

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

SPECIAL BOARD OF DIRECTORS MEETING AGENDA

Tuesday, March 22, 2022 10:00 a.m.

Zoom Videoconference 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 Board of Directors. 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 Board of Directors will be available for public inspection.

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

Page 1. CALL TO ORDER

- 2. INTRODUCTIONS
- 3. APPROVAL OF AGENDA AS POSTED (OR AMENDED)
- **4. PUBLIC COMMENTS** The Public may submit any questions in advance of the meeting by contacting Katie Sullivan at: katie.sullivan@sedgwick.com. This time is reserved for members of the public to address the Board relative to matters of the Board of Directors not on the agenda. No action may be taken on non-agenda items unless authorized by law. Comments will be limited to five minutes per person and twenty minutes in total.

^{*} Reference materials enclosed with staff report.

Page 5. AB361

4

A. Update on AB361 and Virtual Committee Meetings

Recommendation: Staff recommends the Board of Directors reaffirm Resolution 2021-03 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. GENERAL MANAGER'S REPORT

5

20

*A. Report from PLAN JPA's General Manger *Recommendation:*

- 1) Staff recommends the Board of Directors approve the agreement with ResoluteGuard, subject to Board Counsel review of the agreement.
- 2) Staff recommends the Board of Directors appoint Rebecca Mendenhall as the Interim President for the remaining 2021/22 Program Year.

7. LIABILITY PROGRAM

*A. Actuarial Update for the General Liability Program

Recommendation: None. Information only.

B. State of the Market - Liability

Recommendation: None. Information only.

159 C. PLAN JPA 2022/23 Projections – Liability *Recommendation: None. Information only.*

8. PROPERTY AND GROUP PURCHASE PROGRAMS

*A. Actuarial Update for the Property Program

Recommendation: None. Information only.

B. State of the Market – Property and Group Purchase Programs

Recommendation: None. Information only.

207 C. PLAN JPA 2022/23 Projections – Property and Group Purchase Programs *Recommendation: None. Information only.*

9. FINANCIAL MATTERS

*A. Review of the PLAN JPA 2022/23 Preliminary Operating Budget *Recommendation: None. Information only.*

^{*} Reference materials attached with staff report.

10. CLOSING COMMENTS

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

- A. Board of Directors
- B. Staff

11. ADJOURNMENT

NOTICES:

- The next Executive Committee meeting will be held on May 19, 2022 at 10:00am. Format TBD.
- The next Board of Directors meeting will be held on June 16, 2022 at 9:30am. Format: TBD.

^{*} Reference materials attached with staff report.

Agenda Item 5.A.

AB361

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, and because the Board does not meet monthly and its next meeting is in December, we are recommending PLAN JPA's Executive Committee, Claims Committee, and Board of Directors 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 Board of Directors reaffirm Resolution 2021-03 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 $\mathbb{O}(1)\mathbb{O}$ of section 54943 of the Government Code.

REFERENCE MATERIALS ATTACHED:

None

Agenda Item 6.A.

GENERAL MANAGER'S REPORT

SUBJECT: Report from PLAN JPA's General Manger

BACKGROUND AND HISTORY:

Update on CARMA Renewals

PLAN JPA joined the California Affiliated Risk Management Authority (CARMA) at July 1, 2021, for the \$9M x \$1M PLAN JPA layer. Jon Paulsen, PLAN JPA General Manager, and Rob Kramer, CARMA Executive Director, will be present to provide a quick update on CARMA's renewal process.

Consideration of In-Person Meetings

California Executive Order N-29-20 was enacted on March 17, 2020, allowing for public entities to hold meetings virtually due to the COVID-19 pandemic. Due to the current state of the pandemic, public entities around California have begun to resume meetings in-person.

With the health and safety of PLAN JPA members, staff, and services providers being a top priority, staff is requesting guidance on PLAN JPA member's willingness to resume meetings inperson, starting with the June 2022 Board of Directors meeting.

Update on ResoluteGuard

As an initiative from PLAN's December 2019 strategic planning meetings, PLAN staff focused on discovering cyber security options for members. Staff developed a four-part series of cyber risk webinars which were presented to members from August 19, 2020, to September 23, 2020. Additionally, Sedgwick Pooling added a California IT Risk Control Manager, Colette Klier, to our team. To date, approximately six (6) members have engaged Sedgwick to perform cyber security risk assessments.

At the December 8, 2021, Strategic Planning Session, Mr. Paulsen and Jeff Schobel, CEO of ResoluteGuard, presented the capabilities of ResoluteGuard to members. Attached are the requested ResoluteGuard proposal for PLAN JPA, as well as a sample member contract. Mr. Schobel will be in attendance to answer any questions from the Board.

Appointment of Interim President

Staff was informed that PLAN JPA President, Marc Zafferano, will be retiring from the City of San Bruno in May 2022. Mr. Zafferano has been a staple of leadership for PLAN JPA for many years and will be greatly missed.

Rebecca Mendenhall, PLAN JPA Vice President, has agreed to step in and assume the presidency role for the remaining duration of Mr. Zafferano's term. Ms. Mendenhall would serve

Agenda Item 6.A. Page 2

as Interim President for the rest of 2021/22 and in June 2022, PLAN JPA will formally elect Officers for 2022/23.

RECOMMENDATION:

- 1) Staff recommends the Board of Directors approve the agreement with ResoluteGuard, subject to Board Counsel review of the agreement.
- 2) Staff recommends the Board of Directors appoint Rebecca Mendenhall as the Interim President for the remaining 2021/22 Program Year.

REFERENCE MATERIALS ATTACHED:

- ResoluteGuard Cyber Security Continuous Improvement Platform Action Plan for PLAN JPA
- ResoluteGuard Services Agreement Member





Cyber-Security Continuous Improvement Platform™ For PLAN JPA Insureds

ResoluteGuard's Cyber-Security Continuous Improvement Platform™, mapped to the National Institute of Standards and Technology Cyber Security Framework (NIST-CSF) performs automated internal and external security profile assessments to continuously improve your cyber security posture.

These comprehensive internal and external assessments are scheduled and performed every 90 days, and include change reports to track progress, any newly discovered vulnerabilities as well as all updated NIST identified controls.

This 90-day schedule provides the continuous improvement process critical for protecting against the ever-evolving cyber predator strategies and tactics, while providing administrative support for fact-based budgeting and resource allocation decision-making.

Key to the platform are the user-friendly remedial action worksheets and reports, customized to each person's administrative and/or technical role, which align an across organization effort for a continuation of uninterrupted service.

These user-friendly remedial action worksheets and reports are updated every 90 days to include newly identified vulnerabilities, with all actions reprioritized by risk of occurrence and loss.

Templated Policies and guidance are provided for documenting the Best Practice Procedures important to support maintenance activities and to provide evidence of compliance for auditing purposes.

With cyber-attacks on the rise, insurance companies are requiring more detailed questionnaires to ascertain an insureds cyber security risk profile and determine corresponding cyber insurance costs and coverage limit quotes.

The **ResoluteGuard's** *Customized Cyber-insurance Action Plan* (CAP) option maps assessment findings to automate fact-based response submissions to these insurance questionnaires to *optimize* an insureds security posture to help qualify for the best cyber insurance coverage costs and terms:

ResoluteGuard introduced this **CAP** module due to over-riding demand as many public entities lack the resources to properly address these insurance questionnaire submissions as renewal periods come due, potentially positioning them for a premium increase, dramatic deductible increases, and greatly reduced maximum coverage terms.





ResoluteGuard's Cyber-Security Continuous Improvement Platform™ and Cyber-insurance Action Plan Module (CAP) provide the continuous and timely framework to support Plan JPA's efforts to manage cyber security claims and settlements.

Description of Services

NIST-CSF Based Comprehensive Internal/External Assessment and Improvement

Conduct web Meetings with administrative and technical personnel to review reports, remedial action worksheets, templated best practices Policies and procedures, and to schedule initial assessment.

- -Analyze submitted insurance renewal questionnaire
- -Discuss assessment information requirements
- -Screenshare with Technical staff to implement scanning software
- -Share best practices for optimal scanning results

Cyber-insurance Action Plan (CAP) and Assessments Results

Web Meeting to review CAP and Assessment Result to provides fact-based recommendations and responses to Insurance Questionnaire Requirements

- -User-friendly Step by Step Action Plans prioritized by risk of loss occurrence
- User Assignment /Help/Support Documentation /Align Policy and Solution Activities
 - -Network Security Summary
 - -Create Inventory Management Summary
 - -Establish Network Documentation
 - -Server and workstation Aging Report
 - -Includes: Discovery Tasks, User Information, Disc Capacity, and more

Policies and Procedures- Per insurance and NIST Requirements

- -Prioritize Policy Action Plan for Documenting Best Practices
- -Support for modifying policy templates
- -Align Policy creation and Solution Activities

Each Subsequent 90 Day Comprehensive Internal/External Assessment

Cyber Action Plan (CAP) and Assessment Results

Web Meeting to review updated CAP and Assessment Results

Step by Step Action Plans re-prioritized by risk of loss occurrence

- -User Assignment
- -Help/Support Documentation
- -Re-align Policy and Solution Activities

Review Assessment Reports

- -Re-prioritize remedial action plan by risk of potential loss occurrence
- -Review Change and Progress Reports

Network Security Summary

- -Updated Inventory Management Summary
- -Updated Network Documentation
- -Server Aging Report
- -Workstation Aging Report
- -Includes: Discovery Tasks, User Information, Disc Capacity, and more
- -Review Change and Progress





Policies and Procedures- Review progress and reprioritize additional activities

- -Per insurance and NIST-CSF Requirement
- -Support for modifying policy templates
- -Align Policy Creation and Solution Activities

NIST CSF Compliance- Fill out additional questionnaires/worksheets toward full NIST-CSF Compliance

FEES

First 12-month period Annual Fee: \$4500 (up to 250 endpoints) Each addt'l. Network- \$1150

Subsequent 12-month period Annual Fee: \$2500 (up to 250 endpoints)

Each addt'l. Network- \$1150

Each additional 250 endpoints \$1150

Based upon the number of administrative employees per PLAN JPA insured, the estimated Fee for the First 12-month period is as follows:

No. of Insureds	Devices	Total Fee
16	1-250	\$72,000
10	251-500	\$56,500
2	501-750	\$13,600
	Total Est	\$142,100

^{*}Cyber-insurance Action Plan (CAP)- Add \$750 annually per insured

PLAN JPA Kick-Off

- 1. Conduct a meeting with Jon Paulson, Terrie Norris, Katie Sullivan
- 2. PLAN JPA & ResoluteGuard email review to introduce partnership to insureds.
- 3. Review Co-Branded Landing Page and brochure
- 4. Schedule Webinar for insureds
- 5. Obtain contact list for ResoluteGuard follow-up

Member Insured Engagement

- Conduct ResoluteGuard Presentation- Learn more about present cybersecurity posture and initiatives
- 2. Obtain signed agreement to Get Started
- 3. Schedule and conduct Onboarding
- 4. Conduct Assessment and review Cyber-insurance Action Plan (CAP)
- 5. Review User-friendly Reports and schedule subsequent meetings to review Action Plan

SERVICES AGREEMENT

- 1. <u>Services</u>. PLAN JPA ("**JPA**") has certain municipalities within its network (collectively, the "**Members**"), including Member, to whom Service Provider shall provide certain services relating to Service Provider's "Cybersecurity Risk Management Program" (the "**Services**") as further set forth in **Exhibit A**.
- 2. <u>Fees and Expenses</u>. For the Services to be performed hereunder, PLAN JPA shall pay to Service Provider the fixed fee per Member as set out in that certain Payment Agreement by and between Service Provider and PLAN JPA dated March 1, 2022 (as amended and supplemented to date, the "**Payment Agreement**") (collectively, the "**Fees**").
 - 3. <u>Member's Obligations</u>. Member represents and warrants to Service as follows:
 - 3.1 Member will cooperate with Service Provider in all matters relating to the Services and appoint a Member employee to serve as the primary contact with respect to this Agreement and who will have the authority to act on behalf of Member with respect to matters pertaining to this Agreement (the "Member Contract Manager"). Service Provider will be entitled to rely upon directions and guidance from the Member Contract Manager until Service Provider is affirmatively made aware of a change of status of the Member Contract Manager;
 - 3.2 Member shall ensure that Service Provider has such access to Member's equipment and networks (collectively, the "Environment") as may reasonably be requested by Service Provider for the purposes of performing the Services. Without limiting the generality of the foregoing, Members hereby grants to Service Provider the right to monitor, diagnose, manipulate, communicate with, retrieve information from, and otherwise access the Member's Environment to enable Service Provider to provide the Services, Member acknowledges that Service Provider may be required to install one or more software agents into Member's Environment through which such access may be enabled;
 - 3.3 Member shall respond promptly to any Service Provider request to provide direction, information, approvals, authorizations, or decisions that are reasonably necessary for Service Provider to perform Services in accordance with the requirements of this Agreement. It being understood that if Service Provider's performance of its obligations under this Agreement is prevented or delayed by any act or omission of Member, its agents, subcontractors, consultants, or employees, Service Provider shall not be deemed in breach of its obligations under this Agreement or otherwise liable for any costs, charges, or losses sustained or incurred by Member, in each case, to the extent arising directly or indirectly from such prevention or delay.

- 3.4 Member shall comply, fully with all reasonable specifications, rules, regulations and policies governing the Services provided to Member by Service Provider. Such rules, regulations and policies shall be subject to change from time to time in Service Provider's sole discretion;
- 3.5 Member, and not Service Provider, is responsible for Member's own compliance with all applicable laws, including all confidentiality and security requirements, including, but not limited to such requirements of the FERPA, HIPAA, Gramm-Leach-Bliley Act, USA Patriot Act. The Services are not intended, and will not be used, to bring Member into full regulatory compliance with any law, rule, regulation, or requirement that may be applicable to Member's business or operations. The Services may aid Member's efforts to fulfill regulatory compliance; however, the Services are not (and should not be used as) as a compliance solution;
- 3.6 Service Provider may provide Member with specific advice and directions related to the Services ("Advice"). Member is strongly advised to follow Advice which, depending on the situation, may require Member to make additional purchases or investments in its Environment at its sole cost. Member acknowledges and agrees that Service Provider is not responsible for any problems or issues (such as downtime or security-related issues) caused by Member's failure to promptly follow Advice. If, in Service Provider's discretion, Member's failure to follow Advice renders part or all of the Services economically or technically unreasonable to provide, then Service Provider may terminate all or a portion of the Services.
- 4. <u>Intellectual Property</u>. All intellectual property rights, including copyrights, patents, patent disclosures and inventions (whether patentable or not), trademarks, service marks, trade secrets, know-how, and other confidential information, trade dress, trade names, logos, corporate names and domain names, together with all of the goodwill associated therewith, derivative works and all other rights (collectively, "**Intellectual Property Rights**") in and to all documents, work product and other materials that are delivered to Member under this Agreement or prepared by or on behalf of Service Provider in the course of performing the Services (collectively, the "**Deliverables**") except for any Confidential Information of Member or Member-provided materials shall, as between Member and Service Provider, be owned exclusively by Service Provider. Service Provider hereby grants Member a license (or if applicable, a sublicense) to use all Intellectual Property Rights in the Deliverables free of additional charge (other than the Fees) and on a non-exclusive, worldwide, non-transferable, non-sublicensable, fully paid-up, royalty-free and perpetual basis, solely to the extent necessary to enable Member to make reasonable use of the Deliverables and the Services.
- 5. <u>Confidentiality</u>. From time to time during the Term of this Agreement, either party (as the "**Disclosing Party**") may disclose or make available to the other party (as the "**Receiving Party**"), non-public, proprietary, and confidential information of Disclosing Party that, if disclosed in writing or other tangible form is clearly labeled as "confidential," or if disclosed orally, is identified as confidential when disclosed and within 10 days thereafter, is summarized in writing and confirmed as confidential ("**Confidential Information**"); provided, however, that Confidential Information does not include any information that: (a) is or becomes generally available to the public other than as a result of Receiving Party's breach of this Section 5; (b) is

or becomes available to the Receiving Party on a non-confidential basis from a third-party source, provided that such third party is not and was not prohibited from disclosing such Confidential Information; (c) was in Receiving Party's possession prior to Disclosing Party's disclosure hereunder; or (d) was or is independently developed by Receiving Party without using any Confidential Information. The Receiving Party shall: (x) protect and safeguard the confidentiality of the Disclosing Party's Confidential Information with at least the same degree of care as the Receiving Party would protect its own Confidential Information, but in no event with less than a commercially reasonable degree of care; (y) not use the Disclosing Party's Confidential Information, or permit it to be accessed or used, for any purpose other than to exercise its rights or perform its obligations under this Agreement; and (z) not disclose any such Confidential Information to any person or entity, except to the Receiving Party's Group who need to know the Confidential Information to assist the Receiving Party, or act on its behalf, to exercise its rights or perform its obligations under this Agreement. If the Receiving Party is required by applicable law or legal process to disclose any Confidential Information, it shall, prior to making such disclosure, use commercially reasonable efforts to notify Disclosing Party of such requirements to afford Disclosing Party the opportunity to seek, at Disclosing Party's sole cost and expense, a protective order or other remedy. For purposes of this Section 5 only, Receiving Party's Group shall mean the Receiving Party's affiliates and its or their employees, officers, directors, shareholders, partners, members, managers, agents, independent contractors, service providers, sublicensees, subcontractors, attorneys, accountants, and financial advisors.

Provided however, this Section 5 shall not prohibit or otherwise prevent Service Provider from extracting, compiling, synthesizing, and analyzing data provided by Member to Service Provider in connection with the delivery of the Services to the extent such data or information does not identify or is otherwise attributable to Member, JPA's and/or the Members' operations, or its systems or networks or any person (collectively, "Anonymous Data").

- 6. <u>Term.</u> This Agreement shall commence as of the Effective Date and, unless sooner terminated as provided in this Agreement, will remain in full force and effect for an initial term equal to one (1) year from the Effective Date (the "**Initial Term**") after which the term shall automatically renew for additional 12-month periods (collectively with the Initial Term, the "**Term**") unless a party provides written notice to the other party of that party's intention to not renew this Agreement at least thirty (30) days prior to the expiration of the then current Term.
- 7. Termination. Either party may terminate this Agreement, effective upon written notice to the other party (the "Defaulting Party"), if the Defaulting Party: (a) materially breaches this Agreement, and such breach is incapable of cure, or with respect to a material breach capable of cure, the Defaulting Party does not cure such breach within 30 days after receipt of written notice of such breach; (b) becomes insolvent or admits its inability to pay its debts generally as they become due; (c) becomes subject, voluntarily or involuntarily, to any proceeding under any domestic or foreign bankruptcy or insolvency law, which is not fully stayed within seven business days or is not dismissed or vacated within 45 days after filing; (d) is dissolved or liquidated or takes any corporate action for such purpose; (e) makes a general assignment for the benefit of creditors; or (f) has a receiver, trustee, custodian, or similar agent appointed by order of any court of competent jurisdiction to take charge of or sell any material portion of its property or business. Notwithstanding anything to the contrary in this section, Service Provider

may terminate this Agreement before the expiration date of the Term on written notice if JPA fails to pay any amount when due under the Payment Agreement.

8. <u>Independent Contractor</u>. The details of the method and manner for performance of the Services by Service Provider shall be under its own control, Member being interested only in the results thereof. The Service Provider shall be solely responsible for supervising, controlling and directing the details and manner of the completion of the Services. Nothing in this Agreement shall give Member (or JPA) the right to instruct, supervise, control, or direct the details and manner of the completion of the Services. Service Provider is for all purposes hereunder an independent contractor and in no event will Service Provider be considered an agent or employee of Member or JPA or any of their subsidiaries or affiliates for any purpose.

