
CERTIFIED CONNECTICUT REVALUATION EMPLOYEE GUIDEBOOK



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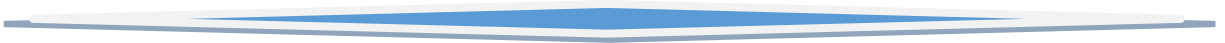
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Certification Information

Any person performing valuation of real or personal property for a municipal assessor as part of a revaluation must be certified as required by §12-62 of the Connecticut General Statutes.

A Certified Connecticut Revaluation Employee designation is required for all persons who are employed by a Certified Connecticut Revaluation Company and who perform valuations of real and personal property for assessment purposes.

There are two separate certifications. Certified employees are employed by, and working for, a Certified Revaluation Company and not employed by, or contracted directly with a municipality. Only a Certified Revaluation Company may contract for real estate revaluation services with a municipality. However, a Certified Personal Property Employee may conduct personal property audits as a designee of the assessor.

Employees of a Revaluation Company who perform the following functions are not required to be certified:

- Data Collectors
- Photographers
- Linguists
- File clerks
- Typists
- Stenographers
- Cartographers
- Hearing clerks (provided their duties are specifically limited to general information purposes)
- Ancillary personnel necessary for routine office functions.

For forms and additional information: [Revaluation Examination \(ct.gov\)](#)

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Certification Requirements

Experience in the fields of Assessing, Revaluation or Appraising typically include:

- Real Estate Appraiser
- Real Estate Salesperson
- Assessor
- Assistant Assessor
- Real Estate Broker
- Data Collector (Municipality or Revaluation Company)
- Appraiser (Municipality or Revaluation Company)
- Bank Appraiser

Land/Residential Designation

- 1) Minimum of two (2) years' experience in the field of assessing, revaluation, or appraising.
- 2) Passing Grade (70%) on the Land/Residential examination.

Commercial/Industrial Designation

- 1) Minimum of three (3) years' experience in the field of assessing, revaluation, or appraising.
- 2) Passing Grade (70%) on the Commercial/Industrial examination.

Personal Property Designation

- 1) Minimum of two (2) years' experience in the field of assessing, revaluation, or appraising.
- 2) Passing Grade (70%) on the Personal Property examination.

Supervisor Designation

- 1) Minimum of three (3) years' experience in the field of assessing, revaluation, or appraising.
- 2) Hold current Land/Residential Certification.
- 3) Hold current Commercial/Industrial Certification.
- 4) Passing Grade (70%) on the Supervisor examination. This exam concentrates on the areas of mass appraisal, Connecticut revaluation legal requirements, sales analysis, and statistical evaluation of the revaluation.

Examination

All four designations (Land/Residential, Commercial/Industrial, Personal Property, and Supervisor) have their own comprehensive examination. The examinations are administered by the Office of Policy and Management. There are minimum requirements to be eligible to sit for each of the designation examinations and they vary based on the designation requested. The individual eligibility requirements are listed for each of the four designations.

The Certified Connecticut Revaluation Employee Examinations are administered annually, in person, at the Office of Policy and Management in Hartford. The annual examination day contains a morning session and an afternoon session. Applicants may take only one examination per session. If any test results in a failing score, the examination may be retaken at a future session by reapplying for the next scheduled session.

Waiver of Examination

Individuals who maintain a designation from one of the appraisal sponsors of the Appraisal Foundation may apply for a waiver of a certification examination. The designation must have been obtained through successful completion of both an examination and the writing of a demonstration narrative appraisal report that is for the same property type as the examination requesting to be waived.

For example, a waiver of the land/residential examination can be granted to SRA (Senior Residential Appraiser) or RES (Residential Evaluation Specialist) designees; for a commercial/industrial examination waiver - an MAI (Member Appraisal Institute) or CAE (Certified Assessment Evaluator) designee would be eligible. For Personal Property, a PPS (Personal Property Specialist) or an ASA (American Society of Appraisers) designee in Personal Property is eligible. If a waiver is requested for the supervisor designation examination, it may only be waived if the applicant holds a designation related to mass appraisal project supervision designees, such as an ASA (American Society of Appraisers) designation in Mass Appraisal, or an AAS (Assessment Administration Specialist) or MAS (Mass Appraisal Specialist) designee from the International Association of Assessing Officers.

