

A PUBLIC POLICY OVERVIEW

**An Overview for P/C Insurers’
Audit Committees:
Effective Use of Actuarial
Loss Reserve Expertise**

September 2020

Developed by the
Committee on Property and Liability
Financial Reporting



AMERICAN ACADEMY *of* ACTUARIES

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This document¹ is intended to provide members of boards of directors and audit committees of property/casualty insurance companies with a more complete understanding of the information and assistance that actuarial professionals can provide as such board/committee members perform their financial reporting oversight roles.

Summary

The reliability of financial statements for property/casualty insurance companies depends significantly on the accuracy of the recorded liabilities for unpaid claims, commonly referred to as “loss reserves.” Unlike most balance-sheet liabilities common to other industries, the loss reserves of a property/casualty insurer are estimates at a point in time, not known amounts. These estimates are generally based on the work of actuaries, which has a great amount of uncertainty associated with estimating the occurrence, timing, and ultimate cost to settle and close all claims.

Loss reserve estimates are subject to significant uncertainties. Understanding the uncertainties and potential range of variation is important in assessing the reasonableness of the reserve estimates and therefore the company’s financial position. At times, property/casualty insurers have announced significant loss reserve increases for reasons that include but are not limited to: high rates of growth, entry into new lines of business (where the company did not have preexisting experience), the impact of major court rulings and new regulations or laws (such as reviver statutes), unanticipated increases in loss trends (e.g., sustained higher trends in medical costs and utilization), and emerging mass torts (e.g., opioids abuse, and talc). For some companies, such loss reserve increases are large enough to impair their financial condition; for others, reported profitability is affected. Material assumption improvements may arise because of favorable medical inflationary trends relative to prior long-term averages on lines such as workers’ compensation, as one example.

Property/casualty insurance companies’ boards of directors and audit committees have a fiduciary responsibility in addition to regulators’ expectation for overseeing the financial reporting process. Because loss reserves are crucial to property/casualty insurers’ financial statements, audit committees and boards of directors are advised to have direct discussions

¹ The considerations contained herein are based on broad generalizations and are not intended to describe or establish actuarial standards of practice or requirements. The information presented is intended to apply to a large percentage of property/casualty insurers. Within the property/casualty insurance industry, there is wide diversity of actuarial practice. Each company and each situation must be evaluated on the basis of its own circumstances.

This document is offered primarily for members of audit committees and boards of directors of property/casualty insurers subject to regulation by the members of the National Association of Insurance Commissioners (NAIC). The NAIC annually mandates requirements for loss reserve opinions. While most of the considerations apply as well to other insurance entities, including non-U.S. insurance companies, captive insurance companies, corporate self-insurers, etc., some of the references contained herein are specific to the NAIC’s requirements regarding the recording of loss reserves in insurers’ financial statements.

For most property/casualty companies, loss reserves are the largest and most uncertain balance sheet liability. However, for companies that specialize in certain long-duration contracts such as auto warranty, loss reserves are minimal, and the unearned premium reserve is a much larger and more uncertain balance sheet liability. For these specialty companies, COPLFR believes all comments in this practice note about loss reserves would generally apply equally to unearned premium reserves.

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with their actuarial professionals to obtain a better understanding of the loss reserve estimation process and the policies related to that process. These discussions, via both periodic presentations and special workshops, help to increase appreciation of members of boards of directors and audit committees for the risks and uncertainties inherent in loss reserve estimates.

Three fundamental requirements for boards of directors and audit committees to meet their fiduciary responsibilities with respect to loss reserves include:

- 1) Appointing an actuary who is appropriately qualified to opine on the company's loss reserves;
- 2) Understanding the basis for management's best estimate of loss reserves in relation to the Appointed Actuary's estimate of unpaid claims; and
- 3) Understanding the drivers of risk and uncertainty in the reserves from the perspective of the Appointed Actuary.

There are numerous sources of information available to help boards and audit committees meet these requirements. However, in order for boards and audit committees to understand the Appointed Actuary's perspective, there is no substitute for direct discussion on at least an annual basis.

This document addresses each of these three items. It begins with a background on loss reserves and the roles of actuaries in determining them, followed by a discussion of oversight function considerations related to those reserves.