9. Indemnification.

- Member shall defend, indemnify, and hold harmless Service Provider and Service Provider's affiliates and their officers, directors, employees, agents, successors, and permitted assigns from and against all losses arising out of or resulting from any third-party action arising out of or resulting from Member's breach of any representation, warranty, or obligation of Member in this Agreement or otherwise, from any act or omission of a Member inconsistent with the terms and requirements of this Agreement. Service Provider shall promptly notify Member in writing of any action and cooperate with the Member at Member's sole cost and expense. Service Provider will have the right, but not the obligation, to control the intake, defense and disposition of any claim or cause of action for which indemnity may be sought under this section. Otherwise, Member shall immediately take control of the defense and investigation of such action and shall employ counsel of its choice to handle and defend the same, at Member's sole cost and expense. Member shall not settle any action in a manner that adversely affects the rights of Service Provider without Service Provider's prior written consent. Service Provider's failure to perform any obligations under this Section shall not relieve Member of its obligations under this Section. Service Provider may participate in and observe the proceedings at its own cost and expense.
- Limited Warranty. Service Provider warrants that it shall perform the Services, which includes the delivery of a vulnerability assessment to Member, in a timely, workmanlike, and professional manner in accordance with generally recognized industry standards for similar services. SERVICE PROVIDER (a) MAKES NO WARRANTIES EXCEPT FOR THAT SET OUT ABOVE; AND (b) DISCLAIMS ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING BUT NOT LIMITED TO IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. Without limiting the generality of the foregoing, Service Provider makes no representations or warranties with respect to any third party software or Deliverables provided to Member with respect to the Services, nor does Service Provider provide to Member any representations, warranties, assurances or promises that Member's operations during or following the delivery of the Services will meet any or all regulatory compliance requirements (or other requirements of applicable laws). Service Provider's sole and exclusive liability and Member's sole and exclusive remedy for breach of the limited warranty set out in this Section shall be reperformance of the affected Services. If Service Provider cannot reperform the Services in compliance with the warranty set forth above within a reasonable time (but no more than 30 days) after Member's

written notice of such breach, Member may, at its option, terminate the Agreement by serving written notice of termination in accordance with Section 7. Service Provider shall not have any obligation to refund to Member or JPA any portion of the fees previously paid by JPA as of the date of termination corresponding to the defective Services.

- 11. <u>Limitation of Liability</u>. IN NO EVENT SHALL SERVICE PROVIDER BE LIABLE TO MEMBER OR TO ANY THIRD PARTY (INCLUDING ANY MEMBER) FOR ANY LOSS OF USE, REVENUE, OR PROFIT OR LOSS OF DATA OR DIMINUTION IN VALUE, OR FOR ANY CONSEQUENTIAL, INCIDENTAL, INDIRECT, EXEMPLARY, SPECIAL, OR PUNITIVE DAMAGES WHETHER ARISING OUT OF BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), OR OTHERWISE, REGARDLESS OF WHETHER SUCH DAMAGE WAS FORESEEABLE AND WHETHER OR NOT SERVICE PROVIDER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES, AND NOTWITHSTANDING THE FAILURE OF ANY AGREED OR OTHER REMEDY OF ITS ESSENTIAL PURPOSE. SERVICE PROVIDER'S SOLE LIABILITY ARISING OUT OF OR RELATED TO THIS AGREEMENT, WHETHER ARISING OUT OF OR RELATED TO BREACH OF CONTRACT, TORT (INCLUDING NEGLIGENCE), OR OTHERWISE, SHALL BE AS SET FORTH IN SECTION 10 ABOVE.
- General. Each of the parties hereto shall use commercially reasonable efforts to, from time to time at the request and sole expense of the other party, furnish the other party such further information or assurances, execute and deliver such additional documents, instruments, and conveyances, and take such other actions and do such other things, as may be reasonably necessary or appropriate to carry out the provisions of this Agreement and give effect to the transactions contemplated hereby. Each party shall deliver all communications in writing either in person, by certified or registered mail, return receipt requested and postage prepaid, by facsimile or email (with confirmation of transmission), or by recognized overnight courier service, and addressed to the other party at the addresses set forth above (or to such other address that the receiving party may designate from time to time in accordance with this Section). This Agreement and all matters arising out of or relating to this Agreement, including tort and statutory claims are governed by, and construed in accordance with the laws of New Jersey, (including its statutes of limitations), without giving effect to any conflict of laws provisions thereof that would result in the application of the laws of a different jurisdiction. Except as otherwise set forth in Section 13 below, either party shall institute any legal suit, action, or proceeding arising out of or relating to this Agreement in the federal or state courts in each case located in Sea Girt, New Jersey. SUBJECT TO SECTION 13 BELOW, EACH PARTY HEREBY IRREVOCABLY AND UNCONDITIONALLY: (A) CONSENTS AND SUBMITS TO THE EXCLUSIVE JURISDICTION OF THE AFOREMENTIONED COURTS; (B) WAIVES ANY OBJECTION TO THAT CHOICE OF FORUM BASED ON VENUE OR TO THE EFFECT THAT THE FORUM IS NOT CONVENIENT; (C) WAIVES ANY RIGHT TO TRIAL BY JURY; AND (D) WAIVES PERSONAL SERVICE OF ANY SUMMONS, COMPLAINT, OR OTHER PROCESS, WHICH MAY BE MADE BY ANY OTHER MEANS PERMITTED BY NEW JERSEY LAW. This Agreement contains the entire understanding of the parties with respect to the subject matter hereof, and supersedes all prior and contemporaneous written or oral understandings, agreements, representations, and warranties with respect to such subject matter. The invalidity, illegality, or unenforceability of any provision herein does not affect any other provision herein or the validity, legality, or enforceability of

such provision in any other jurisdiction. The parties may not amend this Agreement except by written instrument signed by the parties. No waiver of any right, remedy, power, or privilege under this Agreement ("Right(s)") is effective unless contained in a writing signed by the party charged with such waiver. No failure to exercise, or delay in exercising, any Right operates as a waiver thereof. No single or partial exercise of any Right precludes any other or further exercise thereof or the exercise of any other Right. The Rights under this Agreement are cumulative and are in addition to any other rights and remedies available at law or in equity or otherwise; provided that, the parties intend that the remedy set out in Section 11 (Limited Warranty) is Member's exclusive remedy for the Service Provider's breach of the limited warranty set out in Section 11. Neither party may directly or indirectly assign, transfer, or delegate any of or all of its rights or obligations under this Agreement, voluntarily or involuntarily, including by change of control, merger (whether or not such party is the surviving entity), operation of law, or any other manner, without the prior written consent of the other party. Any purported assignment or delegation in violation of this Section shall be null and void. Service Provider, however, may subcontract the Services. This Agreement is binding upon and inures to the benefit of the parties and their respective successors and permitted assigns. Except for the parties, their successors and permitted assigns, there are no third party beneficiaries under this Agreement (without limiting the generality of the foregoing, JPA is not an intended third party beneficiary under this Agreement). Any provision that, in order to give proper effect to its intent, should survive the expiration or termination of this Agreement, will survive such expiration or termination for the period specified therein, or if nothing is specified for a period of 12 months after such expiration or termination. This Agreement may be executed in counterparts.

Dispute Settlement/Arbitration. Prior to bringing any action as contemplated in Section 12 above, the parties agree to make good faith efforts to amicably resolve all controversies, claims and matters of difference arising under this Agreement. If they are unable to do so, either party may demand in writing that a specified dispute be submitted to non-binding mediation to be conducted by the American Arbitration Association (or similar commercial dispute resolution center) in Newark, New Jersey, within 30 days of such demand. If such mediation does not result in settlement of the dispute, the dispute shall be submitted to arbitration. Arbitration shall be conducted in Newark, New Jersey area (unless otherwise agreed by the parties), in accordance with the Commercial Arbitration Rules of the American Arbitration Association, except to the extent such rules conflict with the express provisions of this Section. Arbitration hereunder shall be by three independent and impartial arbitrators. Each of the parties shall appoint one arbitrator within 30 days after one party gives notice of a claim to be arbitrated hereunder. The two arbitrators so appointed shall select a third arbitrator within 45 days after such notice, failing which the American Arbitration Association shall select the third arbitrator. The three arbitrators shall conduct a hearing no later than 60 days after such notice, and the arbitrators shall render a decision within 30 days of the hearing. At the hearing, the parties shall present such evidence and witnesses as they may choose, with or without counsel. The arbitration panel shall consider any evidence and testimony that it determines to be relevant, in accordance with procedures that it determines to be appropriate. Any award entered shall be made by a written opinion stating the reasons for the award made. The arbitrators may award legal or equitable relief; including but not limited to specific performance, and may award the costs and fees, including attorneys' fees, arbitrators and expert witness fees, to the prevailing party. Such award shall be final and binding on all parties, and shall not be appealable. Each party shall continue to perform its obligations under this Agreement and notwithstanding any

other provision of this Agreement, neither party shall have the power to terminate this Agreement, nor shall this Agreement automatically terminate by its own provisions, pending conclusion of the arbitration.

Force Majeure. No party shall be liable or responsible to the other party, nor be deemed to have defaulted under or breached this Agreement, for any failure or delay in fulfilling or performing any term of this Agreement (except for any obligations of JPA to make payments to Service Provider under the Payment Agreement), when and to the extent such failure or delay is caused by or results from acts beyond the impacted party's ("Impacted Party") reasonable control, including, without limitation, the following force majeure events ("Force Majeure Event(s)"): (a) acts of God; (b) flood, fire, earthquake, or explosion; (c) war, invasion, hostilities (whether war is declared or not), terrorist threats or acts, riot or other civil unrest; (d) government order, law, or actions; (e) embargoes or blockades in effect on or after the date of this Agreement; (f) national or regional emergency; (g) strikes, labor stoppages or slowdowns, or other industrial disturbances; (h) shortage of adequate power or transportation facilities; and (i) other similar events beyond the reasonable control of the Impacted Party. The Impacted Party shall give notice within 10 days of the Force Majeure Event to the other party, stating the period of time the occurrence is expected to continue. The Impacted Party shall use diligent efforts to end the failure or delay and ensure the effects of such Force Majeure Event are minimized. The Impacted Party shall resume the performance of its obligations as soon as reasonably practicable after the removal of the cause. In the event that the Impacted Party's failure or delay remains uncured for a period of 10 consecutive days following written notice given by it under this Section, either party may thereafter terminate this Agreement upon 10 days' written notice.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed as of the Effective Date by their respective officers thereunto duly authorized.

By
Name: Jeffrey Schobel
Title: CEO
[PLAN JPA Member]
[PLAN JPA Member] By
,

RESOLUTEGUARD LLC

EXHIBIT A

DESCRIPTION OF SERVICES

Comprehensive Internal/External Assessment and Improvement

Based on NIST-CSF Controls

Web Meeting to Outline Onboarding and Setup for assessment software installation

- -Analyze submitted insurance renewal questionnaire
- -Discuss assessment information requirements
- -Screenshare with Technical staff to implement scanning software
- -Share best practices for optimal scanning results

Cyber-insurance Action Plan (CAP) and Assessments Results

Web Meeting to review CAP and Assessment Results Provides fact-based recommendations and responses to Insurance Questionnaire Step by Step Action Plans prioritized by risk of loss occurrence

- -User Assignment
- -Help/Support Documentation
- -Align Policy and Solution Activities

Review Assessment Reports

Prioritize Network Action Plan by risk of potential loss occurrence Network Management Plan

-User-Friendly Detailed Remedial Actions

Consolidated Risk Report

- -Network Security Summary
- -Create Inventory Management Summary
- -Establish Network Documentation

Review Excel Export

- -Server Aging Report
- -Workstation Aging Report
- -Includes: Discovery Tasks, User Information, Disc Capacity, and more

Policies and Procedures

Per insurance and NIST Requirements

Prioritize Policy Action Plan for Documenting Best Practices

- -Support for modifying policy templates
- -Align Policy creation and Solution Activities

Each Subsequent 90 Day Comprehensive Internal/External Assessment

Cyber-insurance Action Plan (CAP) and Assessment Results

- -Web Meeting to review CAP and Assessment Results
- -Step by Step Action Plans re-prioritized by risk of loss occurrence
 - -User Assignment
 - -Help/Support Documentation
 - -Re-align Policy and Solution Activities
- -Review Assessment Reports

Re-prioritize Network Action Plan by risk of potential loss occurrence

-Review Change and Progress Reports

Network Management Plan

- -User-Friendly Detailed Remedial Actions
- -Change and Progress

Consolidated Risk Report

- -Network Security Summary
- -Updated Inventory Management Summary
- -Updated Network Documentation
- -Change and Progress

Review Excel Export

- -Server Aging Report
- -Workstation Aging Report
- -Includes: Discovery Tasks, User Information, Disc Capacity & more
- -Change and Progress

Policies and Procedures

Per insurance and NIST-CSF Requirements

Re-prioritize Policy Action Plan for Documenting Best Practices

- -Support for modifying policy templates
- -Align Policy Creation and Solution Activities

NIST CSF Compliance

Fill out additional questionnaires to achieve full NIST-CSF Compliance

- -Complete Inventory worksheet
- -Complete User Access worksheet
- -Complete External Port Use worksheet
- -Complete NIST Category worksheets-Identify; Protect; Detect; Respond; Recover

Agenda Item 7.A.

LIABILITY PROGRAM

SUBJECT: Actuarial Update for the General Liability Program

BACKGROUND AND HISTORY:

The preliminary actuarial report provides the funding information for the 2022/23 year. The actuary was able to compile the report using December 31, 2021, loss run and estimated payroll data.

General Liability Program:

Below is our current program structure.



Agenda Item 7.A. Page 2

Below is a comparison of the funding for the PLAN JPA Primary Pool Layer:

Liability	Discount			
Program	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 self-insured retention (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, certain 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, Board recommended 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.

Becky Richard, Bickmore Actuarial, will be present to discuss the funding report.

RECOMMENDATION:

None. Information only.

REFERENCE MATERIALS ATTACHED:

• Draft General Liability Program Actuarial Report as of March 15, 2022



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 15, 2022 - DRAFT



Tuesday, March 15, 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

		Marginally	Recommended Range					
	Expected	Acceptable 70% CL	Low 75% CL	80% CL	High 85% CL	Conservative 90% 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)

DRAFT

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.

4

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

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

Claims administration services are provided by York. As of June 30, 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).

6

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

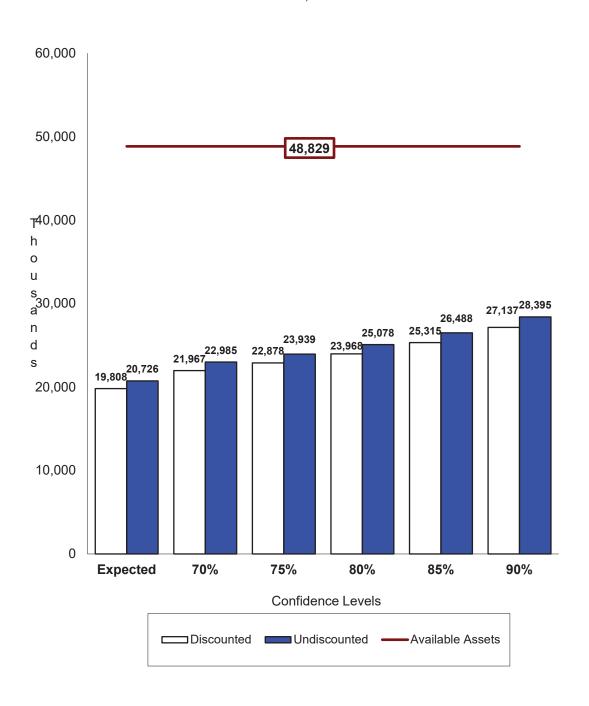
A. LIABILITY FOR OUTSTANDING CLAIMS AS OF JUNE 30, 2022

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.

PLAN JPA Available Assets vs Outstanding Liability (\$000's) at June 30, 2022



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.

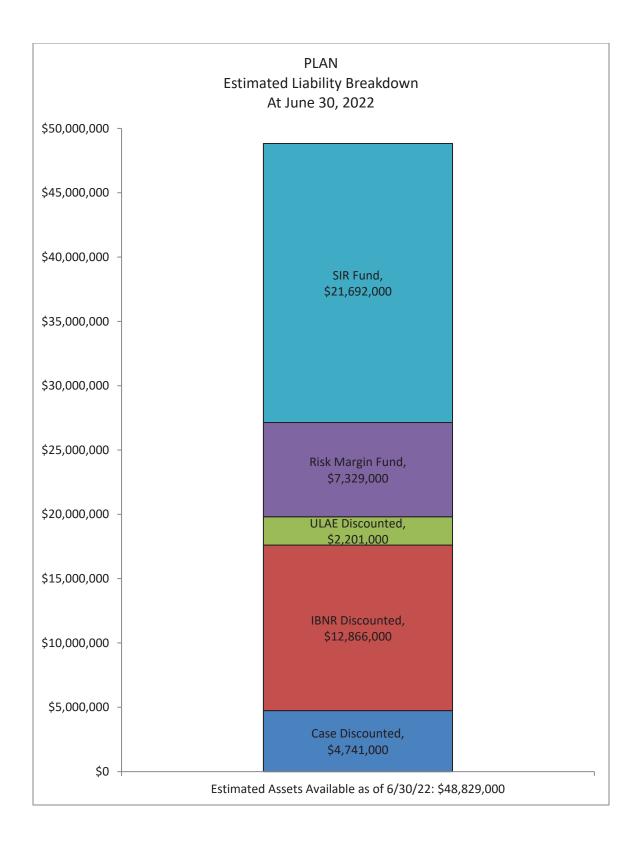
We estimate the program's expected discounted liability for outstanding claims to be \$19,808,000 again including ALAE and ULAE. With recognition of the investment income that can be earned on the assets held, the program is funded above the 90% confidence level. The information presented in Graph 1 is also summarized in tabular form below.

Confidence	Liability	y for Outstai	nding Claim	s at 6/30/22		
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.

10



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.

	Score	Score		
Funding Benchmarks	(SIR: \$2.5M)	(SIR: \$1M)	<u>Target</u>	Result
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 Prior	2022-23 \$1.0M/\$30M Proposed	Dollar	Percent
Member	Funding	Funding	Change	Change
American Canyon	\$366,248	\$447,951	\$81,703	22.31%
Atherton	241,418	308,000	66,582	27.58%
Benicia	764,947	919,469	154,522	20.20%
Burlingame	677,137	889,657	212,520	31.39%
Campbell	814,430	891,891	77,461	9.51%
Colma	106,988	122,298	15,310	14.31%
Cupertino	708,593	1,005,996	297,403	41.97%
Dublin	708,418	1,062,627	354,209	50.00%
East Palo Alto	497,809	742,172	244,363	49.09%
Foster City	462,331	672,441	210,110	45.45%
Half Moon Bay	237,854	273,692	35,838	15.07%
Hillsborough	362,411	384,392	21,981	6.07%
Los Altos Hills	232,844	211,164	(21,680)	-9.31%
Los Gatos	587,027	629,547	42,520	7.24%
Millbrae	490,019	556,364	66,346	13.54%
Milpitas	1,283,279	1,846,813	563,535	43.91%
Morgan Hill	1,148,574	1,223,383	74,809	6.51%
Newark	963,154	1,078,529	115,376	11.98%
Pacifica	1,029,312	1,088,042	58,730	5.71%
Portola Valley	107,940	123,306	15,366	14.24%
Ross, Town of	88,562	94,356	5,794	6.54%
San Bruno	1,255,750	1,372,544	116,794	9.30%
San Carlos	963,495	809,351	(154, 145)	-16.00%
Saratoga	430,311	645,467	215,156	50.00%
South SF	1,476,305	1,438,198	(38,107)	-2.58%
Suisun City	389,892	584,838	194,946	50.00%
Tiburon	188,307	242,144	53,837	28.59%
Woodside	141,802	165,943	24,142	17.02%
Total	\$16,725,157	\$19,830,577	\$3,105,420	18.57%

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.

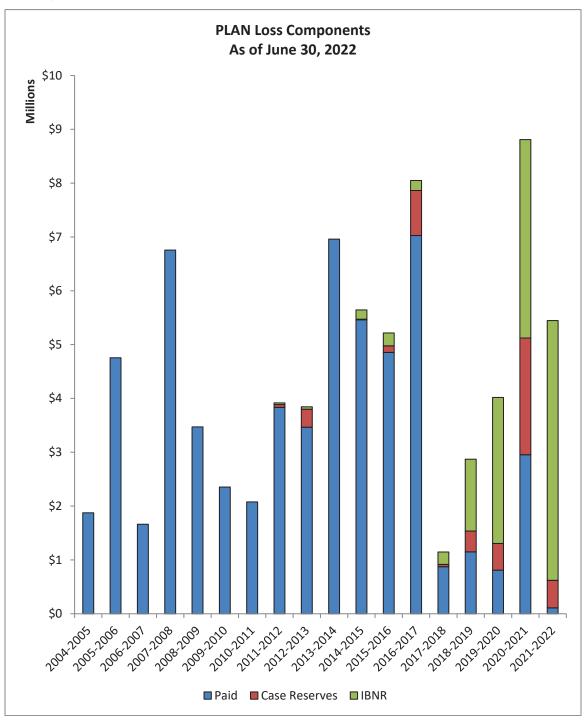
The remaining sixty-seven percent of administrative expenses are assumed to vary by member and are initially allocated based upon one-third weight to reported claims

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.

