

 Gain	Definition	Knowledge of:	Task
A. Law	<p>The Appointed Actuary (AA) should understand relevant US and state insurance law, regulatory authority, and regulations. The AA should be aware of tort law, relevant types of litigation, including class actions and mass torts, as well as precedent case law and changes therein.</p> <p>The knowledge will enable the actuary to assess the effect of the legal environment on the reserves for which the AA is opining and associated risks and uncertainties.</p>	<ol style="list-style-type: none"> 1 Key elements of tort law, tort trends and reforms 2 Insurance law with respect to its impact on Property/Casualty (P/C) insurance 3 Mass torts/class action suits and their impact on the P/C insurance industry 4 Legal environment (e.g. coverages and claims subject to the Statement of Actuarial Opinion) and changes therein 5 Financial solvency regulation purpose 6 U.S. federal and state laws and regulations that pertain to the Statement of Actuarial Opinion 7 State specific laws, regulations, regulatory authority and rules regarding the preparation of annual statements 8 Precedent case law on issues affecting P/C reserves (e.g., bad faith, punitive damages awards, class certification) 	<ol style="list-style-type: none"> 1 Assess the impact of laws, regulations, the legal environment and changes therein as they apply to the 2 Determine if carried reserves meet the requirements of the insurance laws of the state of domicile
B. Policy Forms and Coverages, Underwriting, and Marketing	<p>The Appointed Actuary should understand types of insurable exposures, related insurance policy products, and how insurance companies assume risk through marketing and underwriting.</p> <p>The knowledge will enable the actuary to assess the effect of insurance coverages, underwriting and marketing and changes therein on the reserves for which the AA is opining and associated risks and uncertainties.</p>	<ol style="list-style-type: none"> 1 Policy forms including exposures, limits, coverage triggers, policy terms and conditions, endorsements and exclusions, and reinsurance reinstatement provisions 2 Claims experience impact from deductibles, limits, treatment of loss adjustment expenses and exclusions to coverage 3 Primary insurance, excess insurance, ceded reinsurance and assumed reinsurance 4 Company liabilities that arise from participation in government/industry programs and their interaction with voluntary private insurance sector 	<ol style="list-style-type: none"> 1 Obtain information related to policy forms and coverages written by the company (e.g. risks, exposure, attachment points, limits, deductibles, treatment of loss adjustment expenses (LAE), coverage trigger, key endorsements, exclusions) and changes therein 2 Obtain information related to underwriting and changes therein (e.g. individual risk rating, classifications, rate changes, guidelines, mass tort potential, latent exposures, growth, projections, profitability, staffing challenges, schedule credits, experience rating, retrospective rating, participating policies, underwriting appetite, underwriting variables, new coverages) 3 Obtain information related to marketing and changes therein (e.g. target markets, distribution channels, competitors, state distribution)

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		5 Exposures across different lines of business (e g , possible differences) 6 The impact changes in underwriting, mix of business, or target market can have on claims' experience (e g guidelines, growth, profitability, staffing, programs, appetite, rate changes) 7 Rating plans (e g individual risk rating, class rating, experience rating, retrospective rating, participating policies, judgment rating, schedule rating) 8 Risks specific to the business (e g mass tort potential, latent exposures, new coverages, emerging risk, bad faith, extra contractual obligations, long duration contracts, potential for salvage and subrogation) 9. Claims experience changes when considering organizational, operational and marketing differences (e.g. stock, mutual, direct, agency, captives, risk retention groups, voluntary and involuntary pools, use of third party administrators, target markets, sales incentives, competitors)	
C. Reinsurance	<p>The Appointed Actuary should understand the functions and types of reinsurance including relevant contract features and risk transfer principles. The appointed actuary should understand reinsurance accounting, recognition, and collectability issues.</p> <p>The knowledge will enable the actuary to assess the effect of reinsurance on the reserves for which the AA is opining and associated risks and uncertainties.</p>	1 Basic reinsurance terminology (e g limits, retentions/attachment points, quota share, excess of loss, clauses, reinstatements, co-insurance, commissions) 2 The function and types of reinsurance 3 Reinsurance contracts interpretation 4 Reinsurance contracts to determine the treatment of loss adjustment expenses (LAE) (e g within limits, in addition to limits, shared pro rata) 5 Commutations and novations including definition, motivations of parties, accounting treatment 6 Contract qualification criteria for prospective or retroactive reinsurance accounting treatment or deposit accounting treatment 7 Impact on financial statements from contract qualification criteria for prospective or retroactive reinsurance accounting treatment or deposit accounting treatment	1 Assess reinsurance implications that may be applicable to the estimation of unpaid claims