The Sponsoring Organizations of the Appraisal Foundations are:

- American Society of Appraisers
- American Society of Farm Managers & Rural Appraisers
- Appraisal Institute
- International Association of Assessing Officers
- International Right of Way Association
- National Association of Independent Fee Appraisers
- National Association of Master Appraisers

Temporary Certification

An employee of a Connecticut Certified Revaluation Company may apply for a one-time temporary certification. Both the Connecticut Certified Revaluation Company and the employee must jointly apply to the Office of Policy and Management and the application must list and describe the experience and educational background of the employee and state the reason for the request. Both the applicant and an official of the company must jointly sign the application.

A temporary certification is designed to certify eligible employees in the period leading up to the annual designation examination sessions. If a Temporary Certification is granted by the Office of Policy and Management, it cannot exceed one hundred-eighty days. A temporary certification will not be granted to an individual who has taken and failed the certification examination.

Recertification

A Connecticut Revaluation Employee Certification must be renewed every five (5) years. The process requires every certified employee to apply to receive a new five-year designation. The Office of Policy and Management administers the recertification application and process.

Continuing Education Requirements

Each applicant must have successfully completed a minimum of fifty (50) hours of approved property assessment or appraisal courses or workshops during the five-year period prior to the recertification date. Instructors will receive credit for the hours of an assessment or appraisal course or workshop they teach. Instructors who teach different courses during the five-year period will receive credit hours for each such course. A course taken or instructed more than once during the five-year period will be credited only once. Hours spent on any examination are not able to be used for certification, or recertification purposes; only those hours applicable to instruction can be counted.

The Office of Policy and Management will annually post approved courses and workshops that satisfy the continuing education requirements. The Office of Policy and Management coordinates with the Certified Connecticut Municipal Assessor (CCMA) Committee.

If a course or workshop is not listed and a designee would like the Office of Policy and Management to consider the course or workshop for credit, they may complete the Course Approval Request Form. The request must include the name of the course or workshop, the sponsoring organization, the name(s) of the instructors, the number of hours, and an outline of the areas covered by the course or workshop.

Any additional supporting documentation should also be filed with the request. The request will be reviewed, and a decision will be sent to the applicant. If a request is denied, the applicant may appeal to the Secretary of the Office of Policy and Management within ten (10) business days. Information related to the appeal process will be included with the denial notification.

Application for Recertification Renewal

A written application for renewal of the Connecticut Revaluation Employee Certification must be submitted to OPM no later than five (5) days prior to the expiration of a current certification. There is no fee for the renewal. The application must be on the required form and include documentation of successful completion of fifty (50) hours of continuing education credits.

Application submission electronically only to Jennifer.Gauthier@ct.gov.

All applications will be reviewed, and the Secretary of the Office of Policy and Management will recertify eligible designees for a new five-year period.

All designees are responsible for maintaining course and/or workshop documentation to satisfy the continuing education requirements. Undocumented courses or workshops will not be considered and failure to provide the necessary documentation may cause a recertification application to be denied.

Recertification Application Denial – Appeal

Shall OPM deny the request for recertification, the applicant will be notified. The notice will contain information as to how the applicant may request reconsideration.

Examination Guide - Land/Residential Designation

Value

- Value in use
- Value in exchange
- Market value
- Nature of value
- Elements of supply and demand
- Concepts of cost, price, and value
- Economic Principles of Value
- Arm's length transaction

Legal Concepts and Theory of Value

- The concept of property
- Property rights
- Property classification
- Appraisal principles
- Highest and Best Use
 - Tests
 - Analysis
 - Final Determination

Assessments, Levies, Rates

- Taxable Values
 - Appraised Values
 - Assessed Values
- Effective Tax Rates
 - Formula
 - Calculating

The Appraisal Process

- Defining the appraisal problem
- Data collection, market analysis and highest and best use analysis
- Neighborhood factors
- Property factors
- Using the three approaches to value

Mathematics Review

- Decimals, ratios, percentages
- Mill rates
- Averages

Land Valuation

- Identification of property
- Units of comparison
- Mapping systems
- Valuation methods
 - Sales comparison
 - Abstraction
 - Allocation
 - Land residual technique
- Valuation methods
 - Comparative unit method
 - Base lot method
- Land description system
 - Metes and bounds
 - Rectangular land surveys
 - Lot and block
- Appraisal principles
- Factors affecting land value.