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Background on Loss Reserves and Roles of Actuaries

Property/Casualty Insurance Loss Reserves

A property/casualty insurance policy is a promise to pay claims related to covered, or insured, events. Usually, covered events take place during the time the policy is in effect (e.g., auto accident, injury, or loss of property as a result of a loss covered under the terms of the policy). In some cases, the insurance company is not presented with a claim or demand for payment by the insured or a third party until years after the covered event has occurred. It can take many years for a claim, once made, to be investigated and settled.

When these claims are eventually settled, the insurance company must have the resources to pay the claim in accordance with the policy provisions. Therefore, until all claims are resolved and the related amounts are paid, insurance accounting rules require the insurer to establish a “loss reserve” as a liability on the company’s balance sheet. (These loss reserves include a provision for loss adjustment expenses² (LAE) or settlement costs.) The loss reserve is based on the company management’s best estimate of the amounts that will be paid in the future for losses and loss adjustment expenses related to claims arising from past events (i.e., events on or prior to the accounting “as of” date), whether or not all claims have been reported at that time.

The duration and the uncertainty of the claims-settlement process necessitate that loss reserves be based on estimates. A property/casualty insurer’s loss reserves are typically the company’s largest balance-sheet liability by a wide margin and its greatest source of financial statement uncertainty. Loss reserves can be difficult to estimate, and the amounts ultimately paid may be materially less than, or greater than, amounts previously estimated.

A conclusion that prior years’ loss reserves need to be revised, based on current facts and circumstances, affects both the company’s reported surplus and its income during the period in which that conclusion is reached. As such, changes in loss reserve estimates have consequences both for the financial condition of the company and for its perceived ongoing operating profitability. It is therefore important that loss reserves be set as accurately as possible, given the information available at the time.

Role of Actuaries in the Reserving Process

Actuaries typically play an integral role in the loss reserving process. The actuarial role is generally provided by one or more of the following sources:

- *Internal actuaries*—Many insurance companies employ actuaries to aid in setting loss reserves. Typically, an internal actuary provides periodic analyses of loss reserves and assists management in understanding underlying claim trends and the judgments and

² LAE are discussed in greater detail in Actuarial Standard of Practice No. 43, *Property/Casualty Unpaid Claim Estimates*, promulgated by the Actuarial Standards Board (ASB), which can be found at http://www.actuarialstandardsboard.org/pdf/asops/asop043_159.pdf.

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assumptions used in the analyses, and describes any material risk factors that might affect the loss reserves. The internal actuary may also lead presentations regarding estimated loss reserves to boards of directors and audit committees.

- *Audit firm actuaries*—Often, insurance companies’ external audit firms will assign actuaries to the audit engagement teams. The audit firms’ actuaries evaluate the reasonableness of the recorded amounts in the context of the financial statements as a whole. As part of the audit testing, the auditing actuary may develop an alternative point estimate and/or “range of reasonable estimates”³ of the loss reserves. This range is narrower than a range of possible outcomes and is intended to provide an independent view of whether the recorded loss reserve amounts are reasonable in light of the available information, in conjunction with an audit of the insurance entity. The auditor’s range is not a range that management would rely on to record its best estimate.
- *Consulting actuaries*—Consulting actuaries may be engaged to take on the actuarial role in setting loss reserves (as described in the *Internal Actuaries* discussion above). Some companies also engage third-party actuarial consultants to perform independent analyses of the loss reserves. Such analyses can encompass the entire claim population or can be limited to some unusual or especially difficult-to-estimate portion of the exposures. The detailed analyses performed by consulting actuaries often include independent methodologies, judgments, and assumptions.

The boards of directors of all U.S.-domiciled insurers are required to appoint a qualified actuary, or “Appointed Actuary,” to render an opinion on the recorded loss reserves for the regulatory (or “statutory”) year-end financial statements. The Appointed Actuary could be either an internal actuary, a consulting actuary, or an audit firm actuary acting as a consultant.