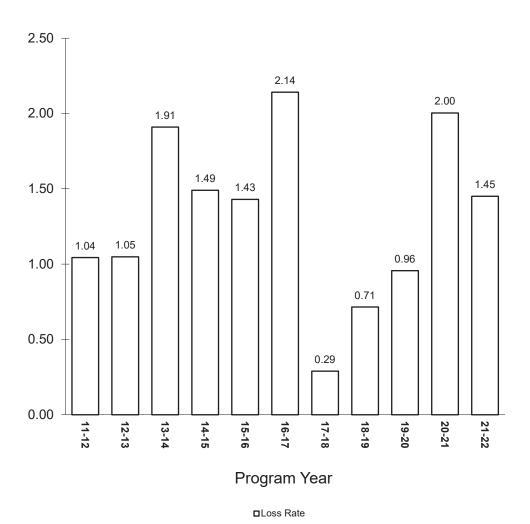
D. OTHER RESULTS

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



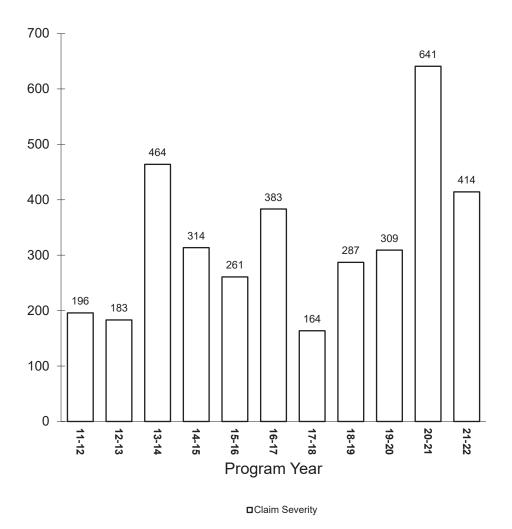
PLAN's loss rate per \$100 of payroll has varied significantly over the past ten years. The projected loss rate of \$1.45 per \$100 of payroll for the 2021-22 year is based on the long-term average.

Indicated Loss Rate per \$100 of Payroll Pool Layer



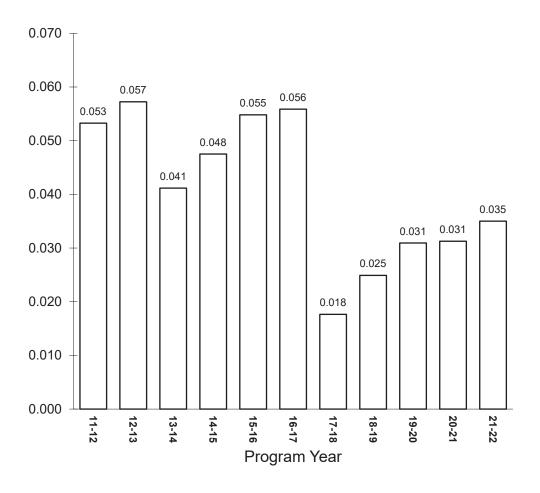
The program's cost per claim averaged \$189,500 per claim prior to 2013-14. Since then the severity averaged \$350,000 in the latest eight years. The projected severity for the 2021-22 program year of \$414,000 is based on this increasing trend. The claim severities in the following chart are limited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



□Claim Frequency

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

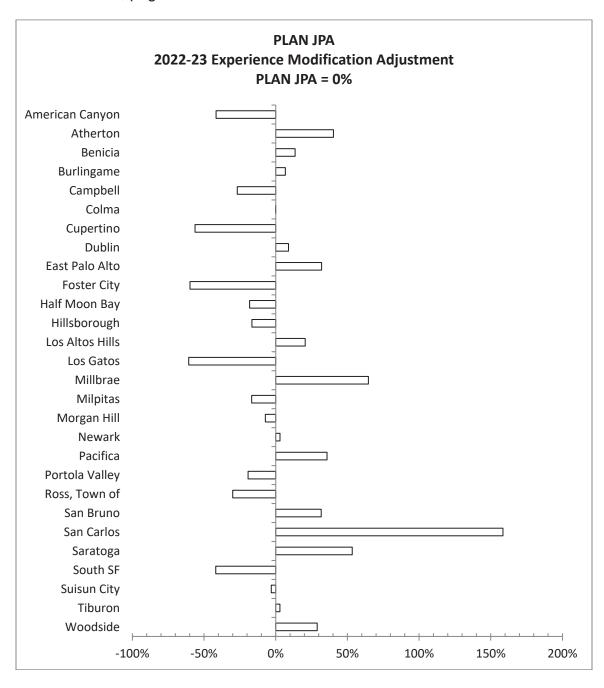
Accident Year	Prior Report	Current Report	Change
1986-01	\$30,004,000	\$30,004,000	\$0
2001-02	4,627,000	4,627,000	0
2002-03	8,812,000	8,812,000	0
2003-04	2,574,000	2,574,000	0
2004-05	1,874,000	1,874,000	0
2005-06	4,756,000	4,756,000	0
2006-07	1,662,000	1,662,000	0
2007-08	6,756,000	6,756,000	0
2008-09	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.

	2021-22	2022-23		
	Actual	Proposed	Dollar	Percent
Member	Funding	Funding	Change	Change
American Canyon	\$366,248	\$447,951	\$81,703	22.31%
Atherton	241,418	308,000	66,582	27.58%
Benicia	764,947	919,469	154,522	20.20%
Burlingame	677,137	889,657	212,520	31.39%
Campbell	814,430	891,891	77,461	9.51%
Colma	106,988	122,298	15,310	14.31%
Cupertino	708,593	1,005,996	297,403	41.97%
Dublin	708,418	1,062,627	354,209	50.00%
East Palo Alto	497,809	742,172	244,363	49.09%
Foster City	462,331	672,441	210,110	45.45%
Half Moon Bay	237,854	273,692	35,838	15.07%
Hillsborough	362,411	384,392	21,981	6.07%
Los Altos Hills	232,844	211,164	(21,680)	-9.31%
Los Gatos	587,027	629,547	42,520	7.24%
Millbrae	490,019	556,364	66,346	13.54%
Milpitas	1,283,279	1,846,813	563,535	43.91%
Morgan Hill	1,148,574	1,223,383	74,809	6.51%
Newark	963,154	1,078,529	115,376	11.98%
Pacifica	1,029,312	1,088,042	58,730	5.71%
Portola Valley	107,940	123,306	15,366	14.24%
Ross, Town of	88,562	94,356	5,794	6.54%
San Bruno	1,255,750	1,372,544	116,794	9.30%
San Carlos	963,495	809,351	(154,145)	-16.00%
Saratoga	430,311	645,467	215,156	50.00%
South SF	1,476,305	1,438,198	(38,107)	-2.58%
Suisun City	389,892	584,838	194,946	50.00%
Tiburon	188,307	242,144	53,837	28.59%
Woodside	141,802	165,943	24,142	17.02%
Total	\$16,725,157	\$19,830,577	\$3,105,420	18.57%

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 \$12,386,000 for the \$1 million to \$30 million layer. Premiums for individual layers are estimated based upon pool limits factors.

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

III. ASSUMPTIONS AND LIMITATIONS

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

- Our analysis is based on loss experience, exposure data, and other general and specific information provided to us by PLAN. We have accepted all of this information without audit.
- We have also made use of loss statistics that have been developed from the information gathered and compiled from other California public entities with selfinsured excess liability program.
- We have assumed that the future development of incurred and paid losses can be reasonably predicted on the basis of development of such losses in the recent past. We have also assumed that the historical development patterns for the participants of other California public entities with self-insured liability programs in the aggregate form a reasonable basis of comparison to the patterns from PLAN's data.
- We have made use of cost relationships for claims of various sizes derived from the most recent actuarial reviews of other California public entities with selfinsured 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.)

Exhibit 1 Page 1

PLAN JPA Summary of 2022-23 Deposit by Retention Limit

		Total				
		Deposit				
		\$1 Million			Total	
	2021-22	Retention	Indicated	Indicated	Deposit	Total
	Premium	\$30 Million	Dollar	Percent	Capped at	Percent
Member	Deposit	Limit	Change	Change	+/- 50%	Change
(A)	(B)	(C)	(D)	(E)	(F)	(G)
American Canyon	\$366,248	\$442,851	\$76,602	20.9%	447,951	22.3%
Atherton	241,418	304,493	63,075	26.1%	308,000	27.6%
Benicia	764,947	908,999	144,052	18.8%	919,469	20.2%
Burlingame	677,137	879,527	202,390	29.9%	889,657	31.4%
Campbell	814,430	881,735	67,305	8.3%	891,891	9.5%
Colma	106,988	120,906	13,918	13.0%	122,298	14.3%
Cupertino	708,593	994,541	285,948	40.4%	1,005,996	42.0%
Dublin	708,418	1,174,413	465,995	65.8%	1,062,627	50.0%
East Palo Alto	497,809	733,721	235,912	47.4%	742,172	49.1%
Foster City	462,331	664,784	202,453	43.8%	672,441	45.4%
Half Moon Bay	237,854	270,575	32,722	13.8%	273,692	15.1%
Hillsborough	362,411	380,015	17,604	4.9%	384,392	6.1%
Los Altos Hills	232,844	208,760	(24,084)	-10.3%	211,164	-9.3%
Los Gatos	587,027	622,378	35,351	6.0%	629,547	7.2%
Millbrae	490,019	550,029	60,011	12.2%	556,364	13.5%
Milpitas	1,283,279	1,825,784	542,506	42.3%	1,846,813	43.9%
Morgan Hill	1,148,574	1,209,453	60,879	5.3%	1,223,383	6.5%
Newark	963,154	1,066,248	103,095	10.7%	1,078,529	12.0%
Pacifica	1,029,312	1,075,653	46,341	4.5%	1,088,042	5.7%
Portola Valley	107,940	121,902	13,962	12.9%	123,306	14.2%
Ross, Town of	88,562	93,281	4,720	5.3%	94,356	6.5%
San Bruno	1,255,750	1,356,915	101,165	8.1%	1,372,544	9.3%
San Carlos	963,495	800,135	(163,361)	-17.0%	809,351	-16.0%
Saratoga	430,311	696,647	266,335	61.9%	645,467	50.0%
South SF	1,476,305	1,421,822	(54,483)	-3.7%	1,438,198	-2.6%
Suisun City	389,892	621,568	231,676	59.4%	584,838	50.0%
Tiburon	188,307	239,387	51,080	27.1%	242,144	28.6%
Woodside	141,802	164,054	22,252	15.7%	165,943	17.0%
Total	\$16,725,157	\$19,830,577	\$3,105,420	18.6%	\$19,830,577	

⁽B) From provided by PLAN JPA.
(C) From Exhibit 1 - Page 2a
(D) (C) - (B)
(E) (C) / (B) - 1
(F) (E) Capped at +/-50%

Exhibit 1 Page 2a

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	\$309,302	\$59,299	\$442,851
Atherton	157,010	102,536	44,947	304,493
Benicia	406,546	403,110	99,343	908,999
Burlingame	191,796	442,290	245,441	879,527
Campbell	183,678	617,549	80,508	881,735
Colma	53,231	24,667	43,008	120,906
Cupertino	74,188	872,149	48,203	994,541
Dublin	145,196	961,942	67,274	1,174,413
East Palo Alto	201,964	451,271	80,486	733,721
Foster City	106,622	488,324	69,839	664,784
Half Moon Bay	50,918	183,021	36,636	270,575
Hillsborough	140,567	169,371	70,076	380,015
Los Altos Hills	50,785	124,750	33,225	208,760
Los Gatos	107,079	458,497	56,803	622,378
Millbrae	140,686	334,684	74,660	550,029
Milpitas	552,618	1,125,024	148,142	1,825,784
Morgan Hill	298,746	704,398	206,309	1,209,453
Newark	245,712	726,479	94,057	1,066,248
Pacifica	385,060	563,382	127,211	1,075,653
Portola Valley	25,263	67,802	28,837	121,902
Ross, Town of	27,341	37,871	28,069	93,281
San Bruno	450,194	668,148	238,574	1,356,915
San Carlos	292,712	443,301	64,122	800,135
Saratoga	193,507	454,185	48,955	696,647
South SF	299,668	998,222	123,932	1,421,822
Suisun City	139,577	429,443	52,548	621,568
Tiburon	61,774	140,600	37,012	239,387
Woodside	45,312	83,682	35,060	164,054
Total	\$5,102,000	\$12,386,000	\$2,342,577	\$19,830,577

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

Exhibit 1 Page 2b

PLAN JPA

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

			Adjusted Experience	2022-23	PLAN JPA	Balanced PLAN JPA		Adjusted	Indicated
		Deductible	Modification	Payroll	Loss Fund	Loss Fund	Excess	Admin.	Total
Member	Deductible	Factor	Factor	(00)		Contribution	Insurance	Expenses	Deposit
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)
American Canyon	25,000	1.403	58%	85,038	70,846	74,249	309,302	59,299	442,851
Atherton	25,000	1.403	140%	74,867	149,815	157,010	102,536	44,947	304,493
Benicia	25,000	1.403	114%	239,540	387,916	406,546	403,110	99,343	908,999
Burlingame	250,000	0.622	107%	271,151	183,007	191,796	442,290	245,441	879,527
Campbell	100,000	1.000	73%	235,577	175,261	183,678	617,549	80,508	881,735
Colma	50,000	1.230	100%	40,653	50,791	53,231	24,667	43,008	120,906
Cupertino	250,000	0.622	44%	255,934	70,789	74,188	872,149	48,203	994,541
Dublin	50,000	1.230	109%	101,718	138,543	145,196	961,942	67,274	1,174,413
East Palo Alto	100,000	1.000	132%	143,546	192,709	201,964	451,271	80,486	733,721
Foster City	100,000	1.000	40%	248,749	101,736	106,622	488,324	69,839	664,784
Half Moon Bay	50,000	1.230	82%	47,486	48,585	50,918	183,021	36,636	270,575
Hillsborough	50,000	1.230	83%	128,612	134,126	140,567	169,371	70,076	380,015
Los Altos Hills	25,000	1.403	121%	28,174	48,458	50,785	124,750	33,225	208,760
Los Gatos	50,000	1.230	39%	207,729	102,172	107,079	458,497	56,803	622,378
Millbrae	100,000	1.000	165%	80,165	134,239	140,686	334,684	74,660	550,029
Milpitas	100,000	1.000	83%	623,171	527,294	552,618	1,125,024	148,142	1,825,784
Morgan Hill	100,000	1.000	93%	302,233	285,056	298,746	704,398	206,309	1,209,453
Newark	100,000	1.000	103%	223,832	234,452	245,712	726,479	94,057	1,066,248
Pacifica	50,000	1.230	136%	216,335	367,414	385,060	563,382	127,211	1,075,653
Portola Valley	25,000	1.403	81%	20,935	24,105	25,263	67,802	28,837	121,902
Ross, Town of	25,000	1.403	70%	26,123	26,089	27,341	37,871	28,069	93,281
San Bruno	100,000	1.000	132%	320,646	429,563	450,194	668,148	238,574	1,356,915
San Carlos	100,000	1.000	259%	106,244	279,299	292,712	443,301	64,122	800,135
Saratoga	25,000	1.403	153%	84,366	184,640	193,507	454,185	48,955	696,647
South SF	100,000	1.000	58%	483,190	285,935	299,668	998,222	123,932	1,421,822
Suisun City	25,000	1.403	97%	96,358	133,181	139,577	429,443	52,548	621,568
Tiburon	50,000	1.230	103%	45,792	58,944	61,774	140,600	37,012	239,387
Woodside	25,000	1.403	129%	23,506	43,236	45,312	83,682	35,060	164,054
Total		1.054	94%	4,761,670	4,868,199	5,102,000	12,386,000	2,342,577	19,830,577

⁽B) Provided by PLAN

⁽C) From Exhibit 2, Page 2.

⁽D) From Exhibit 1, Page 6.

⁽E) From Exhibit 2, 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)

Exhibit 1 page 3

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%	309,302
Atherton	6,896	0.83%	102,536
Benicia	27,111	3.25%	403,110
Burlingame	29,746	3.57%	442,290
Campbell	41,533	4.99%	617,549
Colma	1,659	0.20%	24,667
Cupertino	58,656	7.04%	872,149
Dublin	64,695	7.77%	961,942
East Palo Alto	30,350	3.64%	451,271
Foster City	32,842	3.94%	488,324
Half Moon Bay	12,309	1.48%	183,021
Hillsborough	11,391	1.37%	169,371
Los Altos Hills	8,390	1.01%	124,750
Los Gatos	30,836	3.70%	458,497
Millbrae	22,509	2.70%	334,684
Milpitas	75,663	9.08%	1,125,024
Morgan Hill	47,374	5.69%	704,398
Newark	48,859	5.87%	726,479
Pacifica	37,890	4.55%	563,382
Portola Valley	4,560	0.55%	67,802
Ross, Town of	2,547	0.31%	37,871
San Bruno	44,936	5.39%	668,148
San Carlos	29,814	3.58%	443,301
Saratoga	30,546	3.67%	454,185
South SF	67,135	8.06%	998,222
Suisun City	28,882	3.47%	429,443
Tiburon	9,456	1.14%	140,600
Woodside	5,628	0.68%	83,682
Total	833,015	100.0%	12,386,000

⁽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

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

 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.

 (B) / Total (B)

 (C) / Total (C)

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

(G) x Total of (H)

Total variable liability expenses are equal to 13.4% of total expenses. Total expenses of \$2,342,577 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) (C) (D)

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

Based on reported claims count > \$1 for 2016-17 2020-21 from Appendix E, Page 8. Based on paid losses limited to SIR for 2016-17 2020-21 from Appendix E, Page 6b.

⁽B) / Total (B)

⁽E)

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

⁽H)

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

⁽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

Exhibit 1 Page 7

PLAN JPA

Limited Incurred Losses

Member	2016-17	2017-18	2018-19	2019-20	2020-21
(A)	(B)	(C)	(D)	(E)	(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

Exhibit 2 Page 1a

PLAN JPA Pool Layer

Funding 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		\$12,386,000	\$9,365,000	\$8,778,000	\$7,423,000	\$6,983,000
(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		\$19,701,000	\$17,893,000	\$17,543,000	\$16,731,000	\$16,468,000
(I)	60% Confidence Margin 70% Confidence Margin 80% Confidence Margin 90% Confidence Margin	1.026 1.172 1.365 1.671	129,000 855,000 1,815,000 3,337,000	161,000 1,064,000 2,258,000 4,150,000	168,000 1,105,000 2,344,000 4,309,000	181,000 1,198,000 2,542,000 4,674,000	186,000 1,228,000 2,607,000 4,792,000
(J)	Funding at the 60% confidence Level: Funding at the 70% confidence Level: Funding at the 80% confidence Level: Funding at the 90% confidence Level:		19,830,000 20,556,000 21,516,000 23,038,000	18,054,000 18,957,000 20,151,000 22,043,000	17,711,000 18,648,000 19,887,000 21,852,000	16,912,000 17,929,000 19,273,000 21,405,000	16,654,000 17,696,000 19,075,000 21,260,000

- (A) From,.
- (B) Based on , .

