Gallagher

Insurance | Risk Management | Consulting

ACTUARIAL SERVICES AND SOLUTIONS FOR THE PUBLIC SECTOR

Increased pressure on budgets and the developing risk landscape across the public sector will change an organisation's risk financing and insurance requirements. Actuarial modelling can support your decision-making process and ensure scarce funds are used effectively to support front line services.

Gallagher is one of the leading providers of risk and insurance services to organisations delivering public services in the UK, and we understand the environment in which these organisations operate. We conduct self-insurance fund reviews for our public sector clients to estimate the ultimate cost of self-insured losses, and we provide advice on specialist insurance programmes, risk tolerance and risk appetite.

Gallagher's in-house actuarial capabilities

We are in a unique position within the public sector insurance broking world, where we employ a full-time qualified member of the Institute and Faculty of Actuaries (IFoA) as part of our core service team. This level of qualification means that any actuarial work undertaken by Gallagher is performed and signed off by a professionally qualified Fellow of the Institute of Actuaries. Our reports are therefore produced in accordance with the insurance Technical Actuarial Standard, as defined in the Scope & Authority of Technical Standards of the Board for Actuarial Standards (BAS) and/or any other BAS, as may be deemed relevant.

Access to this specialist resource enables us to provide your organisation with essential analytical work, risk financing advice and recommendations for alternatives to insurance as a mechanism for risk transfer, such as managed deductible funds.

SELF-INSURANCE FUND REVIEWS

Undertaking regular fund reviews can be essential as it assists in recommending the appropriate level of provisions and reserves in the context of self-insured layers of risk—especially where an aggregate stop-loss has the potential to be breached.

The key objective of the fund review is to use actuarial forecasting techniques to estimate the ultimate cost of self-insured losses.

Gallagher has carried out around 300 fund reviews for clients over the past 10 years for County, Metropolitan Borough, London Borough, City and District Councils, plus Police, Fire and Port Authorities, including around 45 fund reviews in the past 12 months. This experience has allowed us to build aggregated data and loss curves for specific types of public sector clients in order to sense check the loss forecasts of individual clients against sector forecasts.

The output from our reports is therefore robust and will enable organisations to maintain prudent self-insurance arrangements to cover existing and future self-insured liabilities.

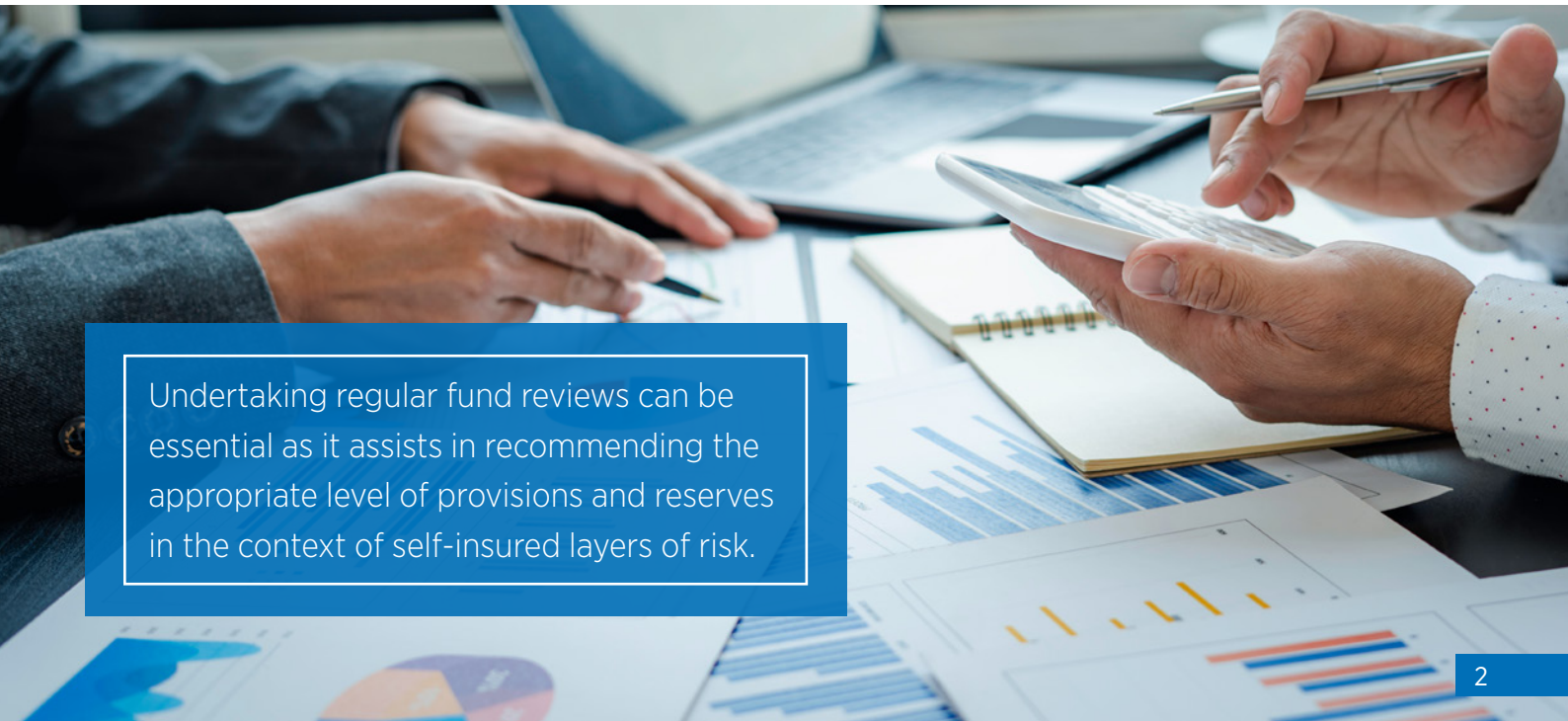
Our actuarial review of your self-insurance provision will, therefore:

1. Recommend insurance provisions and reserves as at an agreed date and compare this with current assets of the Self-Insurance Provision (SIP)—usually referred to in annual statements as the 'insurance fund'.
2. Suggest, as a memo item, the appropriate level of injections/internal premiums to support future self-insurance, i.e., claims within your deductible for dates of loss after the balance sheet at an agreed date, assuming unchanged deductibles. We would usually project the SIP requirements three years into the future for the purposes of budgeting and planning.
3. Analyse the potential impact to the fund of increased levels of deductibles.

The benefits

An independent actuarial fund review delivers:

- An independent view of the forecast ultimate fund exposure and the identification of appropriate levels of provision today for legacy policy years.
- Suggestions as to reserves for a range of emerging, or potential, exposures to the fund.
- A range of scenarios for consideration regarding injection into the fund for the next policy year (and the next two or three policy years).
- A check of actual recoveries achieved from insurers above each and every loss, and aggregate stop limits versus the calculated recoveries due.
- A review looking at where aggregate stop-losses have been—or are predicted to be—breached (single-year or multiyear aggregate).
- Commentary on variability and sensitivity of forecasts.



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- A cash flow projection for both reported claims, and claims incurred but not reported as at the review date.
- Comparisons of liabilities and assets for three successive policy years for budgeting and planning purposes, allowing for inflation, changes in exposure and observable trends.
- A forecast of retained claims costs for the next three policy years to assist in budget planning and funding strategies.
- An overview of the latest situation for Municipal Mutual Insurance (MMI) and an assessment of potential future levy exposure, now that the Scheme of Arrangement has been formally triggered and post the collection of 25% total levy.
- Commentary on any specific public sector or general issues—including emerging risks—that are likely to affect the recommended level of funding.

The fund review process leads naturally into the insurance programme optimisation process. It is therefore most beneficial that these two processes are engaged at the same time to be the most cost-effective—especially as the same claims data is used.

Our approach

A consolidated claims database is created from loss runs received for each risk and policy year where there is an involvement of the self-insurance fund. A model is then constructed by tying the matrix of deductibles to the claims database to determine the proportion of each claim that falls within non-ranking and ranking layers, and additionally the proportion of each claim that falls due to overlying insurers, i.e., the insurer providing cover above the self-insured retention.

Development factors are calculated from triangulations or benchmarks, at least for the liability risks. By applying these development factors, a forecast ultimate claims figure is predicted both in total, and then split between the non-ranking, ranking and insurer risk areas.

Our approach is then to forecast losses for the next policy year, which sometimes requires a second ‘as if’ model to be created, if there have been material changes in fund limits and/or the range of in-house services.

Core data required for a fund review

The ideal data for carrying out a fund review includes:

- Claim runs for each risk to be reviewed for each policy year where the client has had a meaningful level of deductible/excess.
- Confirmation of deductibles (each and every loss and aggregate stop-losses) for each risk and for each policy year, and identity of insurer(s) involved.
- Details of claims handling arrangements.
- Details of exposure data (wage roll, vehicle numbers, property sums insured) for recent years.
- Details of any changes in the risk profile of the organisation to enable us to make appropriate adjustments before forecasting forward.
- Triangulations for liability and motor risks.

While it is desirable to work with a client’s specific data provided to us, Gallagher uses generic data in some limited areas in order to enhance the assumptions using aggregated ‘industry data’ for a similar type of organisation, especially when the organisation’s data is sparse.