The actuary providing the opinion must meet the NAIC definition of “Qualified Actuary”⁴ The actuarial opinion follows specifications described by the NAIC, and is contained in a formal, public document called the *P/C Statement of Actuarial Opinion* (SAO).⁵ The SAO is an important tool used by insurance regulators to assess insurer solvency. In addition to the actuarial opinion on the reasonableness of the recorded loss reserves, the SAO contains informative disclosures regarding the factors affecting the variability of the loss reserves and the Appointed Actuary’s view as to whether there is a significant risk of material adverse deviation⁶ from the recorded estimate. The significant risk factors along with the assessment of risk of material adverse deviation are important items for boards of directors and audit

³ The term “range of reasonable estimates” is defined and described later in the section labeled “Loss Reserve Variability and Uncertainty.” The term is also discussed in a 2008 Academy paper, [P/C Actuarial Communication on Reserves Ranges and Variability of Unpaid Claim Estimates](#).

⁴ Effective with the 12-2019 Opinion year, the NAIC revised the definition of “Qualified Actuary.”

⁵ In the United States, the SAO is prepared at the legal entity level, i.e., for each individual insurance company within a group rather than for the consolidated group of companies. (See NAIC Instructions or NAIC’s Regulatory Guidance for Annual Statement Instructions for Property/Casualty Actuarial Opinions, available at http://www.naic.org/committees_c_catf.htm. https://content.naic.org/cmte_c_catf.htm. See Appendix for more notes and links to sources for current requirements.

⁶ The SAO instructions require the Appointed Actuary to disclose their materiality standard.

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committees to understand and discuss with the Appointed Actuary.

Since 2019, the Appointed Actuary must submit documentation of their qualification to the company's board for review.⁷ Boards are required to document the company's review the qualification documentation. The NAIC requirements allow boards and actuaries to structure this process in a manner appropriate for the company's circumstances.

Oversight Function Considerations—Loss Reserve Estimates

The following are some of the major considerations for those providing an oversight function on recorded loss reserves.

- Unavoidable use of judgment—input from multiple disciplines
- How actuarial estimates are considered
- Extensive public (and non-public) disclosure
- Variability and uncertainty in the loss reserves
- Quality of data and the impact on loss reserve uncertainty
- Context of the reserves
- Impact and collectability of ceded reinsurance
- Governance (control) structure around the company's loss reserving process

Unavoidable Use of Judgment—Input From Multiple Disciplines

As mentioned above, loss reserves are estimates of the ultimate amounts payable and are not known with certainty. The amounts that will eventually be paid will be the result of numerous investigations, settlement negotiations, jury trials, court decisions, contract interpretations, and other items not knowable with certainty in advance. Hence the use of judgment in the estimation process is inevitable.

The basis for these estimates is “past experience adjusted for current trends, and any other factors that would modify past experience.”⁸ This estimation process is often led by actuaries and requires the input of others from multiple disciplines. Those providing input typically include the claims department, legal counsel, underwriting, and relevant business units, with the final decision on the estimate to book being the responsibility of company management. That said, actuarial input is vital to management's process, as the actuarial estimates typically consider and incorporate input from all involved disciplines.

Members of audit committees and boards of directors benefit from understanding the significant judgments and assumptions incorporated into the loss reserve estimates that are made by management and by the actuary. The significance of this understanding can extend beyond loss reserves, as the findings or observations that inform those judgments may also

⁷ See Appendix for resources and links to source websites to verify current requirements.

⁸ 2020 NAIC Accounting Practices & Procedures Manual – Statement of Statutory Accounting Practices (SSAP) No. 55, paragraph 10.

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provide valuable input to decisions regarding pricing or marketing plans.

How Actuarial Estimates Are Considered

Actuarial estimates are not necessarily adopted by management as the booked loss reserves, as company management may record an amount that differs from the actuary's estimate. In such cases, members of audit committees and boards of directors should understand the differences between the actuarial and management estimates. In particular, members of audit committees and boards of directors may request management to provide clarity through answers to the following questions:⁹

- Does management's process typically result in differences between the actuary's estimates and the recorded amounts, and, if so, why?
- How do management's estimates compare to a range of estimates that may be developed by the actuary? How has management's position within the actuarial range changed over time and why?
- Has due diligence been performed to identify the potential impact, if any, on the loss reserve estimates of any significant recent changes in the company's operations (e.g., claims, underwriting, reinsurance)?
- Has the impact of changes in the market or economic activity been properly factored into the analysis with consideration specific to line of business?
- If such changes exist, either internal or external to the company, what adjustments or other considerations are made (by management and/or the actuary) to reflect the potential impact of the changes on the estimates of loss reserves?
- How have the estimates of loss reserves changed over time? Have the reserve estimates developed adversely or favorably, and if so, does this indicate some potential bias in the process? Is there a history of the accuracy of the estimates that can be reviewed that could indicate potential biases in methodologies?