- (B) Based on , .
 (C) From Exhibit 2, Page 2.
 (D) (A) x (B) x (C)
 (E) Based on \$100K to \$1M Rate Analysis Appendix F
 (F) Based on \$12,386,000 in Excess Insurance Premium for the \$1M to \$30M layer and ILF factors.
 (G) Provided by PLAN JPA.
 (H) (D) x (E) + (F) + (G)
 (I) Based on \$100K to \$1M Rate Analysis Appendix G
 (J) (H) + (I)

Exhibit 2 Page 1b

PLAN JPA Pool Layer

Funding Options for 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	\$12,386,000
(G)	Estimated Administration Expenses	\$2,343,000
(H)	Discounted Losses w/ Excess Insurance	\$19,701,000
(1)	60% Confidence Margin 70% Confidence Margin 80% Confidence Margin 90% Confidence Margin	129,000 855,000 1,815,000 3,337,000
(J)	Funding at the 60% confidence Level: Funding at the 70% confidence Level: Funding at the 80% confidence Level: Funding at the 90% confidence Level:	19,830,000 20,556,000 21,516,000 23,038,000
(B) (C) (D) (E) (F) (G) (H) (I)	From , . Based on , . From Exhibit 2, Page 2. (A) \times (B) \times (C) Based on \$100K to \$1M Rate Analysis Appendix F Provided by PLAN JPA. Provided by PLAN JPA. (D) \times (E) + (F) + (G) Based on \$100K to \$1M Rate Analysis Appendix G (H) + (I)	

Exhibit 2 Page 2

PLAN JPA Pool Layer

Selected 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 Factor to \$2.0M Retention Factor to \$2.5M Retention Factor to \$3.0M Retention Factor to \$3.5M Retention Factor to \$4.0M Retention Factor to \$5.0M Retention	1.000 1.244 1.291 1.362 1.378 1.401	1.000 1.244 1.291 1.362 1.378 1.401 1.436
(F)	Selected Base Loss Rate for \$1.0M Retention: Selected Base Loss Rate for \$2.0M Retention: Selected Base Loss Rate for \$2.5M Retention: Selected Base Loss Rate for \$3.0M Retention: Selected Base Loss Rate for \$3.5M Retention: Selected Base Loss Rate for \$4.0M Retention: Selected Base Loss Rate for \$4.0M Retention:	\$1.060 1.319 1.369 1.444 1.460 1.485 1.522	\$1.060 1.319 1.369 1.444 1.460 1.485 1.522

From PLAN JPA - Liability Program (\$100K and \$1M Analysis), Appendix B, Page 1.

From PLAN JPA - Liability Program (\$100K to \$1M Analysis), \$100K to \$1M Rate Analysis Exhibit 1, Page 1.

From PLAN JPA - Liability Program (\$100K and \$1M Analysis), \$100K and \$1M Rate Analysis Exhibit 1, Page 1.

Based on (A) - (C).

Based on PLAN JPA and Industry experience. (A) (B) (C)

⁽D)

⁽E) (F)

⁽D) x (E).

Exhibit 3 Page 1	1999-00	20, 203 30, 492 122, 153 120, 874 16, 198 90, 186 26, 570 177, 98 36, 128 50, 339 10, 685 68, 384 390, 885 68, 384 11, 298 14, 202 14, 298 14, 298 16,	2,454,227
	2000-01	21,177 28,438 133,716 19,108 44,590 22,110 32,110 32,110 32,770 11,175 1	2,694,385
	2001-02	23,329 22,989 148,155 142,095 20,656 94,215 37,820 49,001 59,742 40,001 59,743 113,369 113,369 113,369 113,369 113,369 113,369 113,369 113,369 113,369 113,369 114,369 114,369 114,369 117,369	2,986,375 2
	2002-03	28,801 40,574 155,318 121,834 109,351 121,834 109,351 141,831 142,289 142,289 142,289 142,289 142,289 142,289 142,289 142,289 142,289 143,311 143,714 15,602 100,502 101,477 15,602 101,473 10	3,255,273 2
	2003-04	94,774 162,967 162,967 162,967 162,967 161,053	3,401,137 3
	2004-05	41,573 41,882 176,805 27,803 17,15,054 66,207 227,263 66,039 69,089 114,424 114,234 11,687 11,102 11	3,500,006
	2005-06	48,886 46,194 166,204 50,788 17,682 17,682 17,682 17,682 11,584 16,295 16,005 11,295 11,190 1	3,557,514
	2006-07	54,210 45,055 168,454 35,236 1121,432 60,646 1121,432 1121,432 1121,432 1121,432 1121,432 1121,633 1121,633 1172,093 1172,093 1172,093 1172,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1112,093 1113,093 1114,044 146,739 147,735 147	3,705,140
	2007-08	58,502 218,184 218,184 35,426 35,426 35,426 35,426 35,426 36,542 36,572 37,588 46,572 37,588 46,572 37,588 47,588	3,909,370
	2008-09	65,432 255,356 257,356 35,110 173,241 35,110 165,236 16,070 17,168 17,518 17,168 17,518 17,518 17,518 17,518 17,168 17,518 17	4,049,436
	2009-10	63,972 60,023 198,410 198,410 33,406 199,52 283,745 53,954 53,954 53,954 54,376 51,19 67,446 67,446 11,973 11,9	3,940,725
A 3y Member	2010-11	56,022 182,687 192,687 194,548 194,648 197,147 18,779 1167,044 117,048	3,534,443
PLAN JPA Historical Payroll By	2011-12	53,981 56,802 171,303 174,002 36,102 36,103 37,103 485,509 52,237 52,237 52,306 56,699 66,699 66,699 67,340 68,090 67,340 68,090 68,000 68,	3,457,490
Hsto	2012-13	56,164 36,169,601 182,094 182,094 13,368 17,338 17,338 17,338 18,107 18,107 19,300 10,309 10,339 10,338 10,388 10,388 10,388 10,888	3,480,180
	2013-14	94,281 94,000 161,532 226,244 94,461 186,206 197,640 177,640 177,747 1	3,430,028
	2014-15	82,832 92,832 168,219 202,300 32,788 161,102 78,962 178,341 17,831 17,632 13,637 13,637 13,637 13,637 13,632 13,637 13	3,550,523
	2015-16	64, 947 41,078 173,400 219,292 36,261 1173,727 81,326 81,326 81,326 81,326 81,326 81,326 81,326 81,326 81,326 81,326 81,326 82,386 118,097 118	3,697,212
	2016-17	84,561 174,580 174,580 186,142 224,665 39,739 19,564 19,564 119,424 119,424 119,424 119,424 119,424 119,424 119,424 119,424 119,424 119,424 119,424 119,424 119,424 119,434 119,610 11	3,936,364
priod	2017-18	73,528 190,997 222,604 222,507 40,153 40,153 41,399 41,399 41,399 467,593 20,742 467,593 467,5	4,135,396
X-MOD Experience Period	2018-19	71,504 48,828 195,449 241,923 44,628 263,528 263,528 263,528 264,685 102,940 84,089 84,089 16,001 16	4,265,647
X-MOD E	2019-20	76,546 48,404 48,404 44,486 226,640 47,221 97,221 97,221 97,221 98,7221 99,7221 50,635 50,635 57,192 27,922 27,922 27,922 27,922 27,922 27,922 27,192 86,500 11,197 16,540 71,1248 47,1028 22,075 77,140 77,248 47,1028 22,075 77,140 77,248 77,140 77,248 77,140 77,248 77,140 77,248 77,140 77,248 77,140 77,248 77,140 77,	
	2020-21	67,674 220,431 220,431 238,046 46,434 238,046 93,663 93,663 94,002 42,002 116,374 70,606 621,624 199,877 198,237 199,877 198,237 199,877 199,877 199,877 199,877 199,877 199,877 199,877 199,774 199,877 199,877 199,877 199,877 199,877 199,877 199,877 199,774 199,877 199,877 199,877 199,877 199,877 199,877 199,877 199,774 199,877 199,877 199,877 199,877 199,877 199,877 199,877 199,774 199,877 199,8	4,396,808 4,346,148
	2021-22	82,561 232,563 232,563 226,254 39,469 86,756 86,756 86,756 87,354 24,1504 86,756 77,354 27,354 27,354 27,354 21,004 217,313 210,004 217,313 210,004 217,313 210,004 217,313 210,004 217,313 210,004 217,313 210,004 217,313 210,004 217,313 21	4,622,980
	2022-23	85,038 74,867 239,540 235,577 40,653 225,934 101,718 1	4,761,670
	Member	American Canyon Atherican Canyon Benicia Benicia Benicia Benicia Benicia Cupertino Cupertino Dublin East Palo Alto Froster City Hillsborough Los Altos Hils Los Altos Hils Los Altos Hils Rowark Milbras Milbras Morgan Hill Newark Portob Valley Ross, Town of San Bruno San Carlos San Bruno San Carlos San Bruno San Carlos San Carlos San Bruno Woodside	Total

Exhibit 3 Page 2

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

	Expected	60%	70%	80%	90%
	Confidence	Confidence	Confidence	Confidence	Confidence
Investment Rate	Level	Level	Level	Level	Level
1.0%	\$19,870,000	\$20,004,000	\$20,754,000	\$21,746,000	\$23,319,000
1.5%	19,784,000	19,915,000	20,654,000	21,629,000	23,176,000
2.0%	19,701,000	19,830,000	20,556,000	21,516,000	23,038,000
2.5%	19,621,000	19,748,000	20,462,000	21,407,000	22,903,000
3.0%	19,542,000	19,667,000	20,370,000	21,299,000	22,772,000
3.5%	19,466,000	19,589,000	20,281,000	21,195,000	22,644,000
4.0%	19,391,000	19,512,000	20,193,000	21,093,000	22,519,000

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

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

		l imitad Laa	os Donartos	l aa afi	Reported	Loss Deve	opment				
A = = : = ! = : = 4		Limited Loss 18			5 4	00	70	00	100	444	100
Accident	6		30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001			005 405	898,513	1,005,578	1,060,578	1,023,612		964,842		1,825,620
2001-2002		205 000	965,485	958,981	953,812	1,008,532	1,579,410	1,581,139	1,581,139		2,382,404
2002-2003	265 542	365,699	1,446,885	1,633,894	2,059,086	2,967,377		2,955,718	2,956,981	2,951,981	, ,
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				2,866,202	
2005-2006	25.000	586,598	1,140,449	1,700,075		2,861,424			3,795,674		, ,
2006-2007	25,000	331,278	1,741,278	2,362,206	3,669,875	3,689,497					3,394,936
2007-2008	200,000	292,450	332,811	3,039,627	3,179,650		4,358,070			4,259,284	
2008-2009	100,000	633,000	3,743,710	4,332,780	4,420,360	3,430,417		3,347,708			3,336,906
2009-2010	762 607	2,839,064 3,371,740	3,484,984 3,848,137	3,288,639	3,131,959	3,127,921	3,127,921		2,396,051	3,127,921	
2010-2011	763,697		, ,	2,650,741		2,455,668		, ,		, ,	, ,
2011-2012	510,509	2,770,955	3,631,019	3,415,805	3,302,356				3,127,725		3,127,723
2012-2013	602,255	4,254,395	3,881,185	3,547,144			3,450,659		3,559,906	3,339,900	
2013-2014	842,948	2,251,578	2,694,553	2,631,490			2,539,618		2,539,618		
2014-2015	325,035	2,666,242	3,946,907	3,795,367		3,291,420		3,281,784			
2015-2016	371,511	2,328,347	4,341,861	3,149,726		3,143,331	3,135,461				
2016-2017	290,633	3,737,779	2,754,128	2,812,484		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										
		Donortod I o	aa Dayalaan	nent Factors							
	6-18	18-30	30-42	42-54	<u>.</u> 54-66	66-78	78-90	90-102	102-114	114-126	126-138
2000 2004	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001			0.003	1.119	1.055	0.965	1.000	0.943 1.000	1.000	1.892	1.000
2001-2002		2.050	0.993	0.995	1.057	1.566	1.001		1.507 0.998	1.000 1.030	1.000
2002-2003	4.020	3.956	1.129	1.260	1.441	0.991	1.005	1.000			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	12.051	1.944	1.491	1.000	1.683	1.011	0.988	1.328 1.000	0.998	1.000 1.000	1.000 1.000
2006-2007	13.251	5.256	1.357	1.554	1.005	1.021	0.902		1.000		
2007-2008 2008-2009	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 1.228	1.157 0.944	1.020 0.952	0.776 0.999	0.975 1.000	1.001 1.000	0.999 1.000	1.001 1.000	0.997 1.000	1.003 1.000
	A A4E										
2010-2011	4.415	1.141	0.689	0.951	0.975	0.981	1.000	0.995	1.000 1.000	1.000	1.000
2011-2012	5.428 7.064	1.310	0.941	0.967	0.980	0.966	1.000	1.000 1.029		1.000	
2012-2013		0.912	0.914	0.987	0.996	0.989	1.003		1.000		
2013-2014 2014-2015	2.671 8.203	1.197 1.480	0.977 0.962	1.015 0.883	0.951 0.982	1.000 0.997	1.000 1.000	1.000			
2014-2015	6.267	1.865	0.902	1.002	0.982	0.997	1.000				
2016-2017	12.861	0.737	1.021	1.002	1.028	0.997					
2017-2018	6.851	1.367	1.021	0.982	1.020						
2017-2018	10.493	2.539	0.909	0.902							
2019-2020	5.077	2.419	0.909								
2020-2021	0.109	2.419									
2020-2021	0.109										
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	6.301	2.364	1.465	1.130	1.055	1.215	0.997	1.024	1.024	1.052	1.056
Dollar-Weighted	0.001	2.004	1.700	1.100	1.000	1.210	0.001	1.024	1.024	1.002	1.000
Averages											
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	0.204	1.204	5.000	3.000	5.550	5.550	1.001	1.000	1.000	5.555	5.555
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

	Reported Loss Development										
Accident Year 2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022	Limited Loss 138 Months 1,825,620 2,382,504 4,977,421 3,560,542 2,867,654 3,789,394 3,394,936 4,159,284 3,347,708 3,127,921 2,396,051	150 Months 1,825,620 3,027,919 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921	162 Months 2,482,404 3,012,173 4,977,421 3,560,542 2,867,654 3,788,958	3,560,542	3,560,542 2,867,654 3,788,958	4,977,421 3,560,542 2,867,654	210 Months 2,485,232 3,012,173 4,977,421 3,560,542 2,867,654	3,012,173 4,977,421	3,012,173		258 Months 4,217,210
2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	Reported Lo 138-150 Months 1.000 1.271 1.000 1.000 1.000 1.002 1.024 1.000 1.000	ss Developn 150-162 Months 1.360 0.995 1.000 1.000 1.000 1.000 1.000 1.000 1.000	nent Factors 162-174 Months 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	174-186 Months 1.001 1.000 1.000 1.000 1.000 0.995	186-198 Months 0.999 1.000 1.000 1.000 1.000	198-210 Months 1.001 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000 1.094	234-246 Months 1.000 2.462	246-258 Months 1.697	258-Ult. Months
Average Dollar-Weighted Averages	138-150 Months 1.030	150-162 Months 1.039	162-174 Months 1.001	174-186 Months 0.999	186-198 Months 1.000	198-210 Months 1.000	210-222 Months 1.000	222-234 Months 1.031	234-246 Months 1.731	246-258 Months 1.697	258-Ult. Months
3-yr 4-yr Comparative	1.009 1.008	1.000 1.000	1.002 1.002	0.998 0.999	1.000 1.000	1.000 1.000	1.000 1.000	1.045			
Factors Prior	1.000 1.003	1.000 1.002	1.000 1.001	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000
Selected	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000
Cumulated	1.006	1.003	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000	1.000

Paid Loss Development

Accident Year (A)	Limited Paid Losses as of 12/31/21 (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.

DRAFT

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

			5		Paid L	oss Develop	ment				
			ses Paid as o		- 4	00	70	00	400	444	400
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001				000 440	1,000,106	1,275,187	1,823,244	1,823,244	1,823,244	1,823,244	1,823,244
2001-2002			070 444	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		3,910,106	4,427,910		3,560,542	2,866,154	2,866,154
2005-2006		15,692	363,636	379,734	682,512	766,935		2,858,654	, ,	3,789,394	3,789,394
2006-2007		6,598	310,953		1,675,075		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
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					
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	.,000,.0.						
2019-2020	65,521	413,661	1,128,779	.,00.,200							
2020-2021	54,421	793,126	1,120,110								
2021-2022	40,902	700,120									
2021-2022	+0,50Z										
		Paid Loss D	evelopment	Factors:							
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
		Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000 2004	Months	MOHUIS	MOHUIS	MOHUIS							
2000-2001				4 407	1.275	1.430	1.000	1.000	1.000	1.000	1.001
2001-2002			4 000	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	44.000	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										
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	13.369	8.498	4.723	1.282	1.094	1.268	1.010	1.070	1.052	1.101	1.058
Dollar-Weighted	10.008	0.430	7.123	1.202	1.034	1.200	1.010	1.070	1.032	1.101	1.000
•											
Averages	44.000	0.040	4 000	4.000	4.000	4.000	4.004	4 044	4.000	4.000	1 001
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
Gelected	5.100	4.500	2.502	1.400	1.140	1.120	1.000	1.023	1.010	1.003	1.004
Cumulated	202.994	22.307	4.957	1.981	1 /15	1 226	1.104	1 051	1 025	1 015	1.010
Gumulateu	202.994	22.307	4.957	1.901	1.415	1.236	1.104	1.051	1.025	1.015	1.010

DRAFT

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

			_	Faiu L	.oss Develop	illelli					
Accident Year 2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	Limited Loss 138 Months 1,825,620 2,382,404 4,977,421 3,560,542 2,867,654 3,789,394 3,394,936 4,159,284 3,347,708 3,127,921 2,396,051	150 Months 1,825,620 3,000,611 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836	162 Months 2,482,404 3,012,173 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836	4,977,421 3,560,542 2,867,654 3,788,958 3,403,249	3,012,173 4,977,421 3,560,542 2,867,654 3,788,958	3,012,173 4,977,421 3,560,542 2,867,654	3,012,173 4,977,421 3,560,542	222 Months 2,485,232 3,012,173 4,977,421 3,560,542	3,012,173		258 Months 4,217,210
2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	Paid Loss D 138-150 Months 1.000 1.259 1.000 1.000 1.000 1.002 1.002 1.004 1.000 1.000	evelopment 150-162 Months 1.360 1.004 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Factors: 162-174 Months 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.001 1.000	174-186 Months 1.001 1.000 1.000 1.000 1.000 1.002	186-198 Months 0.999 1.000 1.000 1.000 1.000	198-210 Months 1.001 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000 1.094	234-246 Months 1.000 2.462	246-258 Months 1.697	258-Ult. Months
Average Dollar-Weighted Averages	138-150 Months 1.029	150-162 Months 1.040	162-174 Months 1.000	174-186 Months 1.000	186-198 Months 1.000	198-210 Months 1.000	210-222 Months 1.000	222-234 Months 1.031	234-246 Months 1.731	246-258 Months 1.697	258-Ult. Months
3-yr 4-yr Comparative	1.009 1.008	1.000 1.000	1.000 1.000	1.001 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.045			
Factors Prior	1.006 1.003	1.004 1.002	1.004 1.001	1.002 1.000	1.002 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.000 1.000
Selected	1.003	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

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) x (D) x (E).
- (G) (B) + (F).

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

Exposure and Development Method Based on Paid Losses

Accident Year	Trended Payroll (\$00) (A)	Paid Losses as of 12/31/21 (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) x (D) x (E).
- (G) (B) + (F).

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

Exposure and Development Method

Accident Year	Trended Payroll (\$00) (A)	Ultimate Limited Losses (B)	Trend Factor (C)	Trended Limited Losses (D)	Trended Limited Loss Rate (E)	Limited Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
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			
			Selecte	ed Limited Rate:	\$0.900			

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.

56 78

\$0.975

Prior:

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

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

Frequency and Severity Method

	Ultimate	Adjusted	Ultimate		Trended			
Accident	Limited	Ultimate	Limited	Trend	Limited	Limited	Factor to	Program
Year	Losses	Claims	Severity	Factor	Severity	Severity	SIR	Severity
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)
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.

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) Select	ed Frequency:	0.028
						Prior:	0.028
	Program Year:			2021-2022	2022-2023		
(1)	Trend Factor:			1.000	1.010		
(J)	Selected Frequenc	:y:		0.028	0.028		
(K)	Est. Payroll (\$000,0	000):		462.3	476.2		
(L)	Ultimate Claims:			13	13		

59

Notes:

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

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

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

Frequency and Severity Method Reported Claim Count Development

Accident Year	Claims Reported as of 12/31/2021 (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 Analysis

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

Frequency and Severity Method Closed Claim Count Development

Accident Year	Claims Closed as of 12/31/2021 (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 Analysis

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.