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		8 Reinsurance risk transfer testing 9 Assessing collectability (e.g. sources, rating agencies, letters of credit, news items, amounts in dispute or overdue) 10 The impact of authorized, unauthorized, certified reinsurance on collateral and collectability 11 Differences between reinsurance and primary reserving procedures (e.g. adapting methods for available data, type of reinsurance, terms) 12 Factors considered in the evaluation of the applicability of a reinsurance program to an unpaid claim estimate 13 Possible parameter differences for direct, assumed, gross, ceded and net data (e.g., loss development factors and initial expected loss ratios)	
D. Premium, Loss, and Expense Reserves	<p>The Appointed Actuary should understand and apply reserving methods, analysis and diagnostics to derive actuarial reserve estimates in the context of the requirements of the SAO. The AA should understand the company's operations and data, external environment, and relevant changes therein.</p> <p>The knowledge will enable the actuary to derive estimates that recognize the internal and external environment and the associated risks and uncertainties.</p>	1 Possible effects of external conditions on the analysis (e.g. a recent court decision that affects professional liability medical malpractice claims) 2 The specific organization's claims administration, legal environment and types of claims and changes therein 3 P/C claims' operations and changes therein 4 Key activities in the claims' handling process (e.g. claims' investigations, claims' documentation, cause of loss determination, liability, loss amount, claim conclusion, procedures, staffing or outsourcing, controls on timing and amounts of case investigations, case reserves and payments, diary dates, claims audit involvement, information flows from claims to accounting/actuarial sources) 5 Processes used by the company for handling and managing claims in various lines and classes of business 6 The effects of changes in claims handling on the reserve analysis 7 IT environment (e.g. exposure, premium and loss reporting, claim count data, claim closing, report dates, year-end closing date, claim processing speeds, system implementations) and changes therein	1 Assess the company's external environment (e.g. legal, economic, judicial, regulatory, market) and changes therein 2 Assess the company's internal operations (e.g. underwriting, claims, marketing, IT, finance, investment, reporting, product offerings, assumed and ceded reinsurance programs) and changes therein 3 Compile appropriate data 4 Determine segmentation of data for analysis 5 Reconcile data through analysis as necessary 6 Evaluate data for reasonableness and consistency 7 Analyze data diagnostics (e.g. triangles, ratios)

