

**Cambridge Property Database Analysis V2**

**Prof. Jack Bergersen**

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**Introduction:**

In this project, data from various properties that were assessed between FY 2016 and FY 2021 are analysed using the Cambridge Property Database. The dataset consists of about 174,505 property details such as Building value, land value, sales price, assessed price, year of assessment, and building features like land acreage, flooring type, interior living area, etc. are some of the variables in this dataset. To visually determine the statistical importance, this data is shown in Qlik.

**Analysis:**

1. **Top 10 Property Class :**

Chart, bar chart

Description automatically generated

**Variables Used:**

* In the above graph, the variables used are Count ( PID ) which gives us the number of properties and Property Class which represents the property type.

**Findings:**

* From the above bar graph, we can see that the most popular property class is ‘CONDOMINIUM’. We further continue or analysis with all the properties with property type ‘CONDOMINIUM’.
* **Design Decision:**  
  A bar chart was used in this comparison to properly highlight the difference in the data.

1. **Sales Price & Assessed Value of Condominium over the Years:**

Chart, line chart

Description automatically generated

**Variables Used;**

* The variables used in the above graph are Avg ( AssessedValue ), Avg ( SalesPrice) and YearsOfAssessment. The data is filtered with Property Class = Condominium.

**Findings:**

* From the above graph, we can see the average assessed value has increased linearly over the years but the average sales price remained constant from 2016 to 2017 after which there was an increase.
* The Average Assessed Value of condominiums are bigger than the Average Sales Price.

**Design Decision:**

* For this data, a line chart was used with different colours representing both assessed value and Sales Price to differentiate the two lines.

1. **AVG Sale Price over the Years by # of Bedrooms:**

Chart, bar chart

Description automatically generated

**Variables Used:**

* The variables used in the above graph are Avg ( SalesPrice), Interior\_Bedrooms and YearsOfAssessment. The data is filtered with Property Class = Condominium.

**Findings:**

* From the above chart we can see that in the year 2016, the average sales price of 0 bedroom condominium is larger than 1 bedroom and 2 bedroom condominium. Later from 2017, the 0 bedroom condominium had the least average sales price.
* In the year 2021, the average sales price of 1 bedroom condominium has surpassed the 2 bedroom condominium.

**Design Decision:**

* A vertical grouped bar chart is used in this comparision to show the difference in the sales price of condominiums per the number of bedrooms.

1. **Top 5 Tax Districts with Lowest Property Tax:**

Chart, bar chart

Description automatically generated

**Variables Used:**

* The variables used in the above graph are Avg( PropertyTaxAmount ) and TaxDistrict. The data is filtered with Property Class = Condominium.

**Findings:**

* For property class = Condominium, the tax districts where the property tax amount is least are R1, R7, R2, R12 and R6.

**Design Decisions:**

* A bar chart was used in this comparison to properly show the individual heights of the Tax Districts.

**Conclusion:**

The above analysis can help real estate companies and their prospective clients in understanding the current market value of an average condominium along with some details such as the tax district, number of bedrooms etc. This data would also be helpful for real estate developers in building properties which cater to a larger audience.

**References:**

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