Extensive Public and Non-Public Disclosures

The loss reserves recorded by a U.S. property/casualty insurer are subject to extensive public and non-public disclosure, allowing many parties to view and potentially form their own view of the insurer's estimates.

Each publicly traded U.S. property/casualty insurance company in its annual Securities and Exchange Commission (SEC) 10-K filing incorporates Financial Accounting Standards Board (FASB) Accounting Standards Update (ASU) 2015-09 loss reserve development disclosures. These disclosures, outlined in the FASB's ASU, require annual disaggregated claim development by accident year evaluated as of a number of year-end points representing the period over which claims typically remain open. Additional disclosure items along with reconciliations are required (effective with 2016 year-end reporting for publicly traded companies). These triangles, referred to as disaggregated, represent a subgrouping of the

⁹ Note that these sample questions are not an exhaustive list of questions that could be asked.

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insurer's overall business. These blocks of business are uniquely defined by the company (such as line of business) and includes the most recent estimate of those liabilities.¹⁰

Additional (largely) qualitative disclosures are also required in the SEC 10-K Filing regarding loss reserves and related risk factors. These disclosures include information on the reasonably likely variation in the insurer's loss reserves and the effect of that variation on the financial condition of the company. The disclosures also contain explanation of the source of any recent changes in prior loss reserve estimates. In addition to the disclosures within the SEC filings, many public companies issue press releases and hold investor conference calls that incorporate information related to loss reserves.

For U.S. property/casualty insurers, similar loss development information is provided in Schedule P of the NAIC Statutory Annual Statement, which is filed by each individual insurance company for regulatory purposes. Schedule P shows the annual development of ultimate losses and defense and cost containment expense (DCC) for each of the past 10 coverage years (often referred to as "accident years") and by Schedule P lines of business. Note that Statutory Schedule P defined lines may be different from the blocks of business chosen to be reported in the Form 10-K GAAP filing.

Both the SEC disclosures and the NAIC Schedule P filings provide up to 10 years of history showing the accuracy of management's loss reserve decisions over time. These schedules are used by analysts and other users¹¹ to assess the reliability of a company's current reserving practices and the accuracy of the balance sheet estimates relative to those of its competitors.

Members of audit committees and boards of directors can request the company actuary provide the following information with regard to these disclosures:

- The specific reasons for past years' revisions to loss reserve estimates, including the lines of business, programs, and years affected.
- A comparison to industry trends for the same coverages during the same period.
- A comparison to the reserve activity of the company's closest competitors for the same coverages during the same period.
- A comparison to the loss ratios of the company's closest competitors for the same coverages for the same accident years.

Besides the public SAO mentioned above, in which the Appointed Actuary is required, by state law or regulation,¹² to opine on the reasonableness of recorded loss reserves, the Appointed Actuary is also required to provide a confidential, non-public disclosure (the

¹⁰ See SEC guidance at <https://www.sec.gov/corpfin/cf-manual/topic-11> on short-duration contract disclosures under U.S. GAAP.

¹¹ The list of other users includes the Internal Revenue Service (IRS). The Schedule P filings are the basis for the loss reserve tax deduction under current tax losses, with the IRS and tax courts also making use of actuarial analyses in evaluating the reasonableness of these deductions. See *Acuity v. IRS* tax court decision, "T.C. Memo. 2013-209."

¹² These state laws or regulations are based on an NAIC model law on the topic of P/C insurer loss reserve opinions by appointed actuaries.