Cost Approach

- Definition for Cost Approach
- Model for Cost Approach
- Steps in the Cost Approach
- Elements of cost
- Types of cost
 - Original
 - Reproduction
 - Replacement
- Characteristics influencing cost.
- Methods of estimating cost
- Depreciation
 - Definition/Calculation of accrued depreciation

- Concept of estimating:
 - Total Economic Life
 - Effective Age
 - Remaining Economic Life
- Deferred Maintenance
- Obsolescence – Definition and Calculation
 - Functional
 - Economic

Sales Comparison Approach

- Sales comparison model
- Selecting comparable sales
- Units of comparison
- Developing the value of units of adjustment
- Paired Sales Analysis
- Adjusting sale prices to the subject property
- Reconciling Market Value

Ratios and Statistics

- Measuring level of assessment
- Measures of assessment uniformity
- Calculations
 - Mean, Median, Mode
 - Coefficient of Dispersion (COD)
 - Price Related Differential (PRD)
 - Coefficient of Variation (COV)
- Sales Ratio Studies
 - IAAO Standards

Examination Guide - Commercial/Industrial Designation

These concepts are **in addition to** those listed on the previous pages for the Land/Residential Examination

Cost Approach - Commercial Properties

- Using a commercial building cost manual
- Calculating Annual Rates of Depreciation
- Replacement vs. Reproduction cost
- Data collection
- Sketching
- Building Classification
- Quality class
- Using cost tables
- Using current cost multipliers
- Using local multipliers
- Using cost indexes
- Trending historical costs
- Highest and Best Use
 - Concept of Ideal Improvement
- Reconciling Market Value

Income Approach

- Definition of Direct and Indirect Capitalization
- Income/Rate/Value (IRV)
- Band of Investment
- Land and Building Residual Techniques
- Leasing and financing terminology
 - Types of Rent
 - Leases
 - Units of Comparison
- Income and Expense Analysis
 - Potential Gross Income
 - Market versus Contract Rent
 - Miscellaneous income
 - Vacancy and collection loss
 - Expenses (allowable vs. non-allowable)
 - Expense Ratios
 - Net Operating Income
- Capitalization Rate Components
 - Discount rate
 - Recapture rate
 - Effective Tax Rate
- Using land and building capitalization rates
- Direct Capitalization
 - Development and application of an overall capitalization rate
 - Multipliers - Gross Rent vs. Gross Income
- Yield Capitalization
 - Discounted Cash Flow
 - Reversion

Examination Guide - Personal Property Designation

Administration of Personal Property

- Assessment Dates
- Assessment Ratios
- Declarations of Personal Property
- Property Exempt from Personal Property Taxes
- Ownership of Personal Property
- Taxability of Personal Property

Definitions

- Terminology and definitions

Discovery

- Physical methods
- On-site inspections
- Non-physical methods

Audits

- Authority to conduct PP Audits
- Methodology
- Notices of audit findings
- Penalties
- Time Frames for audits
- Data Sources

These concepts are **in addition to** those listed on the previous pages for both the Land/Residential and Commercial/Industrial Designations

Revaluation Project Overview

- Phases of a revaluation
- Scope of revaluation
- Public relations

Time and Costs Requirements

- Calculating and establishing production goals

Principles of Mass Appraisal

- General model
- Model calibration

Data Collection and Management

- Determining data needs
- Data Accuracy
- Methods of evaluating accuracy
- Describing and coding property characteristics
- Data inventory manuals
- Field data collection

Monitoring the Revaluation

- Time and production record keeping
- Controlling the revaluation program
- Developing revaluation unit costs
- Reporting revaluation progress

