

Requirements Overview

Purpose

This document provides a high-level summary of the business and regulatory requirements extracted from the Cook County, Illinois property tax extension COBOL codebase. The system comprises approximately 70 COBOL programs organized across six functional domains that collectively implement the annual property tax extension process for Cook County.

The requirements documented here were extracted directly from COBOL source code, program comments, modification histories, and structural analysis. They represent the system's behavior as encoded in source files dating from 1992 through 2019.

System Scope

The tax extension system performs the following core functions:

1. **Property Assessment Management** (ASREA domain, 35 programs) -- Maintains assessed valuations, applies equalization factors, manages frozen valuations for reassessment townships, and computes homestead exemption values.
2. **Senior Freeze / Homestead Exemption Processing** (ASHMA domain, 20 programs) -- Calculates senior citizen assessment freeze benefits, non-primary homeowner exemptions (NPHE), and manages the Senior Freeze file lifecycle from application through tax difference computation.
3. **Tax Rate Making / Extension** (CLRTM domain, 10 programs) -- Implements the tax rate computation pipeline including TIF processing, agency valuation assembly, disconnected/annexed territory handling, and the PTELL (Property Tax Extension Limitation Law) new property reporting.
4. **Certificate of Error Processing** (ASCOE domain, 2 programs) -- Handles corrections to assessed valuations via Certificate of Error procedures, including recalculation of base year values.
5. **Equalization Factor Management** (CLREB domain, 1 program) -- Entry point for state-mandated equalization factors that convert assessed values to equalized assessed values.
6. **Special Classification Processing** (ASSRQ domain, 2 programs) -- Handles mixed-use property classification for the Chicago Circulator tax type assignment (currently disabled as of 2013).

Key Requirement Categories

R1: Property Valuation and Equalization

The system must apply state-mandated equalization factors to convert locally assessed property values into equalized assessed values (EAV). This is the foundation of the entire tax computation. Equalization factors vary by year and quadrennial reassessment cycle (quad 1-4). The system maintains a VSAM-indexed equalization factor file keyed by year and quad.

Key programs: CLREB020, ASREA864, ASREA740, ASHMA850, ASHMA855

R2: Property Classification

Properties are classified using a three-digit major/minor classification code system. The system recognizes and applies special processing for:

- Residential property (classes 200-299, with specific subcategories)
- Residential improvements (classes 202-213, 218-221, 234, 278, 294-295, 297, 299)
- Residential land (classes 200, 241)
- Farm land (class 239)
- Mixed-use (class 236)
- Homestead Improvement Exemption (class 288)

Key programs: ASHMA850, ASHMA839, ASREA003, ASREA740

R3: Tax Increment Financing (TIF) Processing

The system must track Tax Increment Financing districts by maintaining frozen base equalized values and computing TIF differences (current EAV minus frozen base EAV). Negative differences are floored to zero. TIF processing flows through a pipeline that removes TIF parcels from the Assessment Master, computes differences, and updates the Frozen Agency File with TIF valuations.

Key programs: CLRTM356, CLRTM757, CLRTM759

R4: Senior Citizen Assessment Freeze Exemption

The system must calculate tax differences between a property's current equalized value and its base year equalized value for qualifying senior citizens. Base years are tracked from 1993 through 2018 with individual year counters. The calculation produces a "tax difference" that represents the senior freeze benefit amount.

Key programs: ASHMA850, ASHMA855

R5: Non-Primary Homeowner Exemption (NPHE)

The system must compute NPHE values based on geographic location within Cook County, with historically differentiated rates for City of Chicago townships, northwest suburban townships, and southwest suburban townships. As of the most recent code updates, all geographic regions converge to the same exemption amount.

Key programs: ASHMA839

R6: Homestead Improvement Exemption (Class 288)

The system must apply year-dependent threshold deductions for homestead improvement exemptions (class 288). The threshold amount that can be subtracted from reproduction cost varies by the year the improvement was made, with five distinct historical tiers.

Key programs: ASREA003, ASREA740

R7: Disconnected and Annexed Agency Processing

When taxing agency boundaries change (disconnection or annexation), the system must identify affected agencies by comparing prior year and current year agency lists, compute proportional valuation adjustments, and update the Frozen Agency File accordingly.

Key programs: CLRTM753, CLRTM755

R8: New Property / PTELL Reporting

The system must produce reports of new property, annexed property, disconnected property, recovered tax increment, and expired incentive values by agency and by town within agency. This supports the Property Tax Extension Limitation Law (PTELL) compliance process.

Key programs: CLRTM749, CLRTM750, CLRTM756

R9: Tax Code to Agency Mapping

Each property is assigned to a tax code that maps to up to 40 taxing agencies. The system must look up tax codes, apply agency assignments, and propagate agency information through the valuation pipeline.

Key programs: CLRTM752, CLRTM759

R10: Certificate of Error Base Year Recalculation

When a Certificate of Error is processed for a property enrolled in the Senior Freeze program, the system must recalculate the base year value using the corrected assessed value and the applicable equalization factor.

Key programs: ASHMA855, ASCOE500, ASCOE515

Compliance and Currency Concerns

The codebase dates primarily from the mid-1990s through 2019. Several areas present compliance risks:

1. **Hardcoded exemption amounts** -- NPHE values, class 288 thresholds, and other statutory amounts are embedded directly in source code and require code changes to update.
2. **Year-specific counters** -- The Senior Freeze base year counters in ASHMA850 extend only through 2018. Processing years beyond 2018 would require source code modification.
3. **Disabled functionality** -- The Chicago Circulator mixed-class logic (ASSRQ560/561) was commented out for the 2013 tax year, suggesting legislative changes that were handled by code modification rather than configuration.
4. **Y2K windowing** -- Several programs use a windowing approach (years > 60 = 1900s, years <= 60 = 2000s) that will fail after 2060.
5. **Geographic boundary codes** -- Township number assignments for City/Northwest/Southwest divisions in ASHMA839 are hardcoded and would need updating if jurisdictional boundaries change.

Cross-References

- **Detailed business rules:** See [business-rules.md](#)
- **Regulatory references:** See [regulatory-references.md](#)

- **Hardcoded values catalog:** See [hardcoded-values.md](#)
- **Program documentation:** See [../Programs/program-index.md](#)
- **Runtime requirements:** See [../Runtime/runtime-requirements.md](#)