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Actuarial Opinion Summary, or AOS) to insurance regulators every year. This confidential document discloses the actuary's estimate or range of unpaid claim estimates relative to management's recorded loss reserve estimates, and, where applicable, the causes of continued significant adverse reserve development. The Appointed Actuary documents the analysis underlying the SAO and AOS in the detailed Actuarial Report,¹³ which is made available to the insurance regulator upon request. The P/C Actuarial Opinion and Actuarial Report must be made available to the board of directors. The Appointed Actuary must also submit a qualification document annually to the board for its review. This was a new NAIC requirement beginning with SAOs on year-end 2019 reserves.¹⁴

Large U.S. property/casualty insurers¹⁵ are required by the NAIC to conduct an Own Risk and Solvency Assessment (ORSA). This non-public analysis is submitted to the domiciliary state insurance department. Loss reserves are one of the key risk areas which are addressed in the ORSA. For those companies which are required to conduct an ORSA, members of audit committees may wish to review the company's ensuing ORSA report.

Loss Reserve Variability and Uncertainty

The management of a U.S. property/casualty insurer is required to include an analysis of variability and uncertainty in the loss reserve estimation process.¹⁶ A qualified actuary can provide insights into the potential for this variability and uncertainty.

Estimating loss reserves involves predicting future loss payments based on historical and current information and knowledge, as well as judgment about future conditions. Actuaries typically employ several methods to estimate loss reserves and may consider multiple reasonable assumptions regarding future conditions when applying the methods. The actuary may develop a "range of reasonable estimates"¹⁷ of loss reserves based on various combinations of these methods and assumptions. This range is typically developed by the Appointed Actuary to assist in creating an opinion on the reasonableness of the recorded loss reserves. The range of reasonable estimates is not intended to be a range of all potential outcomes; rather, it is a narrower range of estimates that the actuary considers to be appropriate for the carried reserve.

While the range of reasonable estimates may encompass multiple reasonable assumptions about future conditions, it typically will not include the possibility of sudden shifts in the

¹³ The Actuarial Report is required and defined by the SAO instructions, and its purpose is to document the SAO findings.

¹⁴ See Appendix for resources and links to source websites to verify current requirements.

¹⁵ The ORSA, as required under the NAIC Risk Management and Own Risk and Solvency Assessment Model Act #505, effective 1/1/2015, applies to any individual U.S. insurer that writes more than \$500 million of annual direct written and assumed premium, and/or insurance groups that collectively write more than \$1 billion of annual direct written and assumed premium.

¹⁶ 2014 NAIC Accounting Practices & Procedures Manual, SSAP No. 55, paragraph 12: "Management ... shall include an analysis of the amount of variability in the estimate."

¹⁷ As pointed out in footnote 3, this term is also discussed in [P/C Actuarial Communication on Reserves Ranges and Variability of Unpaid Claim Estimates](#). ASOP Nos. 36 & 41 discuss reserve range and reasonability.

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statutory, judicial, and economic-reserving environments, nor will it include major unexpected changes in company operations. Nevertheless, such shifts can and do occur.

As part of the actuarial opinion, the actuary reports on events and circumstances that pose significant risks and/or uncertainties to the company and that could, on their own or collectively, result in a material adverse deviation from the carried reserves. Such events and circumstances could be systemic to the company's segment of the insurance industry or particular to the specific company. Historic examples of systemic events and circumstances include changes in the legal environment that led to significant asbestos and environmental losses long after policies had expired; the rapid unexpected inflation that led to mispricing and initial under-reserving in workers' compensation in the late 1990s; and the financial crisis of 2007–2008 that led to a wave of mortgage defaults, resulting in severe stress to the mortgage insurance industry.

More recently, at the time of this publication, we are in the midst of economic stress and uncertainty related to COVID-19. The effects of COVID-19 are very difficult to quantify but boards and audit committees should be asking their appointed actuaries about both direct and ancillary impacts that COVID-19 may have on the unpaid claims estimates.

Systemic changes can be positive as well: Medical professional liability lines, in addition to experiencing rapid loss reserve increases, have also seen rapid decreases in claims costs (neither of which were reflected in the initial reserves).

Examples of significant internal risks include mispricing of a block of business that is not discovered for a period of time or, for smaller companies, the emergence of more than the expected number of large losses. For some companies, particularly very large personal lines carriers, the risk of material adverse deviation in the carried reserves might be remote, while other companies could be subject to reserve deviation risk so great that the difference between the high end of the actuary's range and management's best estimate is material.

