# Real Estate Sales 2001-2020 GL

#### **Background**

The Office of Policy and Management maintains a listing of all real estate sales with a sales price of \$2,000 or greater that occur between October 1 and September 30 of each year. For each sale record, the file includes town, property address, date of sale, property type (residential, apartment, commercial, industrial, or vacant land), sales price, and property assessment.

**Problem Statement** Problem Statement Exploring Property Assessment and Sales Data for Informed Decision-Making.

In our quest for informed decision-making in real estate, we are presented with a comprehensive dataset encompassing various attributes related to property assessment and sales transactions. This dataset includes information such as the assessed value, sale amount, sales ratio, property type, and more, offering a rich source of insights into the real estate landscape.

### **Objectives**

- 1. Assessment Accuracy Evaluate the accuracy of property assessments by comparing assessed values with actual sale amounts, and identify any discrepancies.
- 2. Market Trends Analyze sales ratios to uncover trends in property market values, understanding how sale amounts relate to the assessed values across different property types and residential classifications.
- 3. Geographical Analysis Investigate variations in assessed values, sales amounts, and market ratios across different towns, providing a localized understanding of real estate dynamics.
- 4. Property Type Impact Examine the impact of property type on assessment accuracy and market trends, exploring whether certain types (e.g., residential, commercial) exhibit distinct patterns.
- 5. Non-Use Code Insights Explore the significance of non-use codes in property assessment, investigating how these codes influence assessed values and sales transactions.
- 6. Assessor and OPM Remarks Analyze remarks provided by assessors and the Office of Policy and Management (OPM) to identify factors influencing assessment decisions and potential areas for improvement.

#### **Expected Outcomes**

- 1. Uncover insights into the accuracy of property assessments, identifying areas where adjustments may be necessary.
- 2. Gain a nuanced understanding of market trends, allowing stakeholders to make informed decisions based on current and historical data.
- 3. Provide localized insights for different towns, assisting in regional planning and investment decisions.
- 4. Understand the impact of property type on assessment outcomes, helping to tailor strategies for different segments of the real estate market.
- 5. Investigate the role of non-use codes in property assessment, identifying patterns and potential areas for policy refinement.
- 6. Utilize assessor and OPM remarks to improve communication and transparency in the assessment process.

By undertaking a comprehensive data analysis of this property assessment and sales dataset, we aim to empower stakeholders in the real estate sector with actionable insights for better decision-making and improved accuracy in property assessments.

## **Description**

Data are collected in accordance with Connecticut General Statutes, section 10-261a and 10-261b <a href="https://www.cga.ct.gov/current/pub/chap\_172.htm#sec\_10-261a">https://www.cga.ct.gov/current/pub/chap\_172.htm#sec\_10-261b</a>. Annual real estate sales are reported by grand list year (October 1 through September 30 each year). For instance, sales from 2018 GL are from 10/01/2018 through 9/30/2019.

#### **Features of Dataset**

- 1. Serial Number: Integer, A unique identifier assigned to each record in the dataset.
- 2. List Year: Integer or Date, the year in which the property information was listed or assessed.
- 3. Date Recorded: Date, the date when the property information was recorded or updated.
- 4. Town: String, the name of the town or locality where the property is located.
- 5. Address: String, the specific address or location details of the property.
- 6. Assessed Value: Integer, the assessed monetary value of the property, typically determined by a local assessor for taxation purposes.
- 7. Sale Amount: Integer, the amount for which the property was sold, if applicable.

- 8. Sales Ratio: float, the ratio of the sale amount to the assessed value, providing an indication of the property's market value.
- 9. Property Type: Categorical, the general category or classification of the property (e.g., residential, commercial, industrial).
- 10. Residential Type: Categorical, further classification specifying the residential type (e.g., single-family, multi-family) if applicable.
- 11. Non-Use Code: Categorical, a code indicating the non-use status of the property, which might include information about exemptions or special classifications.
- 12. Assessor Remarks, String, additional remarks, or comments provided by the assessor related to the property assessment.
- 13. OPM Remarks; String, remarks or comments from the Office of Policy and Management (OPM) related to the property data, providing additional context or information.

This data description should give a clear understanding of the types and meanings of each feature in the dataset.

#### **Submission**

- a) Publish your **Jupyter Notebook** to your **GitHub** profile including a 10 slides PowerPoint presentation of your findings and their recommendations
- b) In the **ReadMe file**, include a description of the project and summarize the steps you took and the challenges you faced.
- c) Share the link with your instructor through email segunumorul@gmail.com using Gomycode **Data Science BootCamp Cohort3 2024** as the subject of the mail.
- d) Do a short recording, max 10 minutes of your exploratory data analysis and recommendations using your PowerPoint slides; communicating your insights and how they can help the company make good business decisions, and upload it on LinkedIn; tag **Segun Umoru.** Ensure you include the link to your repository

Download Dataset Here

All the best!