



## **Public Risk Innovation, Solutions, and Management**

### **General Liability 1 (GL1) Premium Allocation Methodology**

Beginning with the 2011/12 year, an entity's premium has been calculated based on an updated premium allocation methodology than what used in the past. The objectives of the premium allocation methodologies are to:

- Make the premiums more sensitive to each entity's own loss experience. There is a balance between ensuring the premiums are equitable and that they are stable for the members from year to year;
- Implement methodologies that are easier to explain to the membership;
- Utilize formulas that are easier for the member to understand in terms of how much their loss experience impacts their premium;
- Develop spreadsheets that are easier to administer with less manual manipulation and room for human error; and
- Provide firm premiums for the pool layer and administrative charges earlier in the renewal process (anticipate in mid-March).

Starting with the 2018/19 program year, the PGL Program merged into the GL1 Program to create the Deductible Buy Down (DBD) Option. This Option provides those PGL members with the same coverage afforded before, but with the benefit of reduced overall administrative costs. Due to this change, the GL1 Premium Allocation Methodology has been updated to include provisions for the new DBD Option. The methods for calculating premiums for members participating in the new DBD Option are very similar to how their premium was calculated in the PGL Program.

Please refer to the attached explanation for more details in regards to the premium methodology.



In general, premiums are calculated based on each entity's exposure and experience.

### **Exposure**

Exposure refers to payroll for the non-school members. For school members, exposure is measured by Average Daily Attendance (ADA). At the beginning of the year, the premium is determined for each member based on their estimated exposure for the coverage year. The estimated exposure is reported by the member on their renewal application, which is completed in the preceding fall. There is no premium adjustment based on the actual exposure at the end of the year. For non-school members, payroll should consist of salary and wages, including extra help, plus 2/3<sup>rd</sup>s of overtime and call-backs. Payroll should not be included for operations not covered by the Memorandum of Coverage, such as payroll for hospitals, clinics, other healthcare facilities, airports, or fixed-route transit operations. When estimating payroll, members should only include the payroll for positions that are intended to be filled during the coverage year.

### **Experience**

Loss experience will include data for the layer being rated, which we will call "stratified losses." When calculating premium for the \$100,000 to \$1,000,000 pool layer, losses valued between \$100,000 and \$1,000,000 will be considered. The data will include losses from the most recent and complete 7 fiscal years. For example, in calculating the 2019/20 premium, the data will include losses from the 2011/12 through 2017/18 fiscal years. Individual losses valued at more than \$1,000,000 will be reviewed for potential surcharges on the premium for the layers excess of \$1,000,000.

### **Deductible Buy Down (DBD) Option Premium Allocation**

The following relates to those participating members in the DBD Option of the GL1 Program and dictates how premiums are allocated for the deductible to \$100,000 layer.

#### **Allocating Premium**

Premiums are allocated to members based on their expected losses from the member's deductible to the \$100,000 layer. The member's actuarially determined losses are estimated in two ways:

1. For members with adequate exposure and experience, expected losses are actuarially determined for each member.
2. For members with smaller exposure and little or no experience, losses are estimated using the member's payroll (divided by 100) multiplied by the average rate of the actuarially rated members at the same deductible level in this option.
  - A minimum premium of \$7,500 applies to payroll rated members.

#### **Two-Year Rate Smoothing Formula**

Because actuarial estimates can change significantly from year to year, the member's expected losses will be smoothed with last year's expected losses to mitigate annual swings and to provide more pricing stability to members in this option. This is done by



calculating each member's average Undiscounted Expected Loss Rate for the renewal year and the expiring year.

#### **Deductible Fund Deposit Prefunding**

A deductible deposit is maintained for each member to ensure that the average quarterly deductible amount is kept on hand to prevent the Program from fronting costs. This money is used to pay claims that fall within the deductible. Members are billed on a quarterly basis to replenish the fund. The deductible deposit fund will be calculated as follows:

1. Members with claims in the 8 quarters preceding 12/31 of the current year will be charged based on the average deductible for the quarters (not counting any quarters with no claim activity).
2. Members with no claims in the 8 quarters preceding 12/31 of the current year will be charged for 2 months of expected losses within the deductible layer, with a minimum charge of \$100.