Members of audit committees and boards of directors should seek to understand the significant risks that could result in reserve development outside of the current range of estimates, both in terms of their potential magnitude and the actuary's estimation of the likelihood of such events. Strong oversight could include frank discussions of such risks among the parties responsible for estimating and recording the loss reserves with the audit committee or board of directors.

Data Quality and the Impact on Loss Reserve Uncertainty

The actuarial analysis process is heavily dependent upon data quality, which is often determined by each company's systems and processes for collecting, storing, and making available its historical data relative to losses, exposures, and premiums. Due to the evolving data processing environment, some companies have a blend of historical systems that provide the data used by the reserving actuary. In addition, for companies that have undergone a series of mergers in the past, the systems of each of the legacy companies may not be fully

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integrated. Data elements may not have been consistently defined or available. Company managements and actuaries need to work together to define the data elements and then provide the data required for the actuarial evaluation.

The level of controls and granularity of the information around these systems can lead to concerns about the quality of the data used by the actuary and may hamper the ability to perform a detailed review. Limitations posed by less-than-perfect data may introduce new uncertainties to the estimation process and impact the actuary's ability to assess reasonableness.

Even in the absence of these legacy system issues, data quality problems at a company can impact the reliability of the actuary's projections. For this reason, beyond reconciling with Schedule P, the actuary is required to review the data for sufficiency, reasonableness and consistency¹⁸ and determine whether the data is of acceptable quality to perform the analysis. It is recommended that in case the valuation cannot be made by groups of homogenous risk, that the actuary explain the different aggregation.

The board and/or the audit committee may consider asking management and/or its Appointed Actuary about the quality of the data and whether there are limitations on its use and/or reliability for projection purposes. The actuary will have a view related to the degree of uncertainty that any data issues add to the process.

Context of the Reserves

Loss reserving issues and variability can vary drastically across product lines and companies within the insurance industry. Hence, members of audit committees and boards of directors will benefit in their oversight function from being aware of the context underlying the reserve estimates, including the company's areas of concentration, recent industry trends in those areas, and material developments within the company that might affect the estimation process. Knowing this context can help generate more probing questions of management and the Appointed Actuary regarding the recorded loss reserve and associated risks.

The following provides additional information that the board or the audit committee may wish to obtain from company management responsible for establishing the recorded reserve and/or the Appointed Actuary:

- The breakdown of the company's loss reserves by coverage or product line.
- Recent industry trends in the company's products/lines (with regard to profitability, underwriting, claims, and reserving issues) and how these have been contemplated in the current reserve estimates.
- Recent changes in the company's experience in those lines vis-à-vis profitability, claim handling, or reserve development, and the drivers of those changes.
- Significant risks and uncertainties inherent in the company's reserves for those lines.

¹⁸ This is a requirement of both Actuarial Standard of Practice No. 23, *Data Quality*, as well as the SAO instructions.

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- Whether competitors are experiencing the same or different/additional risk factors, recent changes, etc.
- The causes of recent changes in reserve estimates (favorable or unfavorable) and whether competitors have noted similar causes.
- Questions about the reserves raised by major outside stakeholders, including regulators, rating agencies, and, where relevant, investors or investment analysts.

The feedback received should be determined to be consistent with information available from other available sources, such as trade publications, competitor SEC filings, and investor analyst reports.

Ceded Reinsurance

Much of the focus on recorded loss reserves is on a net of reinsurance basis, or those reserves after the impact of reinsurance cessions. However, those loss reserves that are expected to be ceded under reinsurance agreements are also estimates. The reasonableness of both the estimated cessions, and, perhaps more importantly, the collectability of such cessions, are matters for board/audit committee oversight, as overstatement of ceded reinsurance or failure to collect such cessions has caused adverse impacts to financial statements and has even caused insurer insolvencies in the past.

The P/C Statement of Actuarial Opinion requires the Appointed Actuary to have a separate view on both gross loss reserves (i.e., before the impact of such cessions) and net loss reserves. As such, the board/audit committee should expect the Appointed Actuary to be conversant in this area. Issues that the audit committee might consider querying include:

- Possible concentration(s) of reinsurance with particular reinsurers
- Financial strength ratings of current reinsurers
- Collateral held to secure reinsurance recoverables
- The policy regarding required financial strength for possible future reinsurers
- Reliability/variability of the ceded reserve estimates underlying the recorded reserves

Governance (Control) Structure Underlying Loss Reserves

Any material balance sheet estimate needs to have a well-defined governance process and system of controls supporting it, and the loss reserve estimate is no exception. The following are some of the typical controls, both internal and external, that exist for loss reserve estimates. The board/audit committee member may want to be familiar with the extent to which these controls exist and are followed for the insurance company.

