

New York State Department of Civil Service
DIVISION OF CLASSIFICATION & COMPENSATION

Tentative Classification Standard

Occ. Code 0752200

Assistant Actuary, Grade 14	0752200
Senior Actuary (Casualty), Grade 19	0752302
Senior Actuary (Life), Grade 19	0752310
Associate Actuary (Casualty), Grade 24	0752310
Associate Actuary (Life), Grade 24	0752410
Principal Actuary (Casualty), Grade 28	0752502
Principal Actuary (Life), Grade 28	0752501
Supervising Actuary (Casualty), M-4	0752602
Supervising Actuary (Life), M-4	0752601
Chief Casualty Actuary 3, M-5	0754530
Chief Life Actuary 3, M-5	0752830
Chief Casualty Actuary 2, M-6	0754520
Chief Life Actuary 2, M-6	0752820
Chief Casualty Actuary 1, M-7	0754510
Chief Life Actuary 1, M-7	0752810

Brief Description of Class Series

Actuaries perform actuarial calculations relative to insurance plans and rates of contribution to pension funds. These calculations are also used to prepare mortality, disability and other demographic tables. Incumbents determine reserves to provide future benefits and analyze sources of earnings under policies and contracts to determine proper rates of dividends and other indeterminate credits and charges.

Actuaries at the State Insurance Fund develop rates for workers' compensation and disability benefit insurance. Actuaries at the Department of Financial Services review the adequacy of reserves of domestic insurance companies. Actuaries at the Teachers' Retirement System and the Office of the State Comptroller perform actuarial computations in connection with retirement benefits.

Distinguishing Characteristics

Assistant Actuary: entry level; assists higher level professionals in doing various actuarial computations.

Senior Actuary (Casualty/Life): full-performance level; may supervise lower level clerical and actuarial staff.

Associate Actuary (Casualty/Life): performs actuarial work of a high degree of difficulty and professional responsibility; may supervise Senior Actuaries and lower-level staff.

Principal Actuary (Casualty/Life): supervises Associate Actuaries; performs high level actuarial work.

Supervising Actuary (Casualty/Life): management level; performs the most difficult actuarial activities.

Chief (Casualty/Life) Actuary 3: unit head at the Department of Financial Services. A unit is a section subgroup assigned a distinct function within the actuarial program, such as the Product Pricing/Nonforfeiture Unit within the Actuarial Valuation Section of the Life Bureau; or oversees a specialty actuarial area that requires the expertise of a fellow, such as medical malpractice insurance, casualty actuarial analysis of captives, life actuarial analysis of agent compensation plans, and actuarial review of health rates.

Chief (Casualty/Life) Actuary 2: section head at the Department of Financial Services. A section is a distinct actuarial area such as casualty actuarial reserve analysis, life valuation, and ratemaking methodology.

Chief (Casualty/Life) Actuary 3: one position class; oversees all actuarial activities for life, health or property and casualty at the Department of Financial Services.

Illustrative Tasks

Assistant Actuary

Assists in constructing actuarial tables by analyzing and presenting data; assists in reviewing the actuarial basis of insurance and pension plans and calculation of premiums; evaluates premium rates, reserves, and liabilities to ensure sufficient funds are available to meet future claims; assists in reviewing methods used by companies to value categories of policies, special benefits, or special liability terms; assists in evaluating reserves; assists in reviewing filed actuarial documents; assists in checking the mathematical accuracy of calculations presented with agents' compensation plans, separate account filings, and actuarial projections; participates in field examinations of life insurance companies, fraternal benefit societies, health maintenance organizations, commercial carriers, non-profits, and retirement systems; assists in preparing valuation memoranda; assists in reviewing health insurer rate submissions and statistical compilations; reviews insurance company rate filings and reserve analysis for compliance with standards prescribed by law; assists higher level actuaries by checking calculations for fiscal notes and cost estimates for legislation, optional retirement

allowances, such as Domestic Relations Orders, workers' compensation reductions, restorations, bond refunding, and experience studies; maintains in-house databases; reviews claims records and death and disability cases to establish proper estimates of eventual incurred losses; computes loss reserves for death and disability cases; calculates the present values of workers' compensation cases and the amount payable to claimants; calculates reserves for transfers, disability, and deferred allowances; computes cost-of-living factors for supplemental pensions paid to annuitants; and checks computations for valuation and service retirement allowances.

