preliminary 2022/23 Liability Contributions
 Note 10: 2021/22 Contributions paid by members.

Funding for the Pool Layer @ 2.0%

	\$1M SIR 21/22	\$1M SIR 22/23
Expected Undisc.	4,934,000	5,318,000
Expected Disc.	4,613,000	4,972,000
60% CL Disc.	4,729,000	5,102,000
70% CL Disc.	5,411,000	5,828,000
80% CL Disc.	6,311,000	6,787,000
90% CL Disc.	7,745,000	8,309,000

PLAN JPA

Preliminary Contribution Worksheet for 2022/2023

Property Program Contributions Schedule

Pool Funding @ 70% Confidence Level, 2.0% Discount Factor

Member	SIR	Insured Values		Pool Funding SIR-\$500K	Excess Prop. Premium \$500k-\$1B	Flood Premium	Excess Cyber Coverage	2022/23 Program Deposit	Budget Comparison	
		2021/22 Insured Values	2022/23 Insured Values						2021/22 Program Deposit	Percent Increase / (Decrease)
		Note 1	Note 2	Note 3	Note 4	Note 5	Note 6	Note 7	Note 8	
American Canyon	\$5,000	\$ 77,992,068	\$ 82,614,210	\$ 34,192	\$ 126,402	\$ 1,674	\$ 13,579	\$ 175,848	\$ 137,460	27.9%
Atherton	5,000	14,749,463	15,584,891	6,450	23,845	-	12,075	42,370	28,931	46.5%
Benicia	5,000	240,096,735	256,510,580	106,165	392,469	4,187	36,434	539,255	421,561	27.9%
Burlingame	5,000	198,240,888	211,536,210	87,551	323,657	2,283	41,110	454,601	349,695	30.0%
Campbell	5,000	95,629,138	101,992,873	42,213	156,052	-	35,848	234,113	175,582	33.3%
Colma	5,000	26,117,622	27,835,071	11,520	42,589	1,675	7,014	62,798	48,791	28.7%
Cupertino	5,000	112,253,511	119,471,509	49,447	182,795	1,675	38,859	272,776	205,657	32.6%
Dublin	5,000	251,241,889	271,448,110	112,347	415,324	1,675	16,047	545,393	429,667	26.9%
East Palo Alto	5,000	27,942,173	29,721,112	12,301	45,474	-	22,234	80,009	53,778	48.8%
Foster City	5,000	138,310,565	170,897,100	70,731	261,478	-	37,796	370,005	245,260	50.9%
Half Moon Bay	5,000	31,169,811	33,330,839	13,795	50,997	-	8,024	72,816	55,808	30.5%
Hillsborough	5,000	81,853,430	87,276,218	36,122	133,535	-	20,025	189,682	145,179	30.7%
Los Altos Hills	5,000	17,086,553	18,027,866	7,461	27,583	-	5,168	40,212	31,525	27.6%
Los Gatos	5,000	60,680,949	64,373,829	26,643	98,494	-	31,729	156,866	116,780	34.3%
Millbrae	5,000	114,215,155	121,361,725	50,229	185,687	-	12,858	248,774	197,265	26.1%
Milpitas	5,000	237,238,555	250,584,792	103,712	383,403	4,671	93,183	584,969	443,333	31.9%
Morgan Hill	5,000	153,263,394	163,254,860	67,568	249,785	1,675	45,708	364,736	277,974	31.2%
Newark	5,000	128,067,580	136,381,699	56,446	208,668	-	34,111	299,225	229,319	30.5%
Pacifica	5,000	233,716,394	249,217,975	103,147	381,311	12,559	33,002	530,018	416,365	27.3%
Portola Valley	5,000	14,620,936	15,669,809	6,485	23,975	-	4,097	34,557	26,586	30.0%
Ross	5,000	5,384,933	6,166,661	2,552	9,435	1,675	4,864	18,526	13,088	41.6%
San Bruno	5,000	101,178,656	107,446,679	44,470	164,397	-	48,432	257,299	190,159	35.3%
San Carlos	5,000	61,949,337	66,156,133	27,381	101,221	1,675	16,716	146,992	111,621	31.7%
Saratoga	5,000	47,346,919	50,610,636	20,947	77,436	1,675	13,480	113,537	86,552	31.2%
South San Francisco	5,000	323,533,686	400,591,882	165,797	612,918	12,559	72,476	863,750	587,051	47.1%
Suisun City	5,000	40,694,302	43,211,738	17,885	66,115	4,187	15,254	103,440	77,934	32.7%
Tiburon	5,000	13,543,414	14,420,964	5,969	22,065	1,675	7,774	37,482	27,651	35.6%
Woodside	5,000	10,121,584	10,804,161	4,472	16,531	-	4,479	25,482	19,299	32.0%
Total		\$ 2,858,239,640	\$ 3,126,500,132	\$ 1,294,000	\$ 4,783,641	\$ 55,516	\$ 732,376	\$ 6,865,533	\$ 5,149,872	33.3%
P/Y		2,858,239,640	1,023,000	3,766,650	50,469	309,753	5,149,872			
Incr./(Decr.)		\$ 268,260,492	\$ 271,000	\$ 1,016,991	\$ 5,047	\$ 422,623	\$ 1,715,661			
% Change		9.4%	26.5%	27.0%	10.0%	136.4%	33.3%			