Internal Controls

- *Segregation of duties.* While input from those responsible for pricing or developing business (e.g., underwriters, pricing actuaries) is often very useful to the loss reserving process, objectivity typically improves when different people perform the primary

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reserving and pricing roles. The perspectives provided by the pricing and reserving functions are often different, with the pricing function focusing on the profitability of current and future business. By contrast, the reserving function focuses on the potential outcomes connected with business written in the past (sometimes even in markets that the company has since left). As such, the reserving function acts to some extent as an early warning test or report card on past pricing and/or underwriting performance. This creates a potential conflict of interest when the same people perform both functions. Where resources do not allow separate staffing of these two functions, audit committee members should be aware of the potential conflict of interest that arises from the same people performing both functions.

Use of reserve committees. Some insurance companies have reserve committees or an equivalent oversight management group, often organized at one or more management segment level(s) (e.g., legal entity, line of business, region). The committee might include the segment's executive management, the segment's internal reserving actuary or actuarial consultant, and heads of key operating functions (e.g., claims, underwriting, marketing).

Having a reserve committee does not ensure objectivity, and members of audit committees and boards of directors may wish to inquire further to determine its effectiveness. The extent to which a reserve committee improves objectivity is partly a function of the quality and efforts of the reserve committee members. Members of audit committees and boards of directors may wish to learn the identities and qualifications of reserve committee members. The audit committee and board of directors may find value in meeting separately with the lead reserving actuary or chief actuary to obtain the actuary's view of the reserve committee's effectiveness and may also find value in obtaining certain summary information and/or minutes from the reserve committee meetings on a regular basis.

- *Internal audit.* Many insurance companies have an internal audit function that includes in its scope the loss reserve process. This internal audit function can include testing of data quality used in the loss reserve analysis and monitoring any in-house reserving actuaries' compliance with professional practice standards.
- *Actuarial peer review.* Many actuarial firms and in-house actuarial departments have implemented peer review programs or use external actuarial resources to provide an additional set of eyes on professional work product.¹⁹ Such a review may serve as an internal control on the reserving process.
- *Report from the Appointed Actuary.* Each statutory insurer's Appointed Actuary is required by the NAIC to report to the board or audit committee each year on the items within the scope of the actuary's loss reserve opinion. While not required, many of these are in-person, allowing for immediate response to questions the board/audit committee may have. Regardless, the NAIC SAO Instructions say, "The minutes of

¹⁹ While not required by the actuarial standards, peer review is a strongly recommended practice. See [Peer Review—Concepts on Professionalism](#), a 2005 discussion paper by the Academy's Committee on Professional Responsibility.

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the Board of Directors should indicate that the Appointed Actuary has presented such information to the Board of Directors and identify the manner for presentation (e.g., webinar, in-person presentation, written).”

External Controls

- *External Audit.* As loss reserve estimates have a material impact on earnings and technical solvency, external auditors of public companies typically include a review of these estimates in every reporting cycle (although more attention may be paid to this issue at year-end than for interim periods). Many insurers’ boards/audit committees include discussions with their external auditors on a regular basis in their agendas.
- *Attestations.* Through its Model Audit rule, the NAIC requires larger insurers to provide an attestation regarding the operating effectiveness of its control structure. This control structure will include controls related to the loss reserving process. For public companies, the Sarbanes-Oxley Act of 2002 requires not only internal attestations, but an attestation by the independent auditors related to controls. An audit committee or board may seek reports related to how well the controls are operating and request specific information related to the controls on actuarial processes in particular.
- *Financial examinations by insurance regulators.* State insurance laws require each insurer to undergo a financial examination by state insurance regulators at least once every three to five years. Given the significance and inherent judgments involved in the estimation process, the exam will include a risk-based review of loss reserves recorded within the financial statements that are within the scope of the particular examination. This review is performed by either insurance department personnel or external actuarial consultants working on behalf of the insurance departments. As part of these exams, the state’s examiners inquire about board and audit committee oversight of the loss reserving process, indicating that the expectations of the regulators include a strong awareness and involvement in oversight of the loss reserves by the board.
- *Replacement of Appointed Actuary.* Whenever an Appointed Actuary is replaced, the NAIC requires both the company and the outgoing Appointed Actuary to exchange letters discussing any disagreements over loss reserves during the last 24 months which are then forwarded by the company to the domiciliary state regulator. These disagreement letters are not public information, but audit committees benefit from review of these letters whenever an Appointed Actuary is replaced.
- *Qualification documentation.* NAIC P/C Opinion Instructions describe the documentation of the Appointed Actuary’s qualifications, which is to be submitted to the board of the company. That documentation includes brief biographical information and a description of how the definition of “Qualified Actuary” is met for that year. The documentation describes the Appointed Actuary’s responsible experience relevant to the subject of the P/C Actuarial Opinion. This requirement was