DRAFT

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

Reported Claim Count Development														
		Claims Re			5 4	00	70	00	400	444	400	400	450	400
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
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	.0
2010-2011	0	6	21	14	13	12	11	11	11	11	16	11	10	
2010-2011	3	11	19	17	17	16	16	16	16	11	17	11		
		22			15		15	15			17			
2012-2013	3		22	15		16			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 Co	unt Devel	opment Fa	actors:								
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001	1110111110	Month	WOTHITO	1110111110	WOTHITO	WOTHITO	WOTHITO	1.000	1.000	1.000	1.000	2.667	1.000	1.000
2000-2001							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
2002-2003					1.111	1.000	1.000	1.000	2.200	0.545	1.000	1.000	1.000	1.000
				4 470										
2004-2005			4 750	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			00											
2020-2021														
2020 2021														
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	3.524	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		2.103	1.204	1.130	0.343	1.219	0.910	1.100	1.023	1.083	1.021	1.211	0.330	1.007
U														
Averages			4 500	0.974	0.000	4.000	1.135	0.005	0.004	1.289	0.822	4 000	0.796	1.171
3-yr			1.526		0.886	1.086		0.935	0.884			1.209		
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	0.00-	4 400	4.040	4 00=	4 00=	4.00:	4 00 :	4 00-	4 00-	4.00:	4 00-	4 00-	4 000	4 000
Factors	2.633	1.136	1.018	1.005	1.005	1.004	1.004	1.002	1.002	1.001	1.000	1.000	1.000	1.000
Prior	3.700	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
30,000,00	0.700	2.200	1.200		1.020	1.010	1.001		1.001	1.001	1.000	1.000		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

					Closed C	laim Deve	elopment							
		Claims Cl		_										
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
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
		4												
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	11	16	11		
2011-2012			2	8	10	14	16	15	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	7									
2019-2019			'	'										
2020-2021														
2021-2022														
		Closed Cl												
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114		126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	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	1.000	1.000	1.000	1.000	1.000
		4 000												
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	0.000									
2018-2019			1.000	0.000										
2019-2020			1.000											
2020-2021														
	0.15	40.00	00 15	40.7:	E 4 0 -	00 ==	70.00	00 155	400 411	444 4	100 1==	100 1=1	450 455	100 1=:
	6-18	18-30	30-42	42-54	54-66	66-78	78-90		102-114					
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average		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
Claim-Weighted														
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			0.100	00				0.500	0.500		5.501		0.010	00
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													
FIIUI	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
Jumulateu	TT.004	11.141	0.100	1.001	1.010	1.008	1.000	1.007	1.000	1.003	1.004	1.003	1.002	1.001

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:

No benefit level adjustment applied. (A)

(A) adjusted for a 4.0% annual loss rate trend.(A) adjusted for a 1.0% annual frequency trend. (B) - (E)

(F) - (I)

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

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

Residual Trend Factors

	Initial					
	Estimate of					
	Ultimate	Ultimate		Adjusted	Trended	
Accident	Limited	Reported		Limited	Payroll	Ultimate
Year	Losses	Claims	BLF	Severity	(\$00)	Frequency
	(A)	(B)	(C)	(D)	(E)	(F)
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 Tre	nd Factors	Frequency 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.

Calculation of Discount Factors

Payment	Payment	Return on	Discounted	Undiscounted	Discount
Year	Pattern	Investment	Reserves	Reserves	Factor
(A)	(B)	(C)	(D)	(E)	(F)
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.0%	2.0%	0.000	0.000	1.000
15	0.0%	2.0%	0.000	0.000	1.000
14	0.2%	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
		(G) DISCOUNT FACTOR	ioi Future Furiding.	2021-2022	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.

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.

Incurred Losses as of 12/31/21

										Incurred
		Additions	Subtractions			Incurred	Incurred	Incurred	Incurred	Capped at
Accident	Unlimited	to	from	Adjusted	Incurred	Over	Capped at	\$100,000	Capped at	SIR &
Year	Incurred	Losses	Losses	Incurred	Over SIR	\$100,000	to SIR Layer	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(1)	(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	•	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		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.

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.

Case Reserves as of 12/31/21

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

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

71

Notes:

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

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

Notes appear on the next page.

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

Notes:

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

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

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

Reported Loss Development Limited Losses Reported as of:											
A = = i = l = = #					5 4	00	70	00	400	444	100
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001		0.050.405	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	4 0 44 000	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		4,811,984	4,901,984	4,966,984	5,011,984	
2003-2004	702,623	2,248,188	2,863,892	3,229,117	3,366,140	3,528,698	3,560,692	, ,			3,560,542
2004-2005	909,032	2,172,504	3,103,889	2,811,093	3,026,321	2,861,424			2,866,202		
2005-2006	584,388	2,569,384	3,328,173	3,524,433	3,669,875	3,689,497			3,795,674	3,789,394	3,789,394
2006-2007	776,086	2,403,595	2,905,504	3,039,627	3,179,650	3,297,534				3,394,936	3,394,936
2007-2008	1,054,492	2,921,920	3,743,710	4,332,780	4,420,360	4,381,184					4,259,284
2008-2009	543,401	2,839,064	3,484,984	3,288,639	3,398,037	3,430,417		3,347,708	3,346,029		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		
2010-2011	510,509	2,770,955	2,742,484	2,650,741	2,519,762					2,396,051	
2011-2012	602,255	3,518,281	3,631,019	3,415,805	3,302,356		3,127,725		3,127,725		3,127,725
2012-2013		4,254,395	3,881,185	3,547,144	3,502,651		3,450,659		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		
2014-2015	325,035	2,666,242	3,946,907	3,795,367	3,350,810		3,281,784	3,281,784			
2015-2016	371,511	2,328,347	3,291,200	3,149,726		3,143,331	3,135,461				
2016-2017	290,633	1,930,274	2,754,128	2,812,484		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										
		Danamaalla	Dl								
		_	ss Developn		-	00.70	70.00	00.400	100 111	444 400	100 100
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
2222 2224	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001		4 000	0.902	1.070	1.009	0.996	0.984	1.000	0.998	1.000	1.000
2001-2002	0.055	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	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	5.443	1.327	1.006	1.010	1.000	0.999	0.995	1.006	1.000	1.002	0.997
Dollar-Weighted	3.443	1.321	1.000	1.010	1.000	0.999	0.990	1.000	1.000	1.002	0.997
•											
Averages	7.566	1.835	1.055	1.001	1.001	0.998	1.001	1.011	1.000	1.000	1.001
3-yr	7.375	1.675	1.033	0.963	0.990	0.996	1.001	1.008	1.000	0.999	0.993
4-yr	1.315	1.075	1.020	0.903	0.990	0.990	1.001	1.008	1.000	0.999	0.993
Comparative	2.999	4 000	4.040	0.070	0.007	0.000	4 000	4 004	4 000	4.000	1.000
Factors Prior	6.216	1.280 1.395	1.016 1.020	0.979 1.010	0.987 1.003	0.998 1.002	1.000 1.001	1.001 1.001	1.000 1.000	1.000 1.000	1.000
F1101	0.210	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

DRAFT

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

Reported Loss Development Limited Losses Reported as of:											
Accident Year 2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 2021-2022	138 Months 2,382,504 3,000,035 4,977,421 3,560,542 2,867,654 3,789,394 3,394,936 4,159,284 3,347,708 3,127,921 2,396,051	150 Months 2,482,404 3,027,919 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921	162 Months 2,482,404 3,012,173 4,977,421 3,560,542	3,560,542 2,867,654 3,788,958	2,867,654 3,788,958	4,977,421 3,560,542 2,867,654	210 Months 2,485,232 3,012,173 4,977,421 3,560,542 2,867,654	3,012,173 4,977,421	3,012,173		258 Months 2,485,232
2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	Reported Lo 138-150 Months 1.042 1.009 1.000 1.000 1.000 1.002 1.024 1.000 1.000	ss Developn 150-162 Months 1.000 0.995 1.000 1.000 1.000 1.000 1.000 1.000	nent Factors: 162-174 Months 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	174-186 Months 1.001 1.000 1.000 1.000 1.000 0.995	186-198 Months 0.999 1.000 1.000 1.000 1.000	198-210 Months 1.001 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000 1.000	234-246 Months 1.000 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted	138-150 Months 1.008	150-162 Months 0.999	162-174 Months 1.001	174-186 Months 0.999	186-198 Months 1.000	198-210 Months 1.000	210-222 Months 1.000	222-234 Months 1.000	234-246 Months 1.000	246-258 Months 1.000	258-Ult. Months
Averages 3-yr 4-yr Comparative	1.009 1.008	1.000 1.000	1.002 1.002	0.998 0.999	1.000 1.000	1.000 1.000	1.000 1.000	1.000			
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

Paid Loss Development

	Limited			Program		
	Paid	Paid Loss	Ultimate	Paid	Paid Loss	Ultimate
Accident	Losses as	Development	Limited	Losses	Development	Program
Year	of 12/31/21	Factor	Losses	of 12/31/21	Factor	Losses
(A)	(B)	(C)	(D)	(E)	(F)	(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

Paid Loss Development Limited Losses Paid as of:											
Accident	6	Limited Loss	ses Paid as d 30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001	MOULUS	MOHUIS	1,691,549	2,066,275	2,230,962				2,382,404	2,382,404	
2000-2001		1,331,577	1,898,744	2,493,146	2,230,962	2,835,674	2,838,647		2,939,481		2,362,404
2002-2003	368,341	1,921,924	3,419,382		4,572,735		4,811,984	, ,		4,930,307	
2002-2003	173,413	1,921,924	2,112,645		3,216,963	3,398,305		3,460,542		3,560,542	
2003-2004	92,583	901,463	2,112,045	2,600,516		2,845,394				2,866,154	
2004-2005	92,363	1,099,067	1,733,718	3,299,822		3,654,071			3,780,292		
2005-2006	178,735	1,099,007							3,394,936		
2000-2007	149,993	1,234,100	2,253,938 2,635,467	2,920,430 3,650,448	3,103,547 4,101,554		3,391,424 4,228,474		4,259,284		
2007-2008	161,539	1,020,079	2,035,467	2,792,089	3,110,459		3,345,621	3,347,708		3,347,708	
2008-2009	301,727	1,020,079	2,100,000	2,792,069			3,115,424			3,127,921	, ,
2010-2011	106,645	872,432		2,287,500						2,396,051	, ,
2010-2011	114,916		2,112,380						3,127,725	, ,	
2012-2013	98,607	934,308	2,290,004		3,371,990				3,559,906		5,127,725
2012-2013	130,461	888,140	1,780,866		2,654,568			2,539,618		3,359,900	
2013-2014	91,368	1,387,749	2,717,926			3,281,784			2,339,016		
2015-2016	98,110	679,755	1,782,598			3,135,716		3,201,704			
2016-2017	30,679	920,995	1,762,596		2,773,661		3, 135,401				
2016-2017	31,268	758,485		1,713,864		2,034,023					
2017-2018	16,322	417,918	867,701	1,713,604	1,000,791						
				1,337,293							
2019-2020	65,521	413,661	1,128,779								
2020-2021	54,421	793,126									
2021-2022	40,902										
		Paid Loss D	evelopment	Factors:							
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001	MOHUIS	MOHILIS	1.222	1.080	1.042	1.022	1.003	1.000	1.000	1.000	
2000-2001		1.426	1.222	1.129	1.042	1.022	1.003	1.000	1.000	1.000	1.000 1.001
2001-2002	5.218	1.420	1.216	1.099	1.030	1.022	1.002	1.000	1.008	1.020	1.001
2002-2003	7.373	1.652	1.328	1.146	1.056	1.022	1.002	1.013	1.000	1.007	1.003
2003-2004	9.737	2.355	1.231	1.090	0.999	1.003	1.002	1.029	1.000	1.000	1.000
								1.003			
2005-2006 2006-2007	11.975 6.905	1.577 1.826	1.903 1.296	1.091 1.063	1.015 1.048	1.030 1.042	1.001 1.001	1.004	1.002 1.000	1.000 1.000	1.000 1.000
2000-2007	8.672	2.026	1.385	1.124	1.046	1.042	1.001	1.000	1.000	1.000	0.977
2007-2008	6.315	2.020	1.277	1.124	1.020	1.003	1.007	0.999	1.000	0.997	1.003
2008-2009	3.468	2.174	1.238	1.064	1.073	1.002	1.001	1.000	1.001	1.000	1.003
	8.181	1.940	1.352	1.004	1.023	1.000	1.004	1.000	1.000	1.000	1.000
2010-2011 2011-2012	7.246	2.537	1.302	1.135	0.999	1.000	1.000	1.000	1.000	1.000	1.000
2011-2012	9.475	2.451	1.364	1.133	1.023	1.003	1.000	1.000	1.000	1.000	
2012-2013	6.808	2.431	1.304	1.146	0.957	1.000	1.003	1.029	1.000		
2014-2015	15.189	1.959	1.243	0.967	1.004	1.000	1.000	1.000			
2015-2016	6.928	2.622	1.568	1.073	1.045	1.000	1.000				
2016-2017	30.020	2.145	1.226	1.145	1.043	1.000					
2017-2018	24.258	1.567	1.442	1.051	1.022						
2018-2019	25.605	2.076	1.541	1.031							
2019-2020	6.313	2.729	1.541								
2020-2021	14.574	2.129									
2020-2021	14.574										
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	11.277	2.052	1.355	1.089	1.024	1.010	1.004	1.006	1.001	1.002	0.999
Dollar-Weighted	11.411	2.002	1.000	1.003	1.024	1.010	1.004	1.000	1.001	1.002	0.000
Averages											
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	1 1.220	2.000	1.722	1.002	1.000	1.000	1.001	1.000	1.000	5.555	5.555
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	1.007	1.007
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

DRAFT

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

Limited Losses Paid as of:											
Accident Year 2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	138 Months 2,382,404 3,000,035 4,977,421 3,560,542 2,867,654 3,789,394 3,394,936 4,159,284	150 Months 2,482,404 3,000,611 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708 3,127,921	162 Months 2,482,404 3,012,173 4,977,421 3,560,542 2,867,654 3,788,958 3,400,836 4,259,284 3,347,708	174 Months 2,482,404 3,012,173 4,977,421 3,560,542 2,867,654 3,788,958 3,403,249 4,259,284	186 Months 2,485,232 3,012,173 4,977,421 3,560,542 2,867,654 3,788,958 3,408,506	3,012,173 4,977,421 3,560,542 2,867,654	4,977,421 3,560,542	3,012,173 4,977,421	3,012,173		258 Months 2,485,232
2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	Paid Loss D 138-150 Months 1.042 1.000 1.000 1.000 1.000 1.002 1.024 1.000 1.000	evelopment 150-162 Months 1.000 1.004 1.000 1.000 1.000 1.000 1.000 1.000 1.000	Factors: 162-174 Months 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.001	174-186 Months 1.001 1.000 1.000 1.000 1.000 1.002	186-198 Months 0.999 1.000 1.000 1.000 1.000	198-210 Months 1.001 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000 1.000	234-246 Months 1.000 1.000	246-258 Months 1.000	258-Ult. Months
Average Dollar-Weighted	138-150 Months 1.007	150-162 Months 1.000	162-174 Months 1.000	174-186 Months 1.000	186-198 Months 1.000	198-210 Months 1.000	210-222 Months 1.000	222-234 Months 1.000	234-246 Months 1.000	246-258 Months 1.000	258-Ult. Months
Averages 3-yr 4-yr Comparative	1.009 1.008	1.000 1.000	1.000 1.000	1.001 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000			
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

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) x (D) x (E).
- (G) (B) + (F).

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

Exposure and Development Method Based on Paid Losses

Accident Year	Trended Payroll (\$00) (A)	Paid Losses as of 12/31/21 (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) x (D) x (E).
- (G) (B) + (F).

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

Exposure and Development Method

Accident Year	Trended Payroll (\$00) (A)	Ultimate Limited Losses (B)	Trend Factor (C)	Trended Limited Losses (D)	Trended Limited Loss Rate (E)	Limited Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
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)	
	(7.1)	(5)	(0)	
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.

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.

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) Selec	ted Frequency:	1.100
						Prior:	1.200
	Program Year:			2021-2022	2022-2023		
(1)	Trend Factor:			1.000	1.005		
. ,	Selected Frequency:			1.100	1.106		
(K)	Est. Payroll (\$000,00	0):		462.3	476.2		
	Ultimate Claims:			509	527		

86

Notes:

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

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

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

Frequency and Severity Method Reported Claim Count Development

	Claims	Reported		
	Reported	Claim		Trended
Accident	as of	Development	Ultimate	Claim
Year	12/31/2021	Factor	Claims	Frequency
	(A)	(B)	(C)	(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:

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.

⁽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)].

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

		Claims Re	anorted as		orted Cla	m Count	Developm	ent						
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months		Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
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
2000-2007	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
2008-2009	238	632	647	646	646	646	646	646	647	647	647	647	647	124
2010-2011	168	494	505	506	508	509	510	510	510	510	513	514	047	
2010-2011	129	452	465	467	470	471	471	470	470	470	470	314		
		499	520			524		527			470			
2012-2013	169			523	523		525		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													
					opment Fa									
	6-18	18-30	30-42	42-54	54-66	66-78	78-90						150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	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	1.010							
2016-2017	4.639	1.014	1.006	1.002	1.000	1.010								
2017-2018	3.112	1.017	1.004	1.012	1.000									
2018-2019	3.203	1.069	1.021	1.012										
2019-2020	2.868	1.044	1.021											
2020-2021	2.847	1.044												
2020-2021	2.047													
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102 114	11/ 126	126 129	120 150	150-162	162 174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
A.,														
Average	3.071	1.048	1.006	1.002	0.999	1.003	1.003	1.002	1.002	0.999	1.002	1.001	1.000	1.000
Claim-Weighted														
Averages	0.00-	4044	1010	1 000	4.007	4.007	4 00=	1.00	1 000	1 000	1 000	1 000	1 000	4 000
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	2.644	1.140	1.018	1.007	1.006	1.004	1.004	1.003	1.002	1.001	1.000	1.001	1.000	1.000
Prior	3.207	1.035	1.007	1.004	1.003	1.002	1.001	1.000	1.000	1.000	1.000	1.000	1.000	1.000
0 1 1 1	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
Selected												1.000		1.000
Selected	3.003	1.040	1.001					1.000						
Selected	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

					Closed C	laim Deve	lopment							
		Claims Cl												
Accident	6	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
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	021				
2014-2015	23	354	457	491	492	501	504	512	101					
2015-2016	43	336	450	470	481	488	496	012						
2016-2017	19	316	465	491	499	506	430							
2010-2017	22	310	445	473	486	300								
2017-2018	19	234	366	411	400									
2019-2020	36	234	363	411										
2019-2020		209	303											
	18	209												
2021-2022	41													
		01	-i C	4 Dayslan										
		Closed Cl					70.00	00 400	100 111	111 100	400 400	100 150	150-162	100 171
	6-18	18-30	30-42	42-54	54-66	66-78	78-90							
0000 0004	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	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	10.100	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													
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	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
Claim-Weighted				1.510	1.500	1.501	1.50⊣	1.502	1.500	0.000	1.502	1.501		1.000
Averages														
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	1.078	1.022	1.010	1.008	1.007	1.001	1.000	0.995	1.009	1.002	1.000	1.000
Comparative	10.510	1.500	1.009	1.017	1.010	1.009	1.003	1.002	1.000	0.550	1.004	1.002	1.000	1.000
•	3 500	1 514	1 110	1.051	1 022	1 000	1 017	1.014	1 010	1 000	1 000	1 006	1 00F	1 002
Factors	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
	2.300											555		

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 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:

No benefit level adjustment applied. (A)

(A) adjusted for a 3.0% annual loss rate trend.(A) adjusted for a 0.5% annual frequency trend. (B) - (E)

(F) - (I)

(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.

Residual Trend Factors

	Initial					
	Estimate of					
	Ultimate	Ultimate		Adjusted	Trended	
Accident	Limited	Reported		Limited	Payroll	Ultimate
Year	Losses	Claims	BLF	Severity	(\$00)	Frequency
	(A)	(B)	(C)	(D)	(E)	(F)
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 Trer	<u>nd Factors</u>	Frequency 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.

Calculation of Discount Factors

Payment	Payment	Return on	Discounted	Undiscounted	Discount
Year	Pattern	Investment	Reserves	Reserves	Factor
(A)	(B)	(C)	(D)	(E)	(F)
22	0.0%	2.0%	0.000	0.000	1.000
21					
	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	2.0%	0.000	0.000	1.000
17	0.0%	2.0%	0.000	0.000	1.000
16	0.0%	2.0%	0.000	0.000	1.000
15	0.0%	2.0%	0.000	0.000	1.000
14	0.1%	2.0%	0.001	0.001	0.990
13	0.2%	2.0%	0.003	0.003	0.984
12	0.2%	2.0%	0.005	0.005	0.975
11	0.3%	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
		(-)	9.	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.