Senior Actuary (Casualty)

Accumulates and reconciles internal company loss data to financial statement data; obtains and verifies historical data; assists in establishing and testing the adequacy of loss and loss adjustment expense reserves; prepares exhibits displaying selected ultimate estimates, premiums and loss ratios, and property/casualty reserves; reviews ratemaking procedures, including trends and loss development factors; reviews regulatory documents; examines filings to ensure that standard actuarial techniques were used and regulatory standards are met; analyzes insurance companies' premium trends, expense ratios, loss development factors and profit provisions; assists in reviewing routine rate submissions, such as agent compensation; communicates with companies to get additional information on incomplete or inaccurate filings; analyzes and approves workers' compensation dividend filings; creates and maintains complex graphs, spreadsheets and reports; analyzes classification submissions by the New York Compensation Insurance Rating Board (NYCIRB) to ensure that the proposals are supported; assists in analyzing and approving Workers' Compensation Large Deductible Programs and Public Auto Rate Filings; oversees staff performing prospective and/or retrospective rating, reserving of lifetime pensions awarded to claimants, and preparation of reports analyzing disability and workers' compensation lines of insurance; analyzes payments, reserves, settlement rates, frequency and severity for workers' compensation and disability lines of insurance; assists in preparing reports related to premium rate derivation; prepares various calculations to be signed by higher level staff; explains actuarial computations to staff, policyholders and their representatives; analyzes case reserves and recommends that certain calculations be final or interim; identifies and addresses external data requests from outside entities; and prepares periodic exhibits of losses and premiums.

Senior Actuary (Life)

Accumulates and reconciles internal company loss data to financial statement data; reviews funding and other actuarial aspects of public and private retirement systems; reviews accuracy and completeness of the data underlying plan valuation; assists in establishing and testing the adequacy of loss and loss adjustment expense reserves; prepares exhibits displaying selected ultimate estimates, premiums and loss ratios; reviews insurer rates, nonguaranteed elements, illustrations and actuarial aspects of

policy forms; reviews ratemaking procedures, including trends and loss development factors; reviews insurer risk management practices and asset adequacy analyses; reviews minimum statutory formula reserves, reinsurance treaties, liquidity filings and actuarial aspects of risk based capital filings; reviews premium rate filings for individual and group accident and health products; reviews and analyzes actuarial aspects of commission submissions, experience rating formula submissions, and premium rate complaints; assesses the adequacy of reserves, including examining filings to ensure that standard actuarial techniques were used and regulatory standards are met; communicates with companies to get additional information on incomplete or inaccurate filings; analyzes and approves workers' compensation dividend filings; analyzes all classification submissions by the New York Compensation Insurance Rating Board (NYCIRB) to ensure that the proposals are reasonable and supported by experience; assists in analyzing and approving Workers' Compensation Large Deductible Programs and Public Auto Rate Filings; supervises a unit performing prospective and/or retrospective ratings, or reserving of lifetime pensions awarded to claimants; prepares reports analyzing disability and workers' compensation lines of insurance; prepares various calculations to be signed by higher level staff; explains actuarial computations to staff, policyholders and their representatives; analyzes case reserves and recommends that certain calculations be final or interim; prepares periodic exhibits of losses and premiums; and checks calculations for fiscal notes and cost estimates for legislation, optional retirement allowances, workers' compensation reductions, restorations, bond refunding and experience studies.

Associate Actuary (Casualty)