Sales Analysis and Mass Appraisal Performance

- Computing Ratios
- Aspects of Mass Appraisal Performance and Uniformity
- Design for ratio studies
- Statistical Terms
 - Mean
 - Median
 - Mode
 - Weighted Mean
- Calculations
 - Standard Deviation
 - Coefficient of Variation (COV)
 - Average Absolute Deviation
- Graphic Interpretations of Data
 - Histograms
 - Frequency Distributions
 - Scatter Diagrams

Connecticut Performance-Based Revaluation

- Calculations of Coefficient of Dispersion Test (COD)
- Calculations of Price Related Differential Test (PRD)
- Calculations of Sold/Unsold Property Test

Recommended Study Materials

"Property Assessment Valuation", 3rd Edition, International Association of Assessing Officers, 2010

From the IAAO Website: "An introductory text on assessment administration and basic appraisal principles for all training needs. Contains substantial chapters on mapping, highest and best use, and personal property assessment."

"Property Appraisal and Assessment Administration", International Association of Assessing Officers

From the IAAO Website: "Property Appraisal and Assessment Administration is the only comprehensive textbook on all three areas crucial to successful property assessment professionals: single-property appraisal, mass appraisal, and assessment administration."

"Fundamentals of Mass Appraisal", International Association of Assessing Officers, 2011

From the IAAO Website: "This essential tool for mass appraisers replaces and updates the previous Mass Appraisal of Real Property. If you are using automated valuation models, or mass appraisal, you need to understand the principles developed in this textbook. This volume contains everything you need to know to develop a mass appraisal system, build and calibrate models, and conduct a revaluation."

"The Appraisal of Real Estate", 15th Edition, Appraisal Institute, 2020

From the Appraisal Institute Website: "In addition to updated information on changes in real estate markets and valuation standards, these significant changes appear in this edition: 1) New chapters focused on applications of market analysis and highest and best use analysis 2) Additional emphasis on identifying the property rights to be appraised in an appraisal assignment 3) Deeper discussion of accepted techniques for allocating value among real estate, personal property, and non-realty items. The applicability and importance of different valuation techniques rise and fall as real estate markets and society evolve, but the basic principles of valuation that are at the core of this book, and fundamental to the appraiser's skill set, remain unchanged."

"Appraising Residential Properties", 4th Edition, Appraisal Institute, 2007

From the Appraisal Institute Website: "This textbook provides all the information residential appraisers need to value homes and meet AQB requirements for competency."

“Study Guide to Appraising Residential Properties”, Appraisal Institute, 2008

This is a companion publication to the *Appraising Residential Properties* book and offers chapter outlines, useful examples, and expanded definitions; real-world problems with detailed solutions; challenging review exercises and extensive case studies illustrating practical applications.”

“Property Inspection: An Appraiser's Guide”, John A. Simpson, MAI, Appraisal Institute, 1997

From the Appraisal Institute Website: “Property Inspection covers all aspects of site and home inspection and provides insight into the special challenges encountered in the inspection of commercial properties.”

“The Dictionary of Real Estate Appraisal”, 7th Edition, Appraisal Institute, 2022

From the Appraisal Institute Website: “*The Dictionary of Real Estate Appraisal*, seventh edition, is a landmark text that reflects the depth and breadth of appraisal knowledge. Each entry, definition, and reference has been painstakingly researched and designed to express an expert understanding of issues that currently impact the profession. This understanding of appraisal is influenced by our history, evolving professional standards, emerging scholarship, significant industry trends, and new legislation and judicial precedent at all levels of government. The new dictionary is the culmination of all these influences and an essential, authoritative resource for professionals.”

“Mathematics for Real Estate Appraisers”, Clifford E. Fisher, Jr., MAI, Appraisal Institute, 1996

From the Appraisal Institute Website: “Using specific appraisal applications and examples, *Mathematics for Real Estate Appraisers* reviews algebra and equation solving, geometry and trigonometry, the mathematics of finance, and statistics. You'll find out why $3 + 4 \times 5$ equals 23 and not 35, how to measure the area of a triangle, and the steps involved in applying the six basic financial function formulas. A brief overview of statistics and statistics terminology is provided to pave the way for further study.”

“Handbook for Connecticut Assessors”, *A Practical Guide to Assessment Administration for Connecticut's Assessing Officers*, Connecticut Association of Assessing Officers, Inc., May, 2023