#### **Credibility Weighting**

Credibility weighting is a way of measuring how much reliance should be put on an individual member's own loss experience. Part of calculating premium is forecasting the amount of losses the members will have in the year. Larger members have more employees, which results in more claims, which provides more data to predict with. Smaller members have fewer employees, less claims, and less data, and as a result, less reliance should be placed on their own experience to predict the future.

A member's size will factor into the premium calculation with the smallest members having their premium based 10% on their own experience and the largest members having their premium based 75% on their own experience. The majority of the members will fall somewhere within the 10% - 75% range, based on their size relative to the rest of the group.

#### **Rating Model**

Members will have Experience Modifiers (Ex Mods) calculated and applied to the premium for the rating layer. The model uses 7 years of loss data and 7 years of payroll data to calculate a loss rate per \$100 of payroll for each member. The individual loss rate is then divided by the average loss rate for the group to determine an Ex Mod. The Ex Mod is multiplied by a credibility factor to adjust for an individual member's size relative to the rest of the group. The adjusted Ex Mod is expressed in the form of a percentage. If the percentage is less than 100%, that means the entity's loss experience is better than average, and they will receive a credit in the premium allocation. If the percentage is greater than 100%, that means the entity's loss experience is worse than average, and they will receive a corresponding surcharge in the premium allocation.



### **\$1,000,000 to \$5,000,000 Layer**

A premium surcharge will be applied to the rated premium for this layer if the member has a significant loss ratio and a frequency of claims valued at more than \$1,000,000 (or the member's SIR, whichever is higher) in the 7 years of loss experience. The table below illustrates the percentage the premium for the layer will be increased.

# of Claims xs \$1M	Loss Ratio for \$1M - \$5M Layer				
	0% to 50%	50% to 74%	75% to 99%	100% to 249%	More than 250%
1	0%	0%	0%	0%	0%
2	2.5%	2.5%	5%	10%	15%
3	5%	7.5%	10%	15%	20%
4	10%	12.5%	15%	20%	25%
5	15%	17.5%	20%	25%	30%

Any premium collected through a surcharge on this layer will be applied as a credit to premium for members with no claims over \$1,000,000. The credits will be allocated to members based on their share of premium in the layer.

### **Layers In Excess of the Pool Layer**

The premium layers excess of the pool are allocated based on exposure. To provide additional equity to this layer and recognize the impact of large losses on the renewal pricing, surcharges will be applied to the total cost of each layer based on the number of claims above a set threshold. Staff will consult with Alliant annually to determine if the loss thresholds remain appropriate and advise the Committee to amend this policy, as necessary.

A surcharge will be applied to the layers \$5M xs of \$5M for any claims over \$2,500,000 and a surcharge will be applied to the \$15M xs \$10M layers for any claims over \$7,500,000 in the last 10 years. These thresholds were chosen based on Alliant's recommendation, based on large losses evaluated by the reinsurance carrier underwriters. The surcharge for each layer will increase as the number of claims increases as illustrated in the table below.

Number of Claims Exceeding Excess Loss Thresholds	\$5M xs \$5M Layer Loss Surcharge \$2.5M Claim Threshold	\$15M xs \$10M Layer Loss Surcharge \$7.5M Claim Threshold	Loss Surcharge Cap as a Percentage of Total Premium
1	25%	15%	5%
2	35%	25%	10%
3 or more	45%	35%	15%



The total surcharge will be subject to a cap based on percent of total premium, determined by the number of losses exceeding the lower loss threshold.

To prevent adverse selection and allow for premium relief to members with good loss history, the Underwriting Committee will make an annual decision to determine how much of the excess loss surcharge should be retained by the Program or reallocated back to the members with a better loss history . The reallocated surcharge premium, if any, will be provided as a credit to premium for members who do not have any claims that generate an excess loss surcharge and have an overall loss ratio 50% or less for SIR to \$25,000,000. The credits will be allocated to members based on their share of premium in the \$5M - \$25M layer.