Examines loss adjustment expense reserve of companies writing property and casualty lines of insurance; establishes loss and adjustment expense reserves on the examinations of casualty insurers in financial difficulty; reviews actuarial reserve reports and loss reserve opinions; assists in the review of insurer rates, non-guaranteed elements, illustrations, and actuarial aspects of policy forms; reviews minimum statutory formula reserves; examines rating plans and analyzes technical components underlying auto rate filings; reviews statistical plans that form the basis for the accumulation of statistical data; compiles and audits insurance company experience in the insurance expense exhibits; assists in reviewing expense provisions and merit rating plans; assists in preparing ratemaking guidelines to be followed by the industry in filings; assists in analyzing and approving workers' compensation deviations; analyzes the general rate revision filed by NYCIRB by reviewing loss experience, effect on the rate level by changes in hospital agreements and medical fee schedules and trends in loss frequencies; assists in analyzing and approving multi-tier rating programs for private passenger automobile insurance; develops special actuarial formulas; develops new and revises existing rating plans; handles requests for information and complaints regarding actuarial aspects of insurance practices; prepares instructions and memoranda relating to the actuarial valuations involving mortality and remarriage contingencies and interest factors; investigates difficult actuarial and statistical problems or directs such investigations; assists in the supervision of consultants; supervises

lower-level actuaries; and assists in the development of new or revised requirements regarding policy form requirements, asset/liability management, policy requirements and risk management.

Associate Actuary (Life)

Reviews and approves credit life, credit disability and credit unemployment insurance filings such as rates, rating plans and policy forms for reasonableness and compliance with applicable regulations; reviews and tests the adequacy of rate adjustment applications; produces or checks various portions of the annual actuarial valuation, experience studies, and various actuarial liability and cost calculations for fiscal notes; analyzes actuarial gains and losses of operations; assists companies in resolving actuarial problems and in developing and implementing rates; makes determinations on difficult actuarial problems connected with valuation of reserves and oversight of private and public retirement systems; audits reserve valuation and valuation methods for compliance with the State's minimum standards and works with companies to correct deficiencies; assists in monitoring compliance with statutory accounting requirements and identifies needed corrections; assists in the review of insurer rates, non-guaranteed elements, illustrations, and actuarial aspects of policy forms; reviews minimum statutory formula reserves; investigates complaints on premium matters; analyzes new and amended regulations; conducts the review of community rate adjustment applications of moderate sized HMOs and health insurers; participates in field examinations of life and health insurance organizations and fraternal benefit societies that involve a medium degree of complexity; performs premium rate reviews of medium complexity for new contracts for all types of health insurance; prepares active, retired and loan experience studies and suggests rate changes; analyzes retirement systems' experience concerning deaths, disabilities and retirements; prepares new actuarial tables, including the construction and graduation of the experience rates; creates and maintains valuation based on cost estimates, fiscal notes and annual valuation; prepares fiscal notes on proposed legislation; prepares, tests and runs the gain/loss analysis and experience studies; oversees the preparation of financial reports; calculates additional reserves and rates due to retirement incentives offered by employers; assists in the supervision of consultants; supervises lower-level actuaries; assists in overseeing the development of new or revised requirements regarding policy form requirements, asset/liability management, and risk management.

Principal Actuary (Casualty)

Directs the analysis and auditing of loss experience and expense data submitted by insurers; supervises preparation of statistical exhibits and other information requested by the public, media and legislature; oversees the analysis of credible frequency, severity and loss experience data; reviews and analyzes new and existing ratemaking methods as presented by insurers in their rate filings; advises on balance sheet items impacting reserves; makes recommendations to management on the analysis of loss and expense experience, loss reserving methods and ratemaking techniques; assists in

designing statistical sampling tests to detect the accuracy of data submitted by insurers; analyzes closed claim studies in liability areas; prepares position papers on actuarial and other insurance issues; recommends reserves be incorporated on examination reports and defends examination findings in discussions with company management; testifies as expert witness at Department hearings and court proceedings on loss and loss expense reserves; assists in preparing testimony on insurer financial condition and solvency matters in court hearings; supervises the maintenance of loss reserves, the reporting of policyholders' experience to NYCIRB for the purpose of ratemaking and experience rating, the preparation of accounting under the various group and retrospective plans, the collection of experience on all policies as justification for charging differentials and refunding differentials on substandard risks, and the collection of statistics for writing workers' compensation and disability benefits insurance; provides actuarial support for various departments; develops estimates of ultimate losses and loss adjustment expenses into segments; calculates reserves for loss-sensitive policyholders; analyzes proposed new products; advises and assists business partners in the use of actuarial and mathematical techniques; monitors the financial stability of the aggregate trust fund; advises on the projection of future cash flows; approves and assigns report preparation including diagnostic reports; analyzes proposed new products and contracts; and supervises lower-level actuarial staff.