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		8 Data compiling methods to conduct data analysis (e.g. accident year, report year, policy year, limited, unlimited, truncated, loss adjustment expenses' treatment, salvage and subrogation, direct, assumed, ceded, net, gross, coverage)	8 Identify and resolve data issues that are material to the analysis of unpaid claims
		9 Key terms including case outstanding, paid claims, reported claims, IBNR, ultimate claims, claims related expenses, reported and closed claim counts, claim counts closed with no payment, insurance recoverables, exposures, experience period, maturity or age, and components of unpaid claim estimates	9 Evaluate the appropriateness of using industry data on business within the Statement of Actuarial Opinion's scope
		10 Role of homogeneity and credibility of data in the process of compiling data and estimating unpaid claims	10 Employ methods to determine actuarial estimates for all items within the scope (e.g. premium reserves, unpaid claims, claim counts, recoveries) including legal entity allocation
		11 Accounting date, valuation date, and review date differences	11 Adjust the analysis as appropriate to statement (e.g. large loss, catastrophe, pattern selection, retentions, limits)
		12 Data reconciliations	12. Evaluate multiple methods' results for reasonability (e.g. ultimate frequencies and severities, ultimate pure premiums, ultimate loss ratios, actual vs. expected, change in ultimates from the prior analysis, trends)
		13 IT and Accounting procedures and processes	13 Select actuarial central estimates and/or ranges of reasonable estimates
		14 Data management and quality (e.g. request, compile, and clean data check data for reasonableness and consistency)	14 Calculate discounted reserves if appropriate and permitted
		15 Diagnostics (e.g. average case reserves, paid severities, incurred severities, closed-to-reported claim counts)	15 Review relevant available work products of the previous Appointed Actuary
		16 Researching data issues	16 Utilize principles and techniques of ratemaking as may be applicable for estimation of unpaid claims (e.g. onlevel premiums)
		17 Potential differences between industry experience and company experience (e.g. Tasks B 1-3 regarding policy forms and coverages, underwriting, and marketing)	
		18. Composition and applicability of industry benchmarks for reserve analysis	

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		19 Actuarial analysis methods including carrying out the mechanics, selecting the assumptions, identifying the strengths and weaknesses of those methods (e.g., Chain-Ladder, Expected claim, Bornhuetter-Ferguson, Cape Cod, Frequency-Severity, methods to methods to calculate Defense and Cost Containment Loss Adjustment Expenses(DCC) and Adjusting and Other Loss Adjustment Expenses (AO))	
		20 Computation methods for other premium reserves required in the opinion (e.g. death, disability and retirement, extended reporting endorsements, long duration contracts)	
		21 Reserving methods for unearned premiums and IBNR for policies with non pro-rata earning patterns	
		22 Diagnostic usage to select methods and parameters	
		23 Treatment of recoveries such as reinsurance, policyholder deductibles, and salvage and subrogation	
		24 Three tests required by Statement of Statutory Accounting Principles (SSAP) 65--Property and Casualty Contracts to test unearned premium reserves on long duration contracts	
		25 Loss development, trend, and the differences between them	
		26 Estimating unpaid claims by layer methods	
		27 Methodologies and considerations for unique lines of business or claim types (e.g. asbestos, surplus lines, construction defect claims, health coverages written on P/C annual statement)	
		28 Fundamentals of different types of insurance (e.g., long tail versus short tail lines of business, low frequency versus high frequency lines)	
		29 Data adjustments and estimation techniques for material changes (e.g. claims' processes, case reserve adequacy, closing and payout rates, economic and legal environment, mix of business, coverages, trend, rapid growth or decline)	
		30 Test assumptions and results for reasonableness (e.g. actual vs expected, diagnostics, prior year results)	
		31 Approaches to select range (e.g. stochastic, deterministic)	