Notes:

- Note 1: 2021/22 Total Insured property values obtained from Alliant.
 Note 2: 2022/23 Total Insured property values as submitted by members. Updated as of 1/25/22.
 Note 3: Rate for PLAN pool (from actuarial report dated March 4, 2022) allocated using Note 2.
 Note 4: Estimated Premium by Alliant Property Insurance Program (APIP).
 Note 5: Flood cost are based upon 2021/22 premiums with a 10% increase in premiums.
 Note 6: Excess Cyber coverage: minimum \$1K per member and remaining allocated based upon payroll.
 Note 7: Total 2022/23 Contributions by member (Total Notes 3 through 6).
 Note 8: 2021/22 Contributions.

Funding for the Pooled Layer

		21/22	22/23
Expected	Undiscounted	870,000	1,101,000
Expected	Discounted	860,000	1,079,000
70% confidence Level	Discounted	1,023,000	1,294,000
75% confidence Level	Discounted	1,103,000	1,404,000
80% confidence Level	Discounted	1,197,000	1,534,000
85% confidence Level	Discounted	1,315,000	1,697,000

PLAN JPA

Preliminary Operating Budget for 2022/2023

	2021/22		2022/23 Draft Operating Budget	Prior Year	
	Approved Budget	Projected Actuals		Increase/ (Decrease)	Percent Incr./ (Decr.)
Revenues:					
Contributions	\$ 21,994,710	\$ 21,961,893	\$ 26,135,955	\$ 4,141,245	18.8%
Funding from Equity	500,000	500,000	500,000	-	0.0% c
Investment Income	530,000	89,868	100,000	(430,000)	0.0%
Less: Investment Fees	(35,000)	(36,000)	(36,000)	(1,000)	0.0%
Total Revenues	22,989,710	22,515,761	26,699,955	3,710,245	16.1%
Expenses					
<i>Claims Expense</i>	5,473,000	8,311,252	6,051,000	578,000	10.6% a
<i>Insurance Expense</i>					
Insurance - Liability	10,150,169	10,267,319	11,721,608	1,571,439	15.5%
Insurance - Property	3,766,650	3,817,118	4,783,641	1,016,991	27.0%
Flood Insurance	50,469	50,469	55,516	5,047	10.0%
Excess Cyber Coverage	309,753	309,750	732,376	422,623	136.4%
Employment Liability Coverage	119,686	86,867	104,240	(15,445)	-12.9%
	14,396,726	14,531,523	17,397,381	3,000,655	20.8% b
<i>Risk Management Grants</i>					
Risk Management Fund	500,000	500,000	500,000	-	0.0% c
<i>Administration</i>					
Program Administration	968,429	968,429	997,482	29,053	3.0%
Financial Audit	21,800	21,800	22,900	1,100	5.0%
Actuarial Studies	41,000	41,000	42,435	1,435	3.5%
Claims Admin & Audit	747,897	726,897	784,704	36,807	4.9%
Legal Counsel	40,000	47,531	54,661	14,661	36.7%
Risk Control Services	274,660	274,660	288,393	13,733	5.0%
Sewer Summit	25,000	20,320	25,000	-	0.0%
Other Insurance	54,371	50,838	56,002	1,631	3.0%
CAJPA Accreditation	12,000	-	12,000	-	0.0%
Bank Fees	5,000	5,400	6,000	1,000	20.0%
Meetings & Conferences:					
Meetings	25,000	1,000	40,000	15,000	60.0%
Training & Workshops	3,000	1,000	3,000	-	0.0%
Allowance for Contingencies	10,000	9,800	10,000	-	0.0%
<i>Total Administration Expenses:</i>	2,228,157	2,168,675	2,342,577	114,420	5.1% d
Total Expenses	22,597,883	25,511,450	26,290,958	3,693,074	16.3%
Budgeted Net Income (Loss)	391,827	(2,995,689)	408,997	17,170	4.4%

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

	2021/22	2022/23	Difference	% Difference
Liability	\$4,613,000	\$4,972,000	\$359,000	7.8%
Property	860,000	1,079,000	219,000	25.5%
Total	\$5,473,000	\$6,051,000	\$578,000	10.6%

b Insurance expenses are budgeted to increase by 20.8%. Liability premiums are budgeted to increase 15% due to a continued hardening insurance market. Property rates are budgeted to increase 27% as the property market is continuing an upward trend. Cyber excess coverage is budgeted to increase 136.4% & employment liability coverage is budgeted to decrease 12.9% for those members who are participating with ERMA.

c Risk Management Grants are funded from the equity. Thus, corresponding revenues has been recorded for budgeting

d Administration expenses are expected to increase by 5.1% in comparison to 21/22 budget. While majority of the expenses are related to contractual increase, legal fees have been increased due to claims activity and coverage opinion by \$15K. In addition to claims admin and audit contractual increases, management of APD claims are budgeted at \$30K. Staff is increasing meeting expenses in anticipation of in-person meetings for 2022/23 due to rising costs of locales in Bay Area.