

MAJOR PROJECT

PROJECT TITLE : Real Estate And Property Management

OBJECTIVE : This dashboard provides property managers with an interactive overview of a diverse portfolio of properties, highlighting key details such as geographic location, overall condition, and room types (such as studio, one-bedroom, or multi-bedroom units). It includes a variety of property types spread across multiple areas, offering a clear and organized snapshot of the current property landscape. The dashboard is designed to support informed decision-making, streamline daily operations, and improve oversight by making essential property information easily accessible and actionable.

DATASET OVERVIEW :

- **Fact Table :**
 - Bedroom ID
 - Condition Status ID
 - Floor ID
 - Yr_built
 - Yr_renovated
 - Location ID , etc.
- **Measures Table :**
 - %bad
 - %good
 - %waterfront yes
 - Properties Years
 - Renovated , etc.
- **Created Various Measures :**
 - Dim_Bedroom
 - Dim_Waterfront
 - Dim_Floors
 - Dim_Location
 - Dim_Condition_Status
 - Dim_Renovation_Status
- **Added Conditional Column :**
 - Table.AddColumn("#Removed Columns2", "WaterFront Status", each if [waterfront] = 1 then "Yes" else "No")
 - Table.AddColumn("#Removed Columns3", "Condition Status", each if [Condition] = 0 then "Bad" else if [Condition] = 1 then "Good" else "Very Good")
 - Table.AddColumn("#Added Custom", "Renovation Status", each if [Interval] > 0 then "Renovated" else "Not Renovated")
- **Added Custom Column**
 - Table.AddColumn("#Removed Columns4", "Interval", each [yr_renovated]-[yr_built])
- **Changed Data type of columns :**
 - Yr_renovated – Decimal to Numeric
 - Interval – Date/Time to Integer
 - Price – Integer
 - Renovation Status – ABC(Text)

DASHBOARD DETAILS :

1) Key Performance Indicators (KPIs) Tracked:

- i) Waterfront Status (yes) : Number of houses having the waterfront whether renovated or not.
- ii) Waterfront Status (no) : Number of houses not having the waterfront.
- iii) Current Condition Of Properties : Condition of houses whether (bad , good , very good)

2) Visualizations Used (Page 1):

- a. Total Properties – A Card is used to show the total number of properties including every area.
- b. Bedrooms Contained In Properties – A Stacked Bar Chart is showcasing the types of bedrooms in properties (1-bedroom , 2 bedroom , etc.).
- c. Floors Contained In Properties – A Stacked Column Chart is displaying the number of floors in various properties (1 floor , 2.5 floor , etc.).
- d. Years in which properties were built – A Line Chart showing the years the company had made the properties.
- e. Renovation Status – A Donut Chart demonstrating the properties that are renovated and that are yet to be renovated.
- f. Waterfront (yes) by Condition – A Pie Chart is used for demonstrating the properties having waterfront based on condition.
- g. Bookmark Button : It is used to make a pop-up menu in which Three slicers are used (yr_built , yr_renovated and property location)
- h. Cross Button : Used to close the pop-up menu.

Visualizations Used (Page 2):

- a. Properties By Location – A Map is used for showing the different property location and which has most properties
- b. Total Properties and its Condition across States – A Table is used to show the total number of property location based on condition across the states.
- c. Total Floors and its Condition across States – A Table is used to show the total number of floors on a property location based on condition across the states.