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		32 Intended measures of the reserve estimate (e.g. actuarial central estimate, management's best estimate, high and low estimates, range of reasonable estimates) 33 Risk and uncertainty associated with a reserve analysis including approaches to quantify risk 34 Approaches and considerations in discounting reserves (e.g. interest rates, risk margins) 35 Relevant principles regarding property and casualty unpaid claims estimates 36 Premium asset for retrospectively rated policies 37 Premium deficiency reserves 38 Earning premiums 39 Premium earning patterns based on expected claim occurrence timelines 40 On-level loss ratios including adjustments as needed (e.g. rate changes, trend, benefit, mix of business) 41 The effect of rate changes by year on loss ratios if using loss ratios as a guide to select the ultimate loss 42 Trend analyses (e.g. exposure trend, frequency trend, severity trend, pure premium trend, premium trend) 43 Analysis adjustments (e.g. effect of law changes, effect of changes in mix of business, adjustment for coverage and benefit level changes, large loss adjustment)	
E. Statutory Insurance Accounting and Role of The Appointed Actuary	<p>The Appointed Actuary should understand relevant statutory accounting principles and reporting requirements including the US NAIC P&C Annual Statement. The AA should understand the responsibilities of an Appointed Actuary including key deliverables.</p> <p>The knowledge will enable the actuary to produce an SOA, AOS, and Actuarial Report in accordance with NAIC Annual Statement Instructions.</p>	1 Opinion reporting requirements for the actuary 2 Basic terms used in statutory insurance accounting (e.g. paid loss, incurred loss, incurred but not reported--IBNR, defense and cost containment expenses, adjusting and other expenses) 3 Derivation of statutory surplus and income 4. Annual statement pages for evaluating reserves and overall financial health of the company (e.g. income statement, five-year historical data, Schedule P, Schedule P interrogatories, Schedule F, balance sheet, Notes to Financial Statements, general interrogatories, Underwriting and Investment Exhibit)	1 Communicate analysis to company management 2 Review the relevant NAIC annual statement pages and risk-based capital (RBC) position of the company 3 Consider the practices described in the American Academy of Actuaries Committee on Property and Liability Financial Reporting's (COPLFR) Practice Note Statements of Actuarial Opinion On Property and Casualty Loss Reserves 4 Prepare the Statement of Actuarial Opinion in accordance with NAIC annual statement instructions

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		5 NAIC Risk-Based Capital (RBC)	5 Determine whether carried reserves meet the requirements of the insurance laws of the state of domicile
		6 Financial health evaluation methods (e.g., NAIC IRIS, financial rating, risk focused examinations/analysis, NAIC RBC)	6 Determine whether carried reserves are consistent with reserves computed in accordance with accepted actuarial standards and principles
		7 Relevant Statements of Statutory Accounting Principles (SSAPs) and permitted practices	7 Reconcile data used by the Appointed Actuary to Schedule P data
		8 The role of the Appointed Actuary	8 Explain any material differences between actuarial data and Schedule P data
		9 Instructions for the Statement of Actuarial Opinion and Actuarial Opinion Summary in the NAIC annual statement instructions	9 Reconcile content of exhibits A and B to the company's annual statement pages
		10 Purposes of the Statement of Actuarial Opinion, the Actuarial Opinion Summary and the Actuarial Report	10 Identify other items within the scope of the opinion (e.g. unearned premium reserve on long duration contracts, Death, Disability and Retirement (DD&R) reserves, retroactive reinsurance liabilities and deposit contract liabilities)
		11 Users of the Statement of Actuarial Opinion, the Actuarial Opinion Summary and the Actuarial Report	11 Compare carried reserves to Appointed Actuary's estimates
		12 Exposures included in the P/C statutory annual statement that are outside of the Appointed Actuary's area of expertise and whether/how to make use of appropriate expertise	12 Determine if carried reserves make a reasonable provision for amounts within the scope of the opinion
		13 Schedule P reconciliation vs audit of the analysis data	13 Determine what type of opinion to render (Reasonable Provision, Deficient Provision, Redundant Provision, Qualified Opinion, or No Opinion)
		14 Materiality standard selection (e.g. intended purpose and the intended users of the Statement of Actuarial Opinion, Risk-based Capital (RBC) calculations and the impact on a materiality standard)	14 Determine the materiality standard for the Statement of Actuarial Opinion
		15 Company's legal structure including pooling and reinsurance agreements	15 Determine company-specific risk factors
		16 Company activities (identified in Tasks B 1-3 regarding policy forms and coverages, underwriting, and marketing)	16 Document intercompany pools' participation
		17 IRIS Property/Casualty Ratios	17 Determine the effect of reinsurance including retroactive and financial

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		18. Reasons for unusual values for IRIS Property/Casualty Ratios 11 One-Year Reserve Development to Policyholders' Surplus, 12 Two-Year Reserve Development to Policyholders' Surplus, and 13 Estimated Current Reserve Deficiency to Policyholders' Surplus	18 Determine if there are significant risks that could result in material adverse deviation
		21 Meaning of "significant" and "material" considering users' needs for the purposes of determining RMAD	19 Determine the reasons for unusual values from Insurance Regulatory Information System (IRIS) Property/Casualty Ratios
		22 Understand the causes and drivers of loss and LAE development	21 Write the narrative components of an Actuarial Report consistent with relevant actuarial standards and regulatory requirements
		23 State Law - Actuarial Opinion Summary or State Filing Requirements (to determine if required)	22 Explain any significant favorable or unfavorable development
		24 Reported adverse development	23 Evaluate potential collectability issues in the ceded reserves
		26 Reconciliations of schedule P data	24 Provide relevant commentary regarding any retroactive or financial reinsurance
		27 Data elements that are significant to the analysis in compliance with the NAIC Annual Statement Instructions Annual audited financial reports	25 Document the technical components of an Actuarial Report consistent with relevant actuarial standards and regulatory requirements
		28 How to effectively communicate with and to an auditor audience	26 Prepare Actuarial Opinion Summary, if required, in accordance with NAIC annual statement instructions
		29 Processes after discovery of a material error	27 Test whether the adverse development exceeded 5% of surplus in at least three of the last five years
		30 Processes related to the change in Appointed Actuary	28 Reconcile net and gross values in the Actuarial Opinion Summary to the Actuarial Report and the Statement of Actuarial Opinion
			29 Create an exhibit comparing the Appointed Actuary's current estimates to comparable prior estimates
			30 Determine the data elements that the Appointed Actuary deems significant to the analysis in compliance with instructions for "NAIC Annual Audited Financial Reports"
			31 Communicate to the company the data elements that the Appointed Actuary deems significant to the analysis so the company can inform external auditors

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			<p>32 Communicate to the company's Board of Directors and company management as required (e.g. items in the scope of the Statement of Actuarial Opinion, Actuarial Report, results, disagreements, errors)</p> <p>33 Respond to regulators' inquiries regarding financial solvency regulation (e.g. risk-focused exams, insurance department analyst questions)</p> <p>34. Adhere to relevant actuarial standards when making use of another's work</p>
<p>F. Professionalism and Business Skills</p>	<p>The AA should know and adhere to the Code of Professional Conduct as well as relevant Actuarial Standards of Practice and must meet the U.S. Qualification Standards. The AA should have the professional and business skills to manage the tasks, make informed decisions, communicate effectively with users of the actuary's work products, resolve disagreements and seek guidance as necessary.</p> <p>The skills will enable the Appointed Actuary (AA) to perform the required actuarial services in an ethical manner that upholds the reputation of the actuarial profession.</p>	<p>1 Code of Professional Conduct (adopted by the US-based actuarial organizations)</p> <p>2 Relevant Actuarial Standards Board's Actuarial Standards of Practice (ASOPs), Qualification Standards for Actuaries Issuing Statement of Actuarial Opinion in the United States (U.S. Qualification Standards), Code of Professional Conduct</p> <p>3 Dispute Resolution, Decision Making, and Communication (e.g. oral, written, listening)</p>	<p>1 Attempt to resolve any issues related to the assignment as raised by company management, the company's Board of Directors, regulatory authorities, the actuarial profession, auditors, and/or the actuary's employer</p> <p>2. Comply with relevant Actuarial Standards Board's Actuarial Standards of Practice (ASOPs), Qualification Standards for Actuaries Issuing Statement of Actuarial Opinion in the United States ("U.S. Qualification Standards"), Code of Professional Conduct (adopted by the US-based actuarial organizations)</p> <p>3 Apply professional skills</p> <p>4 Apply business skills</p>