Principal Actuary (Life)

Performs difficult actuarial duties requiring extensive knowledge in actuarial theory and its practical application to life and health policy from construction and values; reviews rating of individual and group policy forms to determine that premiums are reasonable and comply with rules, guidelines and regulations; determines proper reserve basis for life insurance, annuities, disability benefits, accidental death benefits, and contingent liabilities of life insurance companies and fraternal benefit societies; evaluates reserve strengthening and destrengthening proposals submitted by insurers and makes appropriate recommendations; supervises actuarial staff in reviewing valuation reserves; evaluates the financial impact of corporate pension plans of non-profit health service corporations; conducts the review of community rate adjustment applications for larger HMOs and health insurers; assists in drafting proposed regulations, legislation and circular letters; compiles various actuarial studies and statistical surveys; analyzes trends and drivers; calculates appropriate loss reserves; analyzes proposed new products and contracts; investigates and makes recommendations on difficult actuarial problems in valuations, field examinations, dividend methods and related issues; determines proper reserve basis for pensions, annuities, disability benefits, accidental and ordinary death benefits, and other liabilities of Retirement systems; designs new experience studies to analyze trends developing from new or modified disability benefits; verifies the accuracy of liability calculations used to determine the monetary reserves sent to other retirement systems; calculates the liability of cost-of-living increases to the retirement systems; oversees the calculation of actuarial reduction in benefits due to workers' compensation lump sum payments; and supervises actuarial staff.

Supervising Actuary (Casualty)

Evaluates the liability for outstanding losses and loss adjustment expense reserves of companies writing property and casualty lines of insurance; tests insurer reserving practices to ascertain that projections of future rate needs are based on appropriate loss reserve estimates; develops reasonable standards for rating plans; critiques the work of actuarial consultants; trains Financial Services Examiners in actuarial techniques; integrates actuarial findings with examination reports; interprets the rate level effects of various legislative proposals; provides advice on actuarial issues such as risk transfer, cash flow and discounting; represents the Superintendent on matters involving property and casualty loss and loss expense reserves; coordinates policy with others through the National Association of Insurance Commissioners (NAIC); supervises a staff of lower-level actuaries by assigning and reviewing work, and evaluating performance; ensures actuarial soundness of all rating plans offered to policyholders; leads the actuarial ratemaking process; conducts internal rate reviews and analyzes impact of industry loss cost filings; estimates pricing parameters; performs segment profitability analysis to identify trends; provides actuarial guidance in support of predictive modeling, analyzes proposed new products; and testifies before State and federal governmental bodies as an expert on actuarial issues.

Supervising Actuary (Life)

Oversees actuarial analysis of reserve valuations of domestic life insurance companies; makes determinations on actuarial matters including the acceptance of the valuation methods by domestic companies; analyzes the actuarial implications of existing and proposed plans of agent compensation for compliance with applicable statutes; evaluates actuarial projections in connection with acquisitions, mergers and tests of solvency; reviews studies of experience; determines proper reserve estimates for life insurance annuities, disability benefits, and accidental death benefits; determines the effectiveness of regulations and proposes modifications; drafts proposed regulations, legislation and circular letters; reviews reinsurance treaties for adherence to laws and regulations; serves as a consultant to other bureaus or governmental entities on actuarial matters; evaluates actuarial components of experience rating formulas of health insurance organizations; reviews and critiques actuarial reports of continuing care retirement communities; participates in field examinations of the most difficult life and health insurance organizations, fraternal benefit societies and retirement systems and reviews the field examination work of lower level actuaries; represents the Superintendent on task forces and at NAIC meetings; performs difficult actuarial duties requiring extensive knowledge in actuarial theory; reviews the most difficult premium rating policy forms to determine that premiums are reasonable and comply with rules, guidelines and regulations; oversees all aspects of the annual actuarial valuation of the assets and liabilities of the retirement systems; monitors changes in federal pension regulations and compliance requirements; and supervises a staff of lower-level actuaries.

Chief Casualty/Life Actuary 3

Manages the activities of an actuarial unit at the Department of Financial Services; evaluates the unit's actuarial analyses for reasonableness and supportability; provides actuarial expertise in furthering the Department's policy position; represents the Department on NAIC task forces; oversees Supervising Actuaries in the life, health or casualty specialty; and ensures that unit's goals and objectives are met.