Incurred Losses as of 12/31/21

										Incurred
		Additions	Subtractions			Incurred	Incurred	Incurred	Incurred	Capped at
Accident	Unlimited	to	from	Adjusted	Incurred	Over	Capped at	\$100,000	Capped at	SIR &
Year	Incurred	Losses	Losses	Incurred	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(1)	(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	•	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.

95

Paid Losses as of 12/31/21

										Paid
		Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$100,000	Capped at	SIR &
Year	Paid	Losses	Losses	Paid	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)
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	•	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.

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).

97

- (E) (B) + (C) (D).
- (F) Sum of case reserves in excess of SIR.
- (G) Sum of case reserves in excess of \$100,000.
- (H) (E) (G).
- (I) (G) (F).
- (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See \$100K and \$1M Rate Analysis Not Included.

Claim Counts as of 12/31/21

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:

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

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)			\$18,423,000			
(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))	\$20,726,000					
(F)	Reserve Discount Factor (Based on a Discount F (Reserve Appendix H, Page 1, (H))	0.956					
(G)	Discounted Outstanding Liability for Claims at 6/30/22: ((E) x (F))			\$19,808,000			
		Marginally Acceptable		Recommended		Conservative	
	Confidence Level of Adequacy:	70%	75%	80%	85%	90%	
(H)	Confidence Level Factor: (From Reserve Appendix I)	1.109	1.155	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))	\$21,967,000	\$22,878,000	\$23,968,000	\$25,315,000	\$27,137,000	
(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))	\$26,862,000	\$25,951,000	\$24,861,000	\$23,514,000	\$21,692,000	

Reserve Exhibit 2 **DRAFT**

PLAN JPA - Liability

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

				Estimated		
				Percent of		
				IBNR		
			Estimated	Reported		Estimated
			IBNR	Between	Estimated	IBNR
Accident	Estimated	Reported	as of	1/1/22 and	IBNR	as of
Year	Ultimate	as of 12/31/21	12/31/21	6/30/22	Reported	6/30/22
	(A)	(B)	(C)	(D)	(E)	(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.

Reserve Exhibit 3 **DRAFT** Page 1

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 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	\$30,003,175 4,627,263 8,812,482 2,574,481 1,874,487 4,756,022 1,662,124 6,755,660 3,475,111 2,360,011 2,089,307 3,916,967 3,845,265 7,133,058 5,647,149 5,205,501 8,339,491 953,811 1,268,146 647,223 16,875,412	\$30,002,392 4,627,263 8,812,482 2,574,481 1,874,487 4,756,022 1,662,124 6,755,660 3,475,111 2,360,011 2,089,307 3,852,403 3,421,640 7,133,058 5,706,879 5,314,880 8,254,815 1,152,825 1,402,392 278,777 54,232,020	\$30,003,175 4,627,263 8,812,482 2,574,481 1,874,487 4,756,022 1,662,124 6,755,660 3,475,112 2,360,001 2,089,295 3,917,351 3,846,103 7,126,126 5,636,206 5,203,296 8,129,171 1,337,953 2,161,253 2,974,041 9,076,279	\$30,002,392 4,627,263 8,812,482 2,574,481 1,874,487 4,756,022 1,662,124 6,755,660 3,475,112 2,360,001 2,089,295 3,853,426 3,428,739 7,126,126 5,695,911 5,303,580 7,597,815 2,359,627 3,452,368 4,871,427 8,693,377	\$30,003,978 4,627,260 8,812,496 2,574,480 1,874,484 4,756,022 1,662,122 6,755,664 3,471,638 2,352,960 2,076,841 3,917,000 3,844,995 6,959,085 5,429,952 5,206,000 8,400,000 2,800,000 4,000,000 5,200,000 5,600,000	\$30,004,000 4,627,263 8,812,482 2,574,481 1,874,487 4,756,022 1,662,124 6,755,660 3,471,639 2,352,952 2,076,846 3,917,000 6,959,081 5,644,000 5,216,000 8,049,000 1,146,000 2,871,000 4,018,000 8,808,000
Totals						\$119,441,037
		Projected Losses fo Projected Losses fo		` '		\$5,446,000 \$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 fo Projected Losses fo		\ /		\$7,032,000 \$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.

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

Reported Loss Development											
			sses Reporte		- 4	00	70	00	400	444	100
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001		400 400	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	507.540	486,199	2,720,670	2,906,359	3,303,530	4,806,236	6,530,242		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			8,808,032		8,792,658
2003-2004	4,001	184,321	558,456	670,955	1,173,162		1,591,251	1,881,919	2,790,812		2,569,681
2004-2005	05.000	671,598	1,275,449	1,852,243		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		4,993,818	5,096,734	5,171,734	4,812,387	4,775,006
2006-2007	250,000	429,839	388,247	544,541	885,717		1,717,627			1,656,563	1,656,563
2007-2008	228,140	748,802	1,944,679	3,425,750		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		3,852,129	3,616,630	3,528,002		2,483,987			2,441,417	, ,
2010-2011	05.000		13,599,043	6,660,508	1,961,674	2,096,846	2,046,846	2,046,846		2,076,846	2,076,846
2011-2012	25,000		10,300,736	3,657,810	3,711,615			3,878,185	3,878,185		3,878,185
2012-2013	25,000		2,820,517		2,006,231	2,383,230			3,788,438	3,788,438	
2013-2014	357,000	1,085,300	1,453,782		6,948,858		7,046,618		6,959,081		
2014-2015		2,581,639	3,391,765	4,496,980	5,649,691	5,428,532		5,429,951			
2015-2016	40.000	816,550	4,031,962		5,078,739		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	0.000.000	63,500	367,323								
2020-2021	2,330,000	4,118,968									
2021-2022	60,000										
		Donartad La	ss Developm	ant Fasters							
	6-18	18-30	30-42	42-54	<u>.</u> 54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001	MOHILIS	MOHILIS	1.045	1.032	1.037	1.507	0.985	1.000	1.000	1.000	1.000
2000-2001		5.596	1.043	1.137	1.455	1.359	0.963	0.997	1.000	1.020	0.989
2001-2002	3.359	2.131	2.061	1.101	0.927	1.021	1.000	1.010	1.005	0.993	1.008
2002-2003	46.069	3.030	1.201	1.748	1.124	1.207	1.183	1.483	0.920	1.000	1.000
2003-2004	40.009	1.899	1.452	1.028	0.985	1.004	0.996	1.000	1.000	1.000	1.000
2004-2005	16.886	4.554	1.502	1.218	1.389	1.004	1.021	1.015	0.931	0.992	1.000
2005-2000	1.719	0.903	1.403	1.627	1.334	1.454	0.965	1.000	1.000	1.000	1.000
2000-2007	3.282	2.597	1.762	1.385	1.482	0.968	0.993	1.000	1.000	1.000	0.965
2007-2008	14.846	3.827	1.702	1.263	1.042	0.614	0.987	1.000	1.000	1.000	1.000
2009-2010	5.322	1.230	0.939	0.975	1.000	0.704	0.992	0.991	1.000	1.000	1.000
2010-2011	0.022	4.203	0.490	0.295	1.069	0.976	1.000	1.015	1.000	1.000	1.000
2011-2012	245.457	1.679	0.355	1.015	0.986	1.041	1.018	1.000	1.000	1.000	1.000
2012-2013	188.851	0.597	0.759	0.937	1.188	0.974	1.056	1.547	1.000	1.000	
2013-2014	3.040	1.340	4.399	1.087	1.017	0.997	0.988	1.000	1.000		
2014-2015	0.010	1.314	1.326	1.256	0.961	1.000	1.000	1.000			
2015-2016		4.938	1.154	1.092	1.000	0.974	1.000				
2016-2017	183.774	2.512	1.321	1.161	1.107	0.07					
2017-2018	100.77	3.191	1.354	0.943	1.101						
2018-2019		113.631	1.764	0.0.0							
2019-2020		5.785									
2020-2021	1.768										
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	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
Colootod	F F00		4 000			4 040	4 044	4 045	4.040	4.005	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
Gumulateu	22.554	4.097	1.702	1.200	1.090	1.003	1.002	1.040	1.023	1.015	1.010

DRAFT

PLAN JPA - Liability Reported Loss Development

	Dua mana Laa	D	.d 6.	Reported	Loss Devel	opment					
Accident Year 2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2011-2012 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	Program Los 138 Months 1,709,846 4,615,125 8,866,771 2,569,681 1,876,140 4,775,006 1,656,563 6,517,383 3,528,864 2,441,417 2,076,846	150 Months 1,874,146 4,643,008 8,864,201 2,569,681 1,876,140 4,775,006 1,656,563 6,755,660 3,528,864 2,441,417	162 Months 1,860,684 4,627,263 8,864,200 2,569,681 1,876,140 4,775,006	2,569,681 1,876,140	4,775,006	8,832,841 2,569,681 1,876,140	8,832,841 2,569,681	222 Months 1,860,684 4,627,263 8,832,841 2,569,681		246 Months 1,860,684 4,627,263	258 Months 2,876,099
2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	Reported Lo 138-150 Months 1.096 1.006 1.000 1.000 1.000 1.000 1.000 1.000 1.000	ss Developm 150-162 Months 0.993 0.997 1.000 1.000 1.000 1.014 1.000 1.000	162-174 Months 1.000 1.000 1.000 1.000 1.000 1.000 0.990 1.000	174-186 Months 1.000 1.000 1.000 1.000 1.000	186-198 Months 1.000 1.000 0.996 1.000 1.000	198-210 Months 1.000 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000	234-246 Months 1.000 1.000	246-258 Months 1.546	258-Ult. Months
Average Dollar-Weighted Averages	138-150 Months 1.014	150-162 Months 1.000	162-174 Months 0.999	174-186 Months 1.000	186-198 Months 0.999	198-210 Months 1.000	210-222 Months 1.000	222-234 Months 1.000	234-246 Months 1.000	246-258 Months 1.546	258-Ult. Months
3-yr 4-yr Comparative Factors	1.019 1.017 1.000	1.002 1.001 1.000	0.999 0.999 1.000	1.000 1.000	1.000 0.998 1.000	1.000 1.000	1.000 1.000 1.000	1.000	1.000	1.000	1.000
Prior	1.003	1.000	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

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 Development

		Program Los	sses Paid as	of·	I did L	oss Develop	mont				
Accident	6	18	30	42	54	66	78	90	102	114	126
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
2000-2001	Months	MOHINS	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				4,613,136
2002-2003	150,543	1,228,821	1,665,669	6,933,745	8,246,287		8,708,241		8,719,727		
2002-2003	4,000	77,051	495,103	608,305		1,087,642		1,647,154		2,568,802	
2003-2004	4,000	81,598		1,814,469	1,878,960		1,876,140		1,876,140	, ,	1,876,140
2005-2006	0.400	247,187	294,551	1,141,504	2,514,423	3,122,718			4,753,612		
2006-2007	6,182	16,629	124,634	476,923	689,869	1,110,840		1,656,563		1,656,563	
2007-2008	00.000	73,131		1,833,480		5,793,113					6,755,660
2008-2009	20,033	75,913		2,267,616		3,030,640			3,528,864		
2009-2010	219,495	304,644		2,093,891		2,372,163			2,441,417		
2010-2011		249,199		1,176,359		2,046,846			2,076,846	, ,	, ,
2011-2012	14,083	197,650		2,859,227	3,523,538		3,764,045		3,797,983		3,814,260
2012-2013		550,184	901,080	1,725,493		2,017,440			3,352,812	3,371,074	
2013-2014		128,965	746,799	5,850,808		6,722,157			6,959,081		
2014-2015		1,676,100	2,183,993	2,667,604	5,339,202	5,428,532	5,429,951	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 D	evelopment	Factors:							
	6-18	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
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	1.004	1.000	1.003	1.003	1.004
2002-2003	19.263	6.426	1.229	1.515	1.181	1.266	1.196	1.584	0.985	1.000	1.000
2003-2004	19.203	5.119	4.344	1.036	0.998	1.000	1.000	1.000	1.000	1.000	1.000
				2.203			1.004	1.004	1.000	1.004	
2005-2006	2 600	1.192	3.875		1.242	1.511					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	0.700	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	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	8.221	96.693	3.717	1.334	1.160	1.158	1.044	1.074	1.000	1.001	0.997
Dollar-Weighted	0.22	00.000	0.7 17	1.001	1.100	1.100	1.011	1.07 1	1.000	1.001	0.007
Averages											
3-yr			3.119	1.159	1.142	1.025	1.007	1.077	1.003	1.000	1.000
•			4.378	1.159	1.142	1.025	1.007	1.077	1.003	1.000	
4-yr			4.3/0	1.330	1.097	1.030	1.007	1.009	1.003	1.000	0.984
		0.447	1.446	1.151	4.053	4 000	4 045	4.040	4 000	4 000	4.000
Comparative	4 0 4 0			1 151	1.057	1.033	1.015	1.010	1.008	1.008	1.006
Factors	4.218	2.117				4 400			4 0 4 0		
•	4.218 9.100	4.500	2.521	1.400	1.145	1.120	1.050	1.025	1.010	1.005	1.004
Factors Prior	9.100	4.500	2.521	1.400	1.145		1.050	1.025		1.005	1.004
Factors						1.120 1.120			1.010 1.010		
Factors Prior	9.100	4.500	2.521	1.400	1.145		1.050	1.025		1.005	1.004

PLAN JPA - Liability Paid Loss Development

	D	Deid		Paid L	oss Develop	ment					
Accident Year 2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2011-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	8,809,636 2,569,681 1,876,140 4,775,006 1,656,563 6,517,383 3,528,864	150 Months 1,804,869 4,615,701 8,825,154 2,569,681 1,876,140 4,775,006 1,656,563 6,755,660 3,528,864 2,441,417	162 Months 1,860,684 4,627,263 8,832,114 2,569,681 1,876,140 4,775,006	2,569,681 1,876,140 4,775,006 1,662,124	2,569,681 1,876,140 4,775,006	198 Months 1,860,684 4,627,263 8,832,841 2,569,681 1,876,140 4,775,006	8,832,841 2,569,681	222 Months 1,860,684 4,627,263 8,832,841 2,569,681	234 Months 1,860,684 4,627,263 8,832,841	246 Months 1,860,684 4,627,263	258 Months 2,876,099
2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021	Paid Loss Do 138-150 Months 1.056 1.000 1.002 1.000 1.000 1.000 1.000 1.000 1.000 1.000	evelopment 150-162 Months	Factors: 162-174 Months 1.000 1.000 1.000 1.000 1.000 1.000 1.003 1.000	174-186 Months 1.000 1.000 1.000 1.000 1.000	186-198 Months 1.000 1.000 1.000 1.000 1.000	198-210 Months 1.000 1.000 1.000 1.000	210-222 Months 1.000 1.000 1.000	222-234 Months 1.000 1.000 1.000	234-246 Months 1.000 1.000	246-258 Months 1.546	258-Ult. Months
Average Dollar-Weighted Averages	138-150 Months 1.010	150-162 Months 1.004	162-174 Months 1.000	174-186 Months 1.000	186-198 Months 1.000	198-210 Months 1.000	210-222 Months 1.000	222-234 Months 1.000	234-246 Months 1.000	246-258 Months 1.546	258-Ult. Months
3-yr 4-yr	1.019 1.017	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000 1.000	1.000			
Comparative Factors Prior	1.006 1.003	1.004 1.002	1.004 1.001	1.002 1.000	1.002 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.001 1.000	1.000 1.000
Selected	1.003	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) x (D) x (E).
- (G) (B) + (F).

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

Exposure and Development Method Based on Paid Losses

				Percentage			
	Trended	Paid	Loss	of Losses	_	Incurred	Ultimate
Accident	Payroll	Losses as	Development	Yet to Be	Program	but not	Program
Year	(\$00)	of 12/31/21	Factor	Paid	Rate	Paid	Losses
	(A)	(B)	(C)	(D)	(E)	(F)	(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) x (D) x (E).
- (G) (B) + (F).

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

PLAN JPA - Liability

Exposure and Development Method

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			
					4			

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

	Ultimate	Adjusted	Ultimate
Accident	Program	Ultimate	Program
Year	Severity	Claims	Losses
	(A)	(B)	(C)
1000 0001	4400 =44	4	*** *** ***
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.

Frequency and Severity Method

	Ultimate	Adjusted	Ultimate		Trended			
Accident	Program	Ultimate	Program	Trend	Program	Program	Factor to	Program
Year	Losses	Claims	Severity	Factor	Severity	Severity	SIR	Severity
	(A)	(B)	(C)	(D)	(E)	(F)	(G)	(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.

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) Selec	ted Frequency:	0.035
						Prior:	0.035
	Program Year	:		2021-2022	2022-2023		
(1)	Trend Factor:			1.000	1.065		
(J)		uency:		0.035	0.037		

Notes:

- (A) From Reserve Appendix D, Page 4, (C).
- (B) From Reserve Appendix D, Page 5, (C).
- (C) Selected from (A) and (B).
- (D) From Reserve Appendix M, Column (C) / 10,000.

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

(L) Ultimate Claims:

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

(G) (E) x (F).

462.3

16

(H) The selected frequency of 0.035 is based on (G).

476.2

18

- (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.

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.

DRAFT

PLAN JPA - Liability Reported Claim Count Development

	Reported Claim Count Development Claims Reported as of:												
Accident	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
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	
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			-									
	18-30	30-42	42-54	54-66	66-78	78-90			114-126				
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
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	1.000	
2009-2010	1.389	0.800	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 2012-2013	1.000 1.000	1.053 0.957	1.000 1.000	1.000 0.955	1.000 0.952	1.000 1.000	1.000 1.050	1.000 1.000	1.000				
2012-2013	2.000	1.071	1.067	0.938	1.000	1.000	1.000	1.000					
	1.909	1.000	0.857	1.000		1.000	1.000						
2014-2015 2015-2016	1.800	1.111	1.000	1.000	1.000 1.000	1.000							
2016-2017	3.167	1.000	1.105	1.000	1.000								
2017-2018	2.000	0.875	1.000	1.000									
2017-2018	5.000	1.600	1.000										
2019-2020	4.500	1.000											
2019-2020	4.500												
	18-30	30-42	42-54	54-66	66-78	78-90	90-102	102-114	114-126	126-138	138-150	150-162	162-174
	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
Average	2.144	1.104	1.046	1.010	1.010	0.991	1.013	1.000	1.003	0.996	1.013	1.000	1.000
Claim-Weighted	2.144	1.104	1.040	1.010	1.010	0.551	1.013	1.000	1.003	0.550	1.013	1.000	1.000
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	1.017	1.000	1.000
Comparative	0.104	1.000	0.000	5.507	0.000	1.000	1.010	1.000	1.000	0.000	1.014	1.000	1.000
Factors	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	1.700	1.200	1.150	1.025	1.010	1.004	1.002	1.002	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	1.000	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	1.000

PLAN JPA - Liability Closed Claim Development

		Closed Claim Development											
	Claims Cl												
Accident	18	30	42	54	66	78	90	102	114	126	138	150	162
Year	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months	Months
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			Ü										
2020-2021													
2000-2001 2001-2002 2002-2003 2003-2004 2004-2005 2005-2006 2006-2007 2007-2008 2008-2009 2009-2010 2010-2011 2011-2012 2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020	1.000 1.500 3.000 5.000 3.000 5.000 6.000 2.333 3.000 19.000 0.250	1.222 7.000 3.000 2.333 5.500 1.800 2.167 2.250 3.667 3.000 1.500 1.143 6.667 0.526 2.000 3.000	1.533 1.182 1.000 1.222 1.143 1.545 1.222 1.385 1.222 1.182 1.133 1.333 2.250 0.700 1.100 2.500	ment Fact 54-66 Months 1.375 1.087 1.000 1.286 1.091 1.125 1.294 1.182 1.000 1.182 1.385 1.000 1.250 1.000 1.214	66-78 Months 1.000 1.091 1.040 1.077 1.000 1.167 1.333 1.091 1.231 1.056 1.000 1.056 1.176 0.933 1.000 1.118	78-90 Months 1.091 1.167 1.038 1.071 1.000 1.167 1.000 1.063 1.000 1.053 0.950 1.071 1.000	90-102 Months 1.000 1.000 1.200 1.000 1.000 1.000 1.000 1.053 1.000 0.950 1.053 1.000	102-114 Months 1.000 1.000 1.111 1.000 1.071 1.000 1.000 1.000 1.000 1.000	114-126 Months 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000 1.000	126-138 Months 1.000 1.071 1.000 1.000 1.000 0.958 1.000 1.000	138-150 Months 1.000 0.933 1.000 1.000 1.000 1.000 1.043 1.000	150-162 Months 1.083 1.071 1.000 1.000 1.000 0.929 1.000 1.000	162-174 Months 1.000 1.000 1.000 1.000 1.000 1.077 1.000
Average	18-30 Months 4.340	30-42 Months 2.923	42-54 Months 1.353	54-66 Months 1.177	66-78 Months 1.086	78-90 Months 1.045	90-102 Months 1.018	102-114 Months 1.014	114-126 Months 1.006	126-138 Months 1.003	138-150 Months 0.998	150-162 Months 1.009	162-174 Months 1.010
Averages 3-yr 4-yr		0.714 1.458	0.938 1.200	1.163 1.182	1.020 1.060	1.000 1.014	1.000 1.000	1.000 1.000	1.000 1.000	1.000 0.986	1.017 1.014	0.982 0.986	1.019 1.016
Comparative Factors Prior	1.495 3.500	1.122 3.000	1.051 1.001	1.033 1.001	1.020 1.001	1.012 1.001	1.010 1.001	1.007 1.001	1.005 1.001	1.005 1.001	1.003 1.001	1.003 1.001	1.001 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:

No benefit level adjustment applied. (A)

(A) adjusted for a 6.5% annual loss rate trend.(A) adjusted for a 6.5% annual frequency trend. (B) - (E)

(F) - (I)

(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.