INSURANCE PROGRAMME OPTIMISATION

All large public sector organisations already hold risk management strategies, but not all will have a clear risk financing strategy. We can work with you to develop this document, which would achieve sign-off at a senior level. The aim of the document is to highlight the various risk financing options available to the organisation and your methodology for selecting your current basis, as well as when you would consider the alternatives available. This document provides you with evidence of why you have chosen your programme structure.

The benefits

Using the data that is provided for the fund review project, we are able to apply an analytical approach where probabilistic modelling is used to identify the optimum levels of self-retention in order to develop the most appropriate and cost-efficient insurance solutions for the organisation, which may help to reduce your overall total cost of risk as a combination of self-insured claims plus external premium and associated programme costs.

This actuarial process identifies tolerance to risk. In identifying the optimum risk retention level we can rationalise the need for insurance cover on risks which may fall within those levels. This step has traditionally been conducted subjectively, but by using a more analytical approach it will enable you to make decisions with a greater degree of certainty.

Not all organisations require this level of sophistication but for those that do, it provides evidence to support and inform the decision they may make regarding self-insurance and deductible setting. In addition, it provides the metric by which strategic and operational risk can be measured during any risk review process that the authority may have in place.

Our approach

Gallagher can undertake a thorough review of your organisation's existing insurance programme, ensuring that any re-tendering is conducted on the most cost-effective structure.

Our approach consists of two initial phases:

Phase 1: Data collection

At this initial stage, we analyse the following data:

- Loss data: Authenticated ground-up loss history and a full claims list in order to develop the risk financing structure options for your organisation to consider.
- Influences on loss data: Functions that have been contracted out or have been taken back in-house over the same period as the loss history.

This will enable us to develop projections going forwards, and develop the most cost-efficient risk financing structure options. Risk exposure data—such as buildings sums insured, contents, equipment, motor vehicle numbers by type, employee numbers (FTE), salaries and wages figures, etc.—is required over the same period as the loss history. This will enable us to accurately assess losses in ratio to the exposure data, which will have varied over the period.

- Insurance cover: Full details of existing insurance programmes, together with policy wordings and schedules. We review policy cover and the balance between externally insured, self-insured and non-insured risks, limits of indemnity, sums insured, premium payments, levels of deductibles and aggregates stops.

Phase 2: Analysis of data, programme design and design of risk

Once the data has been collected, we then analyse the programme structure to provide you with an overview of the adequacy and appropriateness of cover, and to recommend cost-effective risk financing programme options.

This process includes analysis of data by risk, service area and location, to identify any trends in causation, claims costs, claims numbers and claims types—enabling us to develop risk improvement plans in good time to dovetail into the tender process as required.

Our programme optimisation report will include:

- Appropriate level of deductible and aggregate stop.
- Estimate of insurance premiums based on historical claims data and actuarial assumptions.
- Recommendations for limits of indemnity.
- Identification of the risk management support available to help make necessary improvements.
- Consideration of contingency cover to encompass any minor functions, assets or costs which could become apparent as a result of the programme being placed.

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Programme options will include the relative merits of cross-class insurance programmes compared to the current structure of monoline insurance policies. This can result in lower premium costs, although it is likely that the largest benefit would be from an improvement in self-insured costs.

In addition, we review current claims handling arrangements and will work to establish your organisation's appetite, resources and desire to change current processes in order to undertake a greater or lesser amount of work in-house. This longer-term objective can be incorporated into tender documents, either as a compulsory or optional insurer requirement.

After this work has been carried out for you, we anticipate future workloads to be lower as the major 'data-crunching' work has been done, and we understand your methodologies. Therefore, annual reviews can be undertaken quickly and efficiently.

MEET JAMES KEOUGH - GALLAGHER'S PUBLIC SECTOR RISK ACTUARY

James Keough is our dedicated Public Sector Risk Actuary, located within Gallagher Risk Analytics and Insights in our London head office. He has considerable expertise in the provision and reporting of actuarial analysis, with extensive experience in commercial insurance.

James has specialist experience in estimation of claims reserves, the pricing of insurance risks and the structuring of appropriate financial risk management solutions for public sector and corporate entities across multiple classes of insurance.

At Gallagher, James is a non-life actuary and will provide actuarial advice and support on the following areas:

- Using actuarial forecasting techniques to self-insurance fund reviews.
- Providing advice on the design of local authority insurance programmes.
- Providing commentary on risk tolerance and risk appetite.

James has worked in roles across different countries and sectors and, prior to joining Gallagher, he spent several years working in the UK Government Actuary's Department on some of the country's most high-profile, self-funded risk pooling solutions.

James has been a fully-qualified member of the Institute and Faculty of Actuaries (IFoA) since 2012, and has been an active member of the profession, including through engagement in the Institute of Actuaries' Measuring Uncertainty Qualitatively working party, and presenting at professional events such as GIRO (the IFoA's annual general conference).

Would you like to talk?

For more information, please contact:

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