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added in the 2019 Opinion year, so requirements may evolve over time. (See Appendix resource list to check sources for any subsequent updates to these 2019 requirements.)

Executive Session With Actuaries

Members of boards of directors or audit committees are strongly encouraged to consider meeting in executive session with the Appointed Actuary, without other management present, potentially including other internal or external actuaries who are significantly involved in the reserving process. Including the audit firm actuary in the audit committee's executive session with the audit firm is also beneficial. It should be noted that both external auditors and regulators use a private discussion with the Appointed Actuary as an investigative tool in regard to reserves. Such executive sessions are of particular value in determining whether management may have attempted to exercise undue influence on the reserve estimation process. While such undue influence is uncommon, its potential is a key focus of regulators, as it has been a contributing factor in a number of past insolvencies. Possible signs of undue management influence that could be identified during executive session may include:

- The actuary is not provided with comprehensive information on potentially emerging problem areas (e.g., newer coverages with adverse experience).
- Information is provided late to the actuary, leaving inadequate time to properly incorporate into their analysis.
- The actuary is denied access to certain individuals at the company who may respond to specific questions or provide corroboration of other information obtained.
- Management makes clear to the actuary that his/her continued employment is contingent upon agreement with management's viewpoint on reserve estimates.
- The opining actuary is replaced, and the new actuary immediately agrees with management's position.

* * * * *

Loss reserves are a major part of an insurer's reported balance sheet, subject to public (and non-public) disclosure and review, and, by their nature, require the use of judgment. Oversight of such reserves is a material part of the board or audit committee's responsibility. Actuarial input in this oversight process is inevitable and invaluable. This practice note attempts to aid in audit committees' and boards of directors' understanding of the issues and resources related to this important oversight function.

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Appendix

Sources for Current Requirements:

- **NAIC Statutory P/C Opinion Instructions:**

The NAIC Statutory requirements are updated annually. The Actuarial Opinion requirements may or may not change annually depending on NAIC decisions.

Current requirements can be found by consulting the NAIC website homepage at naic.org.

- **NAIC Regulatory Guidance:**

Regulatory Guidance supplements the *NAIC Annual Statement Instructions—Property/Casualty* and provides guidance to companies and Appointed Actuaries regarding regulatory expectations on the Actuarial Opinion, AOS, and Actuarial Report. The Regulatory Guidance is usually updated at least once every two years and whenever there are Opinion requirement changes.

The Regulatory Guidance can be found by consulting the NAIC website (naic.org), under the P&C (C) Committee, Actuarial Opinion Working Group (AOWG) (under the “Related Documents” tab).

https://content.naic.org/cmte_c_act_opin_wg.htm

- **American Academy of Actuaries COPLFR P/C Opinion Practice Note:**

The Statements of Actuarial Opinion on P/C Loss Reserves Practice Note provides information to actuaries on current practices by their peers related to signing a Property and Casualty Statement of Actuarial Opinion (SAO) and Actuarial Opinion Summary (AOS) given the current requirements by the NAIC.

The practice note is updated each year and reflects updates to NAIC requirements. (The practice note also includes the current year’s NAIC Opinion Instructions and Regulatory Guidance described above.)

Current practice notes can be found on the American Academy of Actuaries website at <https://www.actuary.org/content/practice-notes>.