A Loss-Based Methodology for the Allocation of Insurance Costs To Individual Operational Units Within an Organization.

"Putting the Cost of Risk on the Bottom-Line, Where it belongs"

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Effective safety management programs usually have several goals which may include:

- **Minimizing injuries and illnesses to the company's employees and/or customers**
- **Maintaining a positive public image**
- **Maintaining regulatory compliance**
- **Minimizing organizational cost of risk (accidents, insurance, and the loss-control function)**
- **Pre-planning to minimize the impact perils that the organization may face**

Many Safety Directors feel that they have difficulty in gaining management's unwavering support to the safety program goals, which elicit comments like….

"When push comes to shove, safety goes out the window"
"If we had top management support, we could do so much more to reduce injuries"
"Management talks safety, but they don't really support it when it counts"
"All management cares about is production, production, production"
"'Get it out the door, and if you have time do it safely' is our company's motto!"

The purpose of this paper is to outline one tool that will help the safety professional or risk manager put safety performance on the bottom-line. Since operational managers are most often evaluated on their performance by the performance of the bottom-line, it makes good sense to integrate the cost of accidents into a unit's P&L. Consequently, the manager is evaluated on his or her total performance, *including loss control performance* **within their unit. This method removes the barrier most safety directors face when trying to institute an effective evaluation system that is not integrated with the profit-loss line. This approach, unlike accident rate statistics or other "safety" measures, is financially relevant.**

"Jim's department had a higher than average accident rate this year, but he doubled his productivity." Performance evaluations like this clearly read to the manager that production is the most important aspect of the evaluation.

Some organizations in an attempt to recognize the bottom-line impact of accidents, directly allocate losses to an operational unit year-to-year. While this approach likely has an impact, it also has several flaws.

- **It ignores the law of large numbers. That is, a smaller department or unit may be more significantly impacted by cost in one year and may not have another loss for many years. A larger department is more likely to have less variation in its losses and thus they are much more predictable as a budgeting element.**

- **It removes the concept of insurance, which is to spread the risk among participating units to reduce the impact to any one specific unit at any one time. It also does not provide any upper limit of exposure or "cap".**

- **It fails to recognize that units with no losses should still incur some base cost to cover the cost of insurance. Even self-insured programs have administrative costs that must be addressed by the organization.**

- **It can be discouraging to a manager who puts forth significant efforts in loss-control, but incurs a significant accident which was not easily controlled or foreseen in a particular year.**

- **It fails to take into account long-term performance.**

The following methodology avoids all of these disadvantages and is embodied in an easy- to-use spreadsheet called the Allocator™ developed by High Safety Consulting Services, Ltd. This allocation system has been in use by High Industries, Inc. since 1995 for the allocation of workers' compensation premiums to individual divisions and affiliates of the organization. Its application can easily be extended to fire, general liability, and fleet insurance allocations as well.

The basis for the allocation is the actual losses for three years of the unit and the standard allocated cost of insurance, usually based on payroll classifications. The user can define the losses in several ways:

- **Incurred Plus Reserved**
- **Incurred plus Reserved plus Claim Development Projections**
- **Incurred Only**
- **Projected**
- **Indirect and Direct Costs**

The user also needs to define the loss years, which could include:

- **Current year and two prior**
- **Three prior completed years**
- **Three years, two years prior to current**

The payroll allocated cost is based on the payroll classifications of the various operational units or departments. This information is often available from the insurance carrier or broker and is used to calculate the organization's standard premium.

Other methods for allocation of insurance cost could include number of employees in an operational unit, sales dollars generated from an operational unit, or other methods considering a units' risk exposure to the organization. (i.e., square footage for fire insurance * loading / risk factor).

The Allocator™ calculates individual Loss Adjustment Ratios (L..A.R.) for each unit. The LAR, like a EMR (Experience Modification Rating) is a ratio that determines how well the unit is performing against their allocated costs. A ratio greater than 1.0 indicates that the unit is negatively impacting the organization's insurance cost. A LAR less than 1.0 indicated the unit is positively impacting the organizations' insurance cost.

The LAR is then multiplied by the standard allocation to obtain a loss-sensitive allocation amount for the particular unit.

In order to add some control to the variation in the allocations using this method, a minimum and maximum factor are applied. The minimum and maximum invoke the concept of insurance and allow the individual units to know the range of liability they may incur in insurance cost. Where they fall in this range is dictated by the how well they control the LAR. Users of the Allocator™ can input minimum and maximum factors that will automatically perform the following calculations.

Comparing the loss-sensitive allocation against the minimum and maximum factors multiplied by the payroll allocated amount identifies those units over their maximum and under the minimum. Those units' exceeding their maximum are capped at the maximum. The excess allocation is placed into an accumulator. Those units' under their minimum are brought up to the minimum with the difference subtracted from the accumulator. The final accumulator value represents the money that must be re-allocated to the units which have not reached their maximum, as a result of those units who have exceeded their maximum allocation. More simply stated, the accumulator value is the aggregate amount of money the other departments must pay-in as a result of their sister departments' poor performance.

High Industries, Inc. has decided to use a .5 minimum factor and a 1.9 maximum factor for their allocations. That is, everyone will pay 50% of their payroll allocated amount even if no losses are incurred; recognizing that some insurance cost is still incurred when no losses are experienced. Conversely, if a unit has a LAR exceeding 1.9, their cost will be capped and the excess expense is allocated to those business units who have not yet exceeded their maximum in the same percentages as their loss-sensitive premium allocation.

This aspect of the allocation invokes an element of peer pressure by causing the other units to help bear the expense of a poor performer.

This "pressure" is highlighted by easily understood graphical outputs. This includes a bar graph comparing the LAR's of the units; a high-low graph demonstrating the minimum and maximums for each organization and plotting current performance; and a chart that identifies much of the same information including the total amount re-allocated to other units as the result of the "poor" performers.

The Allocator™ performs all of the allocation tasks automatically and requires relatively little input and effort on behalf of the user.

This system can quickly draw the attention of a senior manager and once implemented, demands that loss-control be addressed as a business priority, in-line with quality and productivity. By integrating the insurance cost into the unit's financial performance, this method, truly puts the cost of risk on the bottom-line, where it belongs!