Residual Trend Factors

	Initial					
	Estimate of	l Iltimo et e		۸ ما:، ، مغم ما	Tuesdad	
A = = ! =! = = +	Ultimate	Ultimate		Adjusted	Trended	1.04
Accident	Limited	Reported	DI E	Limited	Payroll	Ultimate
Year	Losses	Claims	BLF	Severity	(\$00)	Frequency
	(A)	(B)	(C)	(D)	(E)	(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 T	Severity 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) x (C) / (B).
- (E) From Reserve Appendix M, Column (C).
- (F) (B) / (E) x 10,000.

Payment and Reserve Forecast

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

Payment and Reserve Forecast

		<u>Calendar Period</u>		
		1/1/2022	7/1/2022	
	As of	to	to	
Accident Year	<u>12/31/2021</u>	6/30/2022	6/30/2023	
2012-2013				
Ultimate Loss	\$3,845,000	\$3,845,000	\$3,845,000	
Paid in Calendar Period Paid to Date	- 3,371,074	93,837 3,464,911	125,809 3,590,720	
Outstanding Liability	473,926	380,089	254,280	
3 ,	-,-	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	,	
2013-2014 Ultimate Loss	¢6.050.001	¢6 050 091	¢6.050.001	
Paid in Calendar Period	\$6,959,081 -	\$6,959,081	\$6,959,081	
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 Paid to Date	- 4,814,203	40,180 4,854,383	176,469 5,030,852	
Outstanding Liability	401,797	361,617	185,148	
	,	•	,	
2016-2017	#0.040.000	#0.040.000	#0.040.000	
Ultimate Loss Paid in Calendar Period	\$8,049,000	\$8,049,000 348,068	\$8,049,000 509,095	
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 Paid to Date	- 707,921	441,268 1,149,189	666,341 1,815,530	
Outstanding Liability	2,163,079	1,721,811	1,055,470	
g ,	, ,		, ,	
2019-2020 Ultimate Loss	¢4 040 000	¢4 010 000	¢4 049 000	
Paid in Calendar Period	\$4,018,000 -	\$4,018,000 752,735	\$4,018,000 1,251,520	
Paid to Date	56,239	808,974	2,060,494	
Outstanding Liability	3,961,761	3,209,026	1,957,506	

Payment and Reserve Forecast

\sim	landa	r Period
(,)	ıenda	renoa

Accident Year	As of 12/31/2021	1/1/2022 to 6/30/2022	7/1/2022 to 6/30/2023
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
9	, ,	, ,	
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.

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 x 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.

Short- and Long-Term Liabilities

<u>Liabiliti</u>	es as of 12/31/21: Current (Short Term)	Loss and ALAE:		Expected \$4,750,617		<u>Discounted</u> \$4,703,812	
	<u>ourient (onort Tenni)</u>	ULAE:		0		0	
	Short	-Term Loss and LAE:		\$4,750,617		\$4,703,812	
	Non-Current (Long Term)	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	
	Total Liability	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	
Liabiliti	es as of 6/30/22:						
	Current (Short Term)	Loss and ALAE:		\$5,039,795		\$4,990,141	
		ULAE:		0		0	
	Short	-Term Loss and LAE:		\$5,039,795		\$4,990,141	
	Non-Current (Long Term)	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	
	Total Liability	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	
				Discounted v	with a Margin for Co	ntingencies	
		-	70%	75%	80%	85%	90%
			Confidence	<u>Confidence</u>	Confidence	Confidence	Confidence
<u>Liabiliti</u>	es as of 12/31/21:						
	Current (Short Term)	Loss and ALAE:	\$5,216,528	\$5,432,903	\$5,691,613	\$6,011,472	\$6,444,222
	Short	ULAE: _ -Term Loss and LAE:	\$5,216,528	\$5,432,903	<u>0</u> \$5,691,613	<u>0</u> \$6,011,472	<u>0</u> \$6,444,222
	Short	-Tellii Loss aliu LAE.	φ5,210,526	φ5,432,903	φ5,091,013	Φ0,011,472	\$0,444,222
	Non-Current (Long Term)	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
	Total Liability	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>Liabiliti</u>	es as of 6/30/22:	1 1 41 4 =	#5 504 000	ΦE 700 040	#0.000.074	#0.077.400	#0.000.400
	Current (Short Term)	Loss and ALAE: ULAE:	\$5,534,066 0	\$5,763,613 0	\$6,038,071 0	\$6,377,400 0	\$6,836,493 0
	Short	-Term Loss and LAE:	\$5,534,066	\$5,763,613	\$6,038,071	\$6,377,400	\$6,836,493
	311011		ψυ,υυπ,υυυ	ψο,, σο,ο ιο	ψο,οοο,οι ι	ψο,ο, ι, τοο	ψο,σου,που
	Non-Current (Long Term)	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
	Total Liability	Loss and ALAE:	\$19,526,879	\$20,336,831	\$21,305,252	\$22,502,572	\$24,122,475
	1001 - 1000 - 101	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.

DRAFT
Reserve Appendix I

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	Policy		Self-Insured	Retention
Year	Year	Policy	Per	
Start Date	End Date	Year	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 Darty			
	Third Party Claims		Rogin	End
	Administrator		Begin Date	Date
	Auministrator		Date	Date
	Sedgwick			Current

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

DRAFT Reserve Appendix K

PLAN JPA - Liability

Estimated Total Assets as of 6/30/22

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

Incurred Losses as of 12/31/21

										Incurred
		Additions	Subtractions			Incurred	Incurred	Incurred	Incurred	Capped at
Accident	Unlimited	to	from	Adjusted	Incurred	Over	Capped at	\$100,000	Capped at	SIR &
Year	Incurred	Losses	Losses	Incurred	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)
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.

Paid Losses as of 12/31/21

										Paid
		Additions	Subtractions			Paid	Paid	Paid	Paid	Capped at
Accident	Unlimited	to	from	Adjusted	Paid	Over	Capped at	\$100,000	Capped at	SIR &
Year	Paid	Losses	Losses	Paid	Over SIR	\$100,000	\$100,000	to SIR Layer	SIR	Aggregate
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(1)	(J)	(K)
1000 0001	400 055 000	* 440 7 00		***	**		***	40	****	***
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	2, , 0	0	0	0	0	0	2, 10 1, 100	0	2, 101, 100	2, 101, 100
_02: 2022	O	O	· ·	O	O	· ·	O	O	O	O
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.

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.

Claim Counts as of 12/31/21

		Additions	Subtractions			Additions	Subtractions			
		to	from	Adjusted		to	from	Adjusted		Adjusted
Accident	Reported	Reported	Reported	Reported	Closed	Closed	Closed	Closed	Open	Open
Year	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims	Claims
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(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)

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

Reserve Appendix M **DRAFT**

PLAN JPA - Liability

Exposure Measures

	Total	Inflation	Trended
Accident	Payroll	Trend	Payroll
Year	(\$00)	Factor	(\$00)
	(A)	(B)	(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:

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

Agenda Item 7.B.

LIABILITY PROGRAM

SUBJECT: State of the Market - Liability

BACKGROUND AND HISTORY:

Seth Cole, Alliant Insurance Services Inc., will provide the Board of Directors with an update on the state of the insurance market as regards to liability.

RECOMMENDATION:

None. Information only.

REFERENCE MATERIALS ATTACHED:

None

Agenda Item 7.C.

LIABILITY PROGRAM

SUBJECT: PLAN JPA 2022/23 Projections - Liability

BACKGROUND AND HISTORY:

The primary pool layer funding has a slight increase, while the reinsurance & excess layer is projected to increase by 20%. Staff has taken a conservative approach in estimating costs for the 2022/23 year. Broken down as follows:

<u>Liability</u>	<u>Layers</u>	<u>2021-22</u>	<u>Carrier</u>	2022-23	<u>Variance</u>
PLAN - 60% CL	\$1M	\$4,729,000		\$5,102,000	7.9%
CARMA - 80% CL	\$9M	6,043,223		7,251,867	20.0%
Safety National	\$5M	1,751,613	Excess	2,101,936	20.0%
Everest	\$5M	1,240,009	Excess	1,488,011	20.0%
Hallmark	\$5M	718,701	Excess	862,441	20.0%
Allied World	\$5M	567,875	Excess	681,450	20.0%
	\$30M	\$15,050,421		\$17,487,704	16.2%

Overall, staff estimates a 16.2% increase for PLAN's pooled layer, reinsurance, and excess coverage. The administration cost is not included for this discussion.

RECOMMENDATION:

None. Information only.

REFERENCE MATERIALS ATTACHED:

None

Agenda Item 8.A.

PROPERTY PROGRAM AND GROUP PURCHASE PROGRAMS

SUBJECT: Actuarial Update for the Property Program

BACKGROUND AND HISTORY:

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

Property Program

PLAN JPA's current Property program structure is:



In the past year, the property program has been funded at the 70% confidence level. The preliminary actuarial report provides funding analysis for the 2022/23 year.

Property	Discount			
Program	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%

Agenda Item 8.A. Page 2

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 actuary 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.

Becky Richard, Bickmore Actuarial, will be present to discuss the funding report.

RECOMMENDATION:

None. Information only.

REFERENCE MATERIALS ATTACHED:

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



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.

DRAFT

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

			Marginally	Reco	mmended Ra	nge	
		Expected	Acceptable 70% CL	Low 75% CL	Target 80% CL	High 85% CL	Conservative 90% CL
Loss	s and ALAE	\$1,101,000					
	estment me Offset	(22,000)					
	counted Loss ALAE	\$1,079,000	\$1,294,000	\$1,404,000	\$1,534,000	\$1,697,000	\$1,917,000
Exc	ess Insurance	5,572,000	5,572,000	5,572,000	5,572,000	5,572,000	5,572,000
Tota	al Funding	\$6,651,000	\$6,866,000	\$6,976,000	\$7,106,000	\$7,269,000	\$7,489,000
	e per \$100 of 2-23 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.

3

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

	Marginally		Recommended Range				
	Expected	Acceptable 70% CL	Low 75% CL	Target 80% CL	High 85% CL	Conservative 90% 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

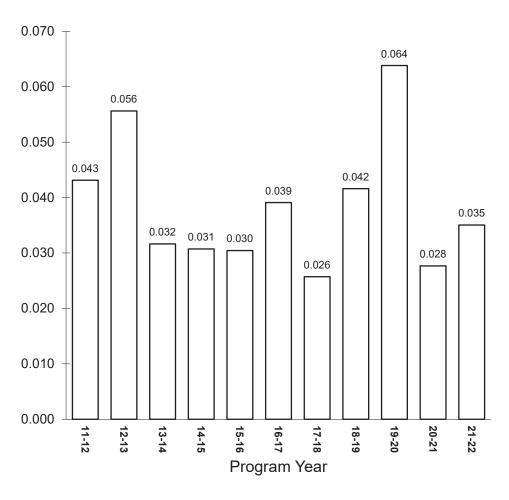
assumptions underlying the actuarial analysis, PLAN JPA's other budgetary constraints, and the relative level of risk it is believed appropriate to assume. This means formulating both short- and long-term funding goals, which may be the same in some years, but different in others.

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 relativity 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.

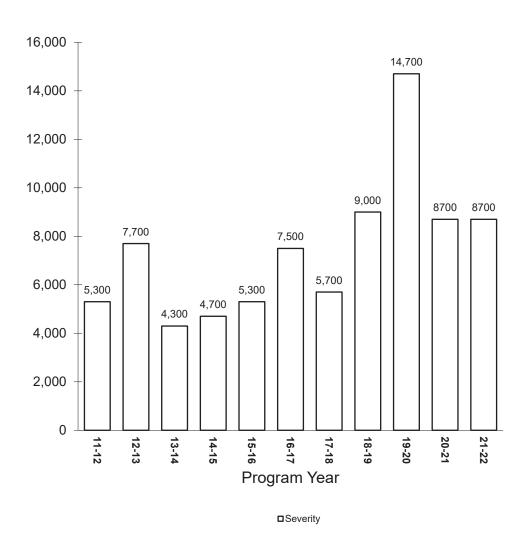
PLAN JPA
Dollars of Loss per
\$100 of TIV



□Loss Rate

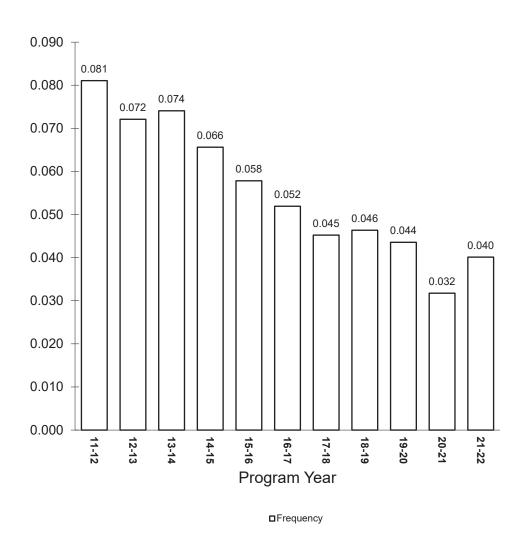
The program's cost per claim has generally increased since 2013-14. The projected 2021-22 severity of \$8,700 is based on this increasing trend.

PLAN JPADollars 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
1 Gai	Thor Roport	ourront report	Onlango
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 <u>excluded</u> 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 (Appendix F, , (G)) $$	2.0%.):		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.

DRAFT Exhibit 2
Page 1

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) Projected Losses for the Year 2022-2023 (H)									

Notes:

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

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

DRAFT Exhibit 2 page 2

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) Projected Losses for the Year 2022-2023 (H)								

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.

DRAFT Exhibit 3
Page 1

PLAN JPA - Property

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

Accident Year	Ultimate Limited Losses (A)	Trend Factor (B)	Trended Limited Losses (C)	Trended TIV (\$00) (D)	Trended Limited Loss Rate (E)
2012-2013 2013-2014 2014-2015 2015-2016 2016-2017 2017-2018 2018-2019 2019-2020 2020-2021 Totals	1,211,570 768,874 768,041 695,000 911,000 620,000 1,041,000 1,700,000 758,000 \$9,351,339 4,272,000	1.044 1.039 1.034 1.030 1.025 1.020 1.015 1.010	1,264,879 798,860 794,154 715,850 933,775 632,400 1,056,615 1,717,000 761,790 \$9,596,192 4,339,790	27,201,491 29,628,198 29,715,314 26,482,176 26,375,931 26,612,275 26,946,252 27,996,278 28,080,356 275,091,195 107,930,736	0.047 0.027 0.027 0.027 0.035 0.024 0.039 0.061 0.027 \$0.035
17/18-20/21	4,119,000		` '	109,635,161 ed Limited Rate: ior \$250K Rate:	0.038 \$0.035 \$0.031
Program Year: (G) Factor to SIR: (H) Trend Factor: (I) Program Rate: (J) Trended TIV (\$00): (K) Projected Program Losses: (L) Projected ULAE: (M) Projected Loss and ULAE:		2021-2022 1.170 1.000 \$0.041 28,416,607 1,165,000 0 \$1,165,000	2022-2023 1.175 1.005 \$0.041 31,265,001 1,282,000 0 \$1,282,000		
Member Ded 0 5,000 10,000 15,000 25,000	Ded Fact 1.00 0.86 0.76 0.69 0.59	2021-2022 Funding 1,165,000 1,000,000 890,000 809,000 692,000	2022-2023 Funding 1,282,000 1,101,000 980,000 890,000 762,000		

DRAFT Exhibit 3
Page 2

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) x (B).
- (D) From Appendix I, Column (C).
- (E) (C)/(D).
- (F) Selected based on (E).
- (G) Based on a Burr distribution, a mathematical model of claim sizes.
- (H) From Appendix E.
- (I) (F) x (G) x (H).
- (J) From Appendix I, Column (C).
- (K) (I) x (J).
- (L) Based on an estimated claim closing pattern and the Pool's historical claims administration expenses.
- (M) (K) + (L).

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

DRAFT Appendix A

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.

DRAFT Appendix B

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.

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) x (D) x (E).
- (G) (B) + (F).

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

Exposure and Development Method Based on Paid Losses

Accident Year	Trended TIV (\$00) (A)	Paid Losses as of 12/31/21 (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) x (D) x (E).
- (G) (B) + (F).

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

Exposure and Development Method

Accident Year	Trended TIV (\$00) (A)	Ultimate Limited Losses (B)	Trend Factor (C)	Trended Limited Losses (D)	Trended Limited Loss Rate (E)	Limited Loss Rate (F)	Factor to SIR (G)	Program Loss Rate (H)
2012-2013	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			
			Selecte	d I imited Rate	\$0.035			

\$0.030

Prior:

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.

Appendix D **DRAFT** Page 1

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) Selec	ted Frequency:	0.040
						Prior:	0.044
(I) (J) (K) (L)	Program Year: Trend Factor: Selected Frequ Est. TIV (\$000 Ultimate Claim	uency: ,000):		2021-2022 1.000 0.040 2,841.7 114	2022-2023 0.980 0.039 3,126.5 122		

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.

Appendix E **DRAFT**

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)

(B) - (E)

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

(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.

Appendix F

PLAN JPA - Property

Calculation of Discount Factors

Payment	Payment	Return on	Discounted	Undiscounted	Discount
Year	Pattern	Investment	Reserves	Reserves	Factor
(A)	(B)	(C)	(D)	(E)	(F)
	0.00/	0.00/			4.000
22	0.0%	2.0%	0.000	0.000	1.000
21	0.0%	2.0%	0.000	0.000	1.000
20	0.0%	2.0%	0.000	0.000	1.000
19	0.0%	2.0%	0.000	0.000	1.000
18	0.0%	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
		(C) Discount Factor	for Euturo Eundina:	2021-2022	0.980
		(G) Discount Factor	for Future Funding:	2021-2022	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.

DRAFT Appendix G

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.

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)
- (E) (B) + (C) (D).
- (F) Sum of incurred losses in excess of SIR.
- (G) Sum of incurred losses in excess of \$225,000.
- (H) (E) (G).
- (I) (G) (F).
- (J) (E) (F).
- (K) Minimum of (J) and the aggregate stop loss. See Not Included.

Paid Losses as of 12/31/21

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.

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.

Appendix H **DRAFT** Page 4

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).

Appendix I **DRAFT**

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:

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

Agenda Item 8.B.

PROPERTY PROGRAM AND GROUP PURCHASE PROGRAMS

SUBJECT: State of the Market – Property and Group Purchase Programs

BACKGROUND AND HISTORY:

Seth Cole, Alliant Insurance Services Inc., will provide the Board of Directors with an update on the state of the insurance market as regards to property.

RECOMMENDATION:

None. Information only.

REFERENCE MATERIALS ATTACHED:

None

Agenda Item 8.C.

PROPERTY PROGRAMAND GROUP PURCHASE PROGRAMS

SUBJECT: PLAN JPA 2022/23 Projections – Property and Group Purchase Programs

BACKGROUND AND HISTORY:

The primary pool layer SIR for the property program is projected to remain at \$500K per occurrence. Additionally, the excess coverage cost is expected to increase as well. Staff has taken a conservative approach in estimating cost for the 2022/23 year. Below is a breakdown:

<u>Property</u>	<u>Layers</u>	2021-22	<u>Carrier</u>	2022-23	<u>Variance</u>
PLAN - 70%	\$500K	\$1,023,000		\$1,294,000	26.5%
Excess Property & Flood	Above \$500K	3,817,119		4,839,157	26.8%
Excess Cyber Coverage		309,750		732,376	136.4%
	-	\$5,149,869		\$6,865,533	33.3%

RECOMMENDATION:

None. Information only.

REFERENCE MATERIALS ATTACHED:

None

Agenda Item 9.A.

FINANCIAL MATTERS

SUBJECT: Review of the PLAN JPA 2022/23 Preliminary 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. Similar structure as prior year, the proposed coverage is losses pooled from member's SIR (currently \$5K) up to \$500K per occurrence with zero aggregate deductible, and excess coverage purchased up to \$1 billion through Alliant Property Insurance Program (APIP).

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% over prior year, the budgeted contributions are projected to increase from \$22 million to \$26.8 million for 2022/23. An increase of 22% over the prior year. Below is a summary by program.

Liability Program (Page 2)

The Liability program is projecting a 19% increase in contribution over the 2021/22 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

Agenda Item 9.A. Page 2

estimated payroll is based upon the actual payroll collected on a quarterly basisannualized, with a conservative 3% trend increase.

- *Primary Funding Layer* increase of \$373K, or 7.9% from prior year mainly due to estimated payroll increasing in 2022/23.
- Insurance cost The insurance cost is projected to increase by 20% over the prior year.
 - a. CARMA is projected to increase by 20%.
 - b. 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:

- 1. Funding the 2022/2 program year at the **70% CL**, similar to prior year;
- 2. Increasing the Total Insured Value (TIV) by 9.4%; these are preliminary numbers as Alliant is still gathering the data;
- 3. 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;
- 4. Excess Cyber liability is projected to increase 150%; and
- 5. Actuarial Report, dated on March 4, 2022, was used to compile the proposed contributions for 2022/23.

2. <u>Claims Expense</u>

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.

Agenda Item 9.A. Page 3

3. Insurance Expense

Total insurance expense is projected to increase by 25.5% over the prior year budget. Liability insurance expense is projected to increase 22% 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 opinions;
- 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.

RECOMMENDATION:

None. Information Only.

REFERENCE MATERIALS ATTACHED:

• 2022/23 PLAN Preliminary Operating Budget

Preliminary Contribution Worksheet for 2022/2023

Summary of Contributions by Program

					Prior Y	ear Comparis	son	Payroll	Compa	rison		Ex-m	od Compa	rison
				2022/23	2021/22			Estimated	Estim	ated	<u> </u>			
	Liability	Property	Employment		Total	Increase/	Percent	Payroll	Pay		%			
Member	Program	Program	Liability	Contributions	Contributions	(Decrease)	Change	 2022/23	2021	1/22	Change	2022/23	2021/22	Change
	Page 2	Page 3												
American Canyon	\$ 447,943	\$ 175,848	\$ 56,662	\$ 680,452	\$ 550.928	\$ 129,524	24%	\$ 8,503,800	\$ 6.7	738,943	26.2%	58%	61%	-4.8%
Atherton	307,997	42,370	31,594	381,961	296,677	85,284	29%	7,486,700		103,982	46.7%	140%	130%	7.4%
Benicia	919,457	539,255	-	1,458,712	1,186,508	272,204	23%	23,954,000	22,8	387,654	4.7%	114%	87%	30.6%
Burlingame	889,644	454,601	-	1,344,245	1,026,832	317,414	31%	27,115,100	22,8	395,189	18.4%	107%	82%	30.3%
Campbell	891,874	234,113	_	1,125,987	990,012	135,975	14%	23,557,700	22,7	756,074	3.5%	73%	82%	-11.1%
Colma	122,297	62,798	_	185,095	155,780	29,315	19%	4,065,300	3,9	973,521	2.3%	100%	77%	30.2%
Cupertino	1,005,972	272,776	-	1,278,748	914,250	364,497	40%	25,593,400	23,8	360,889	7.3%	44%	39%	13.7%
Dublin	1,062,626	545,393	-	1,608,019	1,138,084	469,935	41%	10,171,800		733,186	4.5%	109%	84%	30.1%
East Palo Alto	742,159	80,009	-	822,168	551,587	270,581	49%	14,354,600	9,4	153,047	51.9%	132%	117%	12.8%
Foster City	672,428	370,005	-	1,042,433	707,592	334,841	47%	24,874,900	19,8	327,337	25.5%	40%	31%	29.4%
Half Moon Bay	273,687	72,816	-	346,503	293,662	52,841	18%	4,748,600	4,0	089,523	16.1%	82%	76%	7.9%
Hillsborough	384,386	189,682	_	574,068	507,590	66,478	13%	12,861,200	11,1	138,285	15.5%	83%	91%	-8.9%
Los Altos Hills	211,161	40,212	_	251,373	264,370	(12,997)	-5%	2,817,400	3,0	05,980	-6.3%	121%	172%	-29.7%
Los Gatos	629,535	156,866	_	786,401	703,807	82,594	12%	20,772,900	22,3	378,814	-7.2%	39%	48%	-19.3%
Millbrae	556,356	248,774	_	805,130	687,282	117,848	17%	8,016,500	7,7	733,077	3.7%	165%	231%	-28.6%
Milpitas	1,846,782	584,969	_	2,431,751	1,726,611	705,140	41%	62,317,100	64,3	362,249	-3.2%	83%	87%	-4.8%
Morgan Hill	1,223,364	364,736	_	1,588,100	1,426,547	161,552	11%	30,223,300	29,5	67,808	2.2%	93%	114%	-18.1%
Newark	1,078,510	299,225	_	1,377,735	1,192,473	185,262	16%	22,383,200	21,7	770,775	2.8%	103%	98%	5.2%
Pacifica	1,088,027	530,018	-	1,618,045	1,445,676	172,369	12%	21,633,500	19,5	531,220	10.8%	136%	151%	-9.9%
Portola Valley	123,304	34,557	_	157,861	134,526	23,335	17%	2,093,500	1,7	721,873	21.6%	81%	81%	0.2%
Ross	94,354	18,526	-	112,880	101,650	11,230	11%	2,612,300	2,4	147,463	6.7%	70%	70%	0.0%
San Bruno	1,372,526	257,299	_	1,629,825	1,445,909	183,916	13%	32,064,600	31,1	136,941	3.0%	132%	143%	-7.6%
San Carlos	809,339	146,992	_	956,331	1,075,117	(118,785)	-11%	10,624,400	8,3	395,419	26.5%	259%	369%	-29.9%
Saratoga	645,462	113,537	_	758,999	516,860	242,139	47%	8,436,600	7,4	144,257	13.3%	153%	140%	9.2%
South San Francisco	1,438,171	863,750	_	2,301,921	2,063,357	238,564	12%	48,319,000	51,5	63,560	-6.3%	58%	73%	-20.5%
Suisun City	584,838	103,440	_	688,278	467,826	220,452	47%	9,635,800	7,8	336,131	23.0%	97%	75%	30.2%
Tiburon	242,140	37,482	_	279,622	215,958	63,664	29%	4,579,200	3,8	362,568	18.6%	103%	79%	30.1%
Woodside	165,941	25,482	15,985	207,408	174,420	32,988	19%	2,350,600	2,1	121,729	10.8%	129%	99%	30.0%
Total	\$ 19,830,280	\$ 6,865,533	\$ 104,240	\$ 26,800,053	\$ 21,961,891	\$ 4,838,162	22%	\$ 476,167,000	\$ 447,3	337,492	6.4%			
•														
Prior Year Actuals	16,725,154	5,149,869	\$86,867	21,961,890										
Incr./(Decr.)		\$ 1,715,664												
% Change	19%	33%	20%	22%										

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).

Preliminary Contribution Worksheet for 2022/2023

Liability Program Contribution Schedule

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

																Budget Con	nparison
		Funding for	Reinsi	urance/Excess Inst	ırance					Members			Allocation	202	22/23	2021/22	Percent
	Member	Losses	CARMA	Rein/Excess	Total	Adı	ministration	Deposit from PY	Unallocated	capped	Ur	ncapped	of	60%	6 CL	60% CL	Increase /
Members	SIR	SIR-\$1M	\$9M x \$1M	\$20M x \$10M	Insurance		Expense	50%	Contributions	at 50%	M	lembers	Contributions	Liability	y Budget	Liability Budget	(Decrease)
	Note 1	Note 2			Note 3		Note 4		Note 5	Note 6		Note 7	Note 8	No	ote 9	Note 10	
American Canyon	\$25,000	\$ 74,249	\$ 181,093	\$ 128,202 \$	309,295	\$	59,299	\$549,375	\$ 442,843	-	\$	442,843	\$ 447,943	\$	447,943	\$ 366,250	22.3%
Atherton	\$25,000	157,010	60,034	42,500	102,534		44,947	362,127	304,49	l -		304,491	307,997		307,997	241,418	27.6%
Benicia	\$25,000	406,546	236,016	167,084	403,100		99,343	1,147,421	908,989	-		908,989	919,457		919,457	764,947	20.2%
Burlingame	\$250,000	191,796	258,956	183,323	442,279		245,441	1,015,706	879,516	-		879,516	889,644		889,644	677,137	31.4%
Campbell	\$100,000	183,678	361,568	255,966	617,534		80,508	1,221,645	881,720) -		881,720	891,874		891,874	814,430	9.5%
Colma	\$50,000	53,231	14,442	10,224	24,666		43,008	160,484	120,905	5 -		120,905	122,297		122,297	106,989	14.3%
Cupertino	\$250,000	74,188	510,634	361,494	872,128		48,203	1,062,890	994,519			994,519	1,005,972		,005,972	708,593	42.0%
Dublin	\$50,000	145,196	563,207	398,713	961,920		67,274	1,062,626	1,174,390			-	-	1	,062,626	708,417	50.0%
East Palo Alto	\$100,000	201,964	264,214	187,046	451,260		80,486	746,714	733,710			733,710	742,159		742,159	497,809	49.1%
Foster City	\$100,000	106,622	285,908	202,404	488,312		69,839	693,498	664,773			664,773	672,428		672,428	462,332	45.4%
Half Moon Bay	\$50,000	50,918	107,157	75,860	183,017		36,636	356,781	270,57			270,571	273,687		273,687	237,854	15.1%
Hillsborough	\$50,000	140,567	99,165	70,202	169,367		70,076	543,617	380,010			380,010	384,386		384,386	362,411	6.1%
Los Altos Hills	\$25,000	50,785	73,040	51,707	124,747		33,225	349,268	208,757			208,757	211,161		211,161	232,845	-9.3%
Los Gatos	\$50,000	107,079	268,445	190,041	458,486		56,803	880,541	622,368			622,368	629,535		629,535	587,027	7.2%
Millbrae	\$100,000	140,686	195,954	138,722	334,676		74,660	735,026	550,022			550,022	556,356		556,356	490,017	13.5%
Milpitas	\$100,000	552,618	658,689	466,308	1,124,997		148,142	1,924,917	1,825,757			1,825,757	1,846,782		,846,782	1,283,278	43.9%
Morgan Hill	\$100,000	298,746	412,417	291,964	704,381		206,309	1,722,860	1,209,436			1,209,436	1,223,364		,223,364	1,148,573	6.5%
Newark	\$100,000	245,712	425,346	301,116	726,462		94,057	1,444,731	1,066,23			1,066,231	1,078,510		,078,510	963,154	12.0%
Pacifica	\$50,000	385,060	329,854	233,515	563,369		127,211	1,543,967	1,075,640			1,075,640	1,088,027	1	,088,027	1,029,311	5.7%
Portola Valley	\$25,000	25,263	39,697	28,103	67,800		28,837	161,910	121,900			121,900	123,304		123,304	107,940	14.2%
Ross	\$25,000	27,341	22,173	15,697	37,870		28,069	132,843	93,280			93,280	94,354		94,354	88,562	6.5%
San Bruno	\$100,000	450,194	391,193	276,939	668,132		238,574	1,883,625	1,356,900			1,356,900	1,372,526	1	,372,526	1,255,750	9.3%
San Carlos	\$100,000	292,712	259,548	183,743	443,291		64,122	1,445,244	800,12			800,125	809,339		809,339	963,496	-16.0%
Saratoga	\$25,000	193,507	265,920	188,254	454,174		48,955	645,462	696,636			-	-		645,462	430,308	50.0%
South San Francisco	\$100,000	299,668	584,448	413,750	998,198		123,932	2,214,459	1,421,798			1,421,798	1,438,171	1	,438,171	1,476,306	-2.6%
Suisun City	\$25,000	139,577	251,434	177,999	429,433		52,548	584,838	621,558			-	-		584,838	389,892	50.0%
Tiburon	\$50,000	61,774	82,320	58,277	140,597		37,012	282,461	239,383			239,383	242,140		242,140	188,307	28.6%
Woodside	\$25,000	45,312	48,995	34,685	83,680		35,060	212,702	164,052	-		164,052	165,941		165,941	141,801	17.0%
Total		\$ 5,101,999	\$ 7,251,867	\$ 5,133,838 \$	12,385,706	\$	2,342,576		\$ 19,830,280	\$ 2,292,926	\$1	7,337,696	\$ 17,537,354	\$ 19	,830,280	\$ 16,725,154	19%
Prior Year Actuals		4.728.999	6,043,223	4,278,198	10,321,421		2,228,157						·	16	,725,154		
I noi Teal Actuals		4,120,339	0,040,223	4,270,130	10,021,421		2,220,137	-						10	105 104	_	

Prior Year Actuals Incr./(Decr.) % Change

	4,728,999	6,043,223	4,278,198	10,321,421	2,228,157
	373,000	1,208,644	855,640	2,064,285	114,419
-	7.9%	20.0%	20.0%	20.0%	5.1%

16,725,154 3,105,126 19%

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 15, 2022.

Note 3: Insurance estimated 20% increase; allocation based upon draft actuarial study dated March 15, 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	\$1M SIR					
	21/22	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					

Preliminary Contribution Worksheet for 2022/2023

Property Program Contributions Schedule

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

				70 Commuen	ice Level, 2.0 % I	Discount F	actor		ı ₁	
		Insure	d Values						Budget Co.	mparison
		2021/22	2022/23	Pool	Excess	Flood	Excess	2022/23	2021/22	Percent
		Insured	Insured	Funding	Prop. Premium	Premium	Cyber	Program	Program	Increase /
Member	SIR	Values	Values	SIR-\$500K	\$500k-\$1B		Coverage	Deposit	Deposit	(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	\$ 34,19	2 \$ 126,402	2 \$ 1,674	\$ 13,579	\$ 175,848	\$ 137,460	27.9%
Atherton	5,000	14,749,463	15,584,891	6,45	0 23,845	-	12,075	42,370	28,931	46.5%
Benicia	5,000	240,096,735	256,510,580	106,16	5 392,469	4,187	36,434	539,255	421,561	27.9%
Burlingame	5,000	198,240,888	211,536,210	87,55	1 323,657	2,283	41,110	454,601	349,695	30.0%
Campbell	5,000	95,629,138	101,992,873	42,21	3 156,052	_	35,848	234,113	175,582	33.3%
Colma	5,000	26,117,622	27,835,071	11,52	0 42,589	1,675	7,014	62,798	48,791	28.7%
Cupertino	5,000	112,253,511	119,471,509	49,44	7 182,795	1,675	38,859	272,776	205,657	32.6%
Dublin	5,000	251,241,889	271,448,110	112,34	7 415,324	1,675	16,047	545,393	429,667	26.9%
East Palo Alto	5,000	27,942,173	29,721,112	12,30	1 45,474		22,234	80,009	53,778	48.8%
Foster City	5,000	138,310,565	170,897,100	70,73	1 261,478	-	37,796	370,005	245,260	50.9%
Half Moon Bay	5,000	31,169,811	33,330,839	13,79	5 50,997	-	8,024	72,816	55,808	30.5%
Hillsborough	5,000	81,853,430	87,276,218	36,12	2 133,535	· -	20,025	189,682	145,179	30.7%
Los Altos Hills	5,000	17,086,553	18,027,866	7,46	1 27,583	-	5,168	40,212	31,525	27.6%
Los Gatos	5,000	60,680,949	64,373,829	26,64	3 98,494		31,729	156,866	116,780	34.3%
Millbrae	5,000	114,215,155	121,361,725	50,22	9 185,687	-	12,858	248,774	197,265	26.1%
Milpitas	5,000	237,238,555		103,71	2 383,403	3 4,671	93,183	584,969	443,333	31.9%
Morgan Hill	5,000	153,263,394	163,254,860	67,56	8 249,785	1,675	45,708	364,736	277,974	31.2%
Newark	5,000	128,067,580	136,381,699	56,44	6 208,668	-	34,111	299,225	229,319	30.5%
Pacifica	5,000	233,716,394	249,217,975	103,14	7 381,311	12,559	33,002	530,018	416,365	27.3%
Portola Valley	5,000	14,620,936	15,669,809	6,48	5 23,975	5 -	4,097	34,557	26,586	30.0%
Ross	5,000	5,384,933	6,166,661	2,55	2 9,435	1,675	4,864	18,526	13,088	41.6%
San Bruno	5,000	101,178,656	107,446,679	44,47	0 164,397	,	48,432	257,299	190,159	35.3%
San Carlos	5,000	61,949,337	66,156,133	27,38	1 101,221	1,675	16,716	146,992	111,621	31.7%
Saratoga	5,000	47,346,919	50,610,636	20,94	7 77,436	1,675	13,480	113,537	86,552	31.2%
South San Francisco	5,000	323,533,686	400,591,882	165,79	7 612,918	12,559	72,476	863,750	587,051	47.1%
Suisun City	5,000	40,694,302	43,211,738	17,88	5 66,115	4,187	15,254	103,440	77,934	32.7%
Tiburon	5,000	13,543,414	14,420,964	5,96	9 22,065	1,675	7,774	37,482	27,651	35.6%
Woodside	5,000	10,121,584	10,804,161	4,47			4,479	25,482	19,299	
Total		\$ 2,858,239,640	\$ 3,126,500,132	\$ 1,294,00	0 \$ 4,783,641	\$ 55,516	\$ 732,376	\$ 6,865,533	\$ 5,149,872	33.3%
							·			•
Prior Year Actuals			2,858,239,640				309,750	5,149,869		
Incr./(Decr.)			\$ 268,260,492	\$ 271,00						
% Change			9.4%	26.5	% 27.09	% 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 Laver

i unumg for the room	a Layer		
		<u>21/22</u>	<u>22/23</u>
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

Preliminary Operating Budget for 2022/2023

			2022/23			Τ
	202	1/22	Draft	Prior Year		
	Approved	Projected	Operating	Increase/	Percent	
	Budget	Actuals	Budget	(Decrease)	Incr./(Decr.)	
Revenues:	_				_	
Contributions	\$ 21,994,710	\$ 21,961,893	\$ 26,800,053	\$ 4,805,343	21.8%	
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	27,364,053	4,374,343	19.0%	
Expenses						
Claims Expense	5,473,000	8,311,252	6,051,000	578,000	10.6% a	1
Insurance Expense						
Insurance - Liability	10,150,169	10,267,319	12,385,706	2,235,537	22.0%	
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)		
	14,396,726	14,531,523	18,061,479	3,664,753	25.5% b)
Risk Management Grants						
Risk Management Fund	500,000	500,000	500,000	-	0.0% c	;
Administration						
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%	
Total Administration Expenses:	2,228,157	2,168,675	2,342,577	114,420	5.1% d	ł
Total Expenses	22,597,883	25,511,450	26,955,056	4,357,172	19.3%	
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:

	<u>2021/22</u>	2022/23	Difference	<u>% Difference</u>
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 25.5%. Liability insurance expense are budgeted to increase 22% due to a contined 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 opinions by \$15K. In addition to claims admin and audit contractual increases, managment 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.

 Page 14