Annual Loss Summary Report

**Actuarial Cost Method (or Funding Method)**

A procedure for allocating the Actuarial Present Value of all past and future pension plan benefits to the Normal Cost and the Actuarial Accrued Liability.

**Actuarial Gain or Loss (or Experience Gain or Loss)**

A measure of the difference between actual experience and that expected based upon the set of Actuarial Assumptions, during the period between two Actuarial Valuation dates.

Note: The effect on the Accrued Liability and/or the Normal Cost resulting from changes in the Actuarial Assumptions, the Actuarial Cost Method or pension plan provisions would be described as such, not as an Actuarial Gain (Loss).

**Actuarial Accrued Liability**

That portion of the Actuarial Present Value of pension plan benefits which is not provided by future Normal Costs or employee contributions. It is the portion of the Actuarial Present Value attributable to service rendered as of the Valuation Date.

**Actuarial Assumptions**

Assumptions, based upon past experience or standard tables, used to predict the occurrence of future events affecting the amount and duration of pension benefits, such as: mortality, withdrawal, disablement and retirement; changes in compensation; rates of investment earnings and asset appreciation or depreciation; and any other relevant items.

**Assets**

The total value of securities. Assets grow through employer and employee contributions, as well as investment earnings. They are reduced by benefit payments and other disbursements. For valuation purposes, assets are usually measured at market value.

**Cost of Benefits**

The estimated payment from the pension system for benefits for the fiscal year. This is the minimum amount payable during the first six years of some Funding Schedules.

## Glossary & Key Metrics

Incurred Loss represents the total amount of claims reported and paid or reserved for at a given time. It includes both paid claims and case reserves.

Ultimate Loss is the estimated final cost of all claims arising from a portfolio or line of business, often projected using actuarial techniques such as chain ladder or Bornhuetter-Ferguson.

IBNR (Incurred But Not Reported) is the portion of the ultimate loss that has not yet been reported to the insurer. It is calculated as: IBNR = Ultimate Loss - Incurred Loss.

In the current dataset, the highest IBNR is 10,556,579.01 observed in year 2020.

Across all years, total Incurred Loss is 248,429,053.61, and total Ultimate Loss is 378,081,381.55.

## Results by Expo year and Profile

|  |  |  |  |
| --- | --- | --- | --- |
| ExposureYear | TotalIncurredLoss | TotalUltimateLoss | TotalIBNR |
| 2010.0 | 15909546.77 | 24269555.16 | 8360008.39 |
| 2011.0 | 15531741.35 | 24450918.96 | 8919177.61 |
| 2012.0 | 15807038.25 | 24398908.22 | 8591869.97 |
| 2013.0 | 16564335.91 | 24407507.85 | 7843171.94 |
| 2014.0 | 15681140.08 | 23307172.32 | 7626032.24 |
| 2015.0 | 17983194.03 | 26865343.17 | 8882149.14 |
| 2016.0 | 17505083.44 | 26455672.64 | 8950589.2 |
| 2017.0 | 16760506.16 | 24545612.1 | 7785105.94 |
| 2018.0 | 15960569.46 | 24308236.26 | 8347666.8 |
| 2019.0 | 16907165.42 | 27324581.36 | 10417415.94 |
| 2020.0 | 15726152.88 | 26316431.89 | 10590279.01 |
| 2021.0 | 16371093.49 | 23727739.71 | 7356646.22 |
| 2022.0 | 18406108.66 | 28016477.51 | 9610368.85 |
| 2023.0 | 15284673.82 | 23567752.07 | 8283078.25 |
| 2024.0 | 17530703.89 | 26119472.330000002 | 8588768.44 |

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| ClaimNumber | ExposureYear | IncurredLoss | UltimateLoss | IBNR | Currency | GeographicalLocation |
| CLM002783 | 2019 | 4820.56 | 149731.48 | 144910.92 | AUD | London |
| CLM001871 | 2024 | 3013.77 | 147502.97 | 144489.2 | CAD | Toronto |
| CLM004794 | 2021 | 7596.17 | 149970.97 | 142374.8 | USD | London |
| CLM002959 | 2022 | 7290.04 | 149262.86 | 141972.82 | AUD | London |
| CLM002619 | 2016 | 1070.97 | 142910.68 | 141839.71 | CAD | London |

|  |  |  |  |
| --- | --- | --- | --- |
| Reserve\_Profile | AvgIncurredLoss | AvgUltimateLoss | AvgIBNR |
| Auto Liability | 50196.93335907336 | 72771.7292046332 | 22574.795845559845 |
| Commercial | 49654.81571546733 | 78348.97783291977 | 28694.16211745244 |
| Homeowners | 49078.70013709678 | 76323.3577016129 | 27244.657564516132 |
| Workers Comp | 49389.93992038217 | 75220.6325477707 | 25830.692627388536 |

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**Amortization Payment**

That portion of the pension plan appropriation which represents payments made to pay interest on and the reduction of the Unfunded Accrued Liability.

**Annual Statement**

The statement submitted to PERAC each year that describes the asset holdings and Fund balances as of December 3l and the transactions during the calendar year that affected the financial condition of the retirement system.

**Annuity Reserve Fund**

The fund into which total accumulated deductions, including interest, is transferred at the time a member retires, and from which annuity payments are made.

**Expense Fund**

The fund into which the appropriation for administrative expenses is paid and from which all such expenses are paid.

**Funding Schedule**

The schedule based upon the most recently approved actuarial valuation which sets forth the amount which would be appropriated to the pension system.

**GASB**

Governmental Accounting Standards Board

**Reserve Profile Analytics**

This section compares different Reserve Profiles, such as Personal and Commercial lines, by their average incurred and ultimate losses.

Actuarial metrics such as AvE (Actual vs Expected) are often used to validate the adequacy of reserves. While AvE is not explicitly calculated here, trends in IBNR can indicate over- or under-reserving.

The profile with the highest average IBNR is Commercial with an average of 28,594.16.

**Average Losses and IBNR by Reserve Profile**

Actuarial models updated through tools like Vanna may revise these averages based on new claim development data or revised assumptions.