INSIGHTS DERIVED FROM DASHBOARD

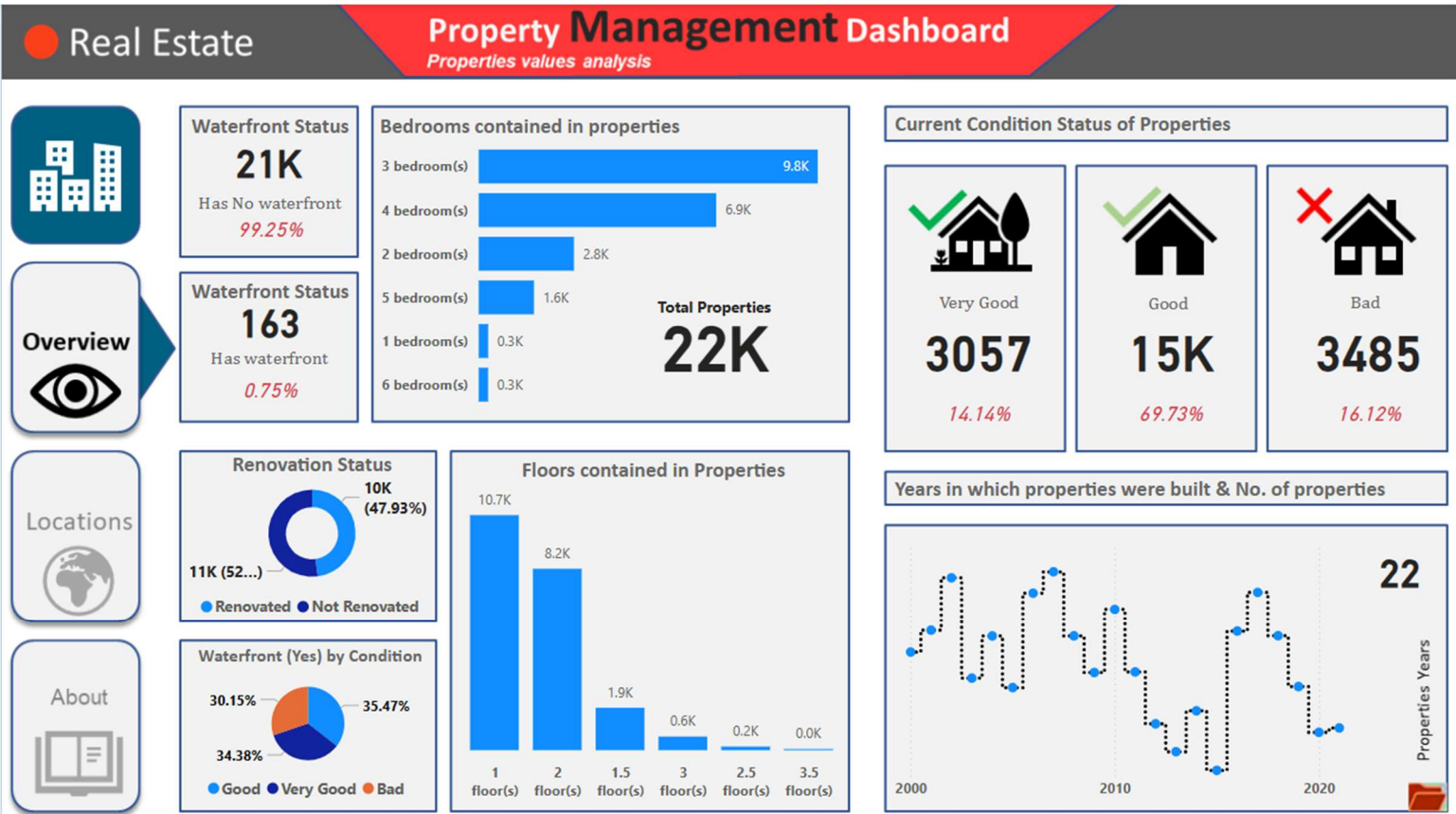
- i). Bedrooms : Most of the properties have 3 bedrooms in them and only 0.3K have 6 bedrooms in a single property.
- ii). Floors : Almost 50% of properties have single floor (1) in a property.
- iii). Condition of Properties : 50% i.e. 15K properties have Good condition and very less of them have Bad condition.
- iv). Property Built : In the year 2007, highest number of properties were built.
- v). Location–Wise Analysis : Highest number of properties are present in California and least number of properties in Georgia
- vi). Scope of Renovation : Connecticut has most properties in Bad condition those need immediate repair.

FUTURE ENHANCEMENTS

- i). Integration with Real-Time Data Sources : Incorporating real-time data updates to ensure the dashboard reflects the most current information on property status, conditions, and changes.
- ii). Predictive Analytics & Machine Learning : Implement machine learning models to predict potential maintenance needs based on historical property condition data and usage patterns.
- iii). Historical Data and Trend Analysis : Introducing features to analyze property condition trends or location development over time for better long-term planning.
- iv). Customer Segmentation : Add functionality to segment customers based on purchase history, region, or demographics to tailor marketing and sales strategies.
- v). Mobile Responsiveness : Optimize the dashboard layout and visuals for use on mobile devices and tablets, ensuring accessibility for users on the go.

CONCLUSION : This Real Estate And Property Management dashboard provides a clear overview of property locations, conditions, and room types to support efficient property management. It lays the groundwork for smarter decision-making and future enhancements, such as real-time data integration and machine learning, to further improve operational efficiency and planning. With continued development, it can evolve into a more intelligent and proactive management tool.

FINAL PROJECT DASHBOARD





Overview



Locations



About



Waterfront Status

21K

Has No waterfront

99.25%

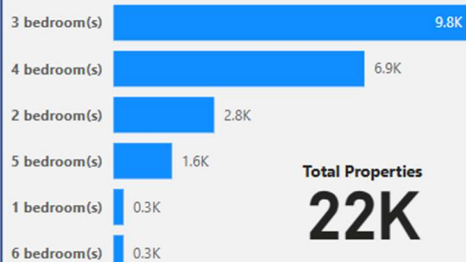
Waterfront Status

163

Has waterfront

0.75%

Bedrooms contained in properties



Current Condition Status of Properties



Very Good

3057

14.14%



Good

15

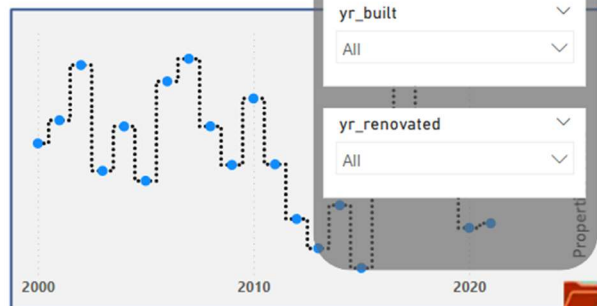
69.7%



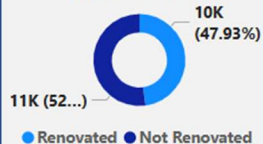
Property location

- ☐ Arizona
- ☐ California
- ☐ Connecticut
- ☐ Florida
- ☐ Georgia
- ☐ Hawaii