Chief Casualty/Life Actuary 2

Oversees all actuarial activities for a section comprised of two or more units; supervises Chief Life Actuaries 3 or Chief Casualty Actuaries 3, depending on the area (life, health or casualty); establishes procedures for reviewing section work; develops standards for awarding actuarial consulting contracts and reviews the work of actuarial consultants; represents the Department on various committees; and educates the public and industry on the procedures and positions of the Department on actuarial issues.

Chief Casualty/Life Actuary 1

Directs all actuarial activities at the Department of Financial Services for either life, health or casualty; oversees the overall review and approval of all filings; directs and participates in drafting legislation, regulation and circular letters on rating matters; and represents the Department on major inter-governmental and inter-departmental task forces involved with policy making and the drafting of significant legislation and regulations.

Minimum Qualifications

Assistant Actuary

Open-Competitive: bachelor's degree including 24 semester credit hours in mathematics, statistics, and/or actuarial science and successful completion of one examination of the Society of Actuaries or Casualty Actuarial Society.

Senior Actuary (Casualty)

Open-Competitive: bachelor's degree including or supplemented by 24 semester credit hours in mathematics, statistics, and/or actuarial science and one year of actuarial experience; and successful completion of one examination from the Casualty Actuarial Society.

Senior Actuary (Life)

Open-Competitive: bachelor's degree including or supplemented by 24 semester credit hours in mathematics, statistics, and/or actuarial science and one year of actuarial experience; and successful completion of one examination from the Society of Actuaries.

Associate Actuary (Casualty)

Open-Competitive: bachelor's degree and successful completion of two examinations of the Casualty Actuarial Society; and three years of actuarial experience.

Associate Actuary (Life)

Open-Competitive: bachelor's degree and successful completion of two examinations of the Society of Actuaries; and three years of actuarial experience.

Principal Actuary (Casualty)

Open-Competitive: bachelor's degree and successful completion of four examinations of the Casualty Actuarial Society; and four years of actuarial experience.

Principal Actuary (Life)

Open-Competitive: bachelor's degree and successful completion of the Society of Actuaries examinations MLC, MFE, and two additional examinations; and four years of actuarial experience.

Supervising Actuary (Casualty)

Open-Competitive: bachelor's degree and successful completion of five examinations of the Casualty Actuarial Society; and five years of actuarial experience.

Supervising Actuary (Life)

Open-Competitive: bachelor's degree and successful completion of the Society of Actuaries examinations MLC, MFE, and four additional examinations; or be an enrolled Actuary with successful completion of the Society of Actuaries examinations MLC, MFE, and three additional examinations; and five years of actuarial experience.

Chief Casualty Actuary 3

Promotion: Successful completion of seven examinations from the Casualty Actuarial Society and one year of service as a Supervising Actuary (Casualty).

Chief Life Actuary 3

Promotion: Fellowship in the Society of Actuaries and one year of service as a Supervising Actuary (Life).

Chief Casualty Actuary 2

Promotion: Fellowship in the Casualty Actuarial Society and one year of service as a Chief Casualty Actuary 3.

Open Competitive: Fellowship in the Casualty Actuarial Society and seven years of actuarial experience, two of which must be subsequent to obtaining the Fellowship designation and includes responsibility for managing and/or directing all activities of actuarial staff.

Chief Life Actuary 2

Promotion: Fellowship in the Society of Actuaries and one year of service as Chief Life Actuary 3.

Chief Casualty Actuary 1

Promotion: Fellowship in the Casualty Actuarial Society and one year of service as Chief Casualty Actuary 2.

Chief Life Actuary 1

Promotion: Fellowship in the Society of Actuaries and one year of service as Chief Life Actuary 2.

Note: Classification Standards illustrate the nature, extent, and scope of duties and responsibilities of the classes they describe. Standards cannot and do not include all the work that might be appropriately performed by a class. The minimum qualifications above are those required for appointment at the time the Classification Standard was written. Please contact the Division of Staffing Services for current information on minimum requirements for appointment or examination.

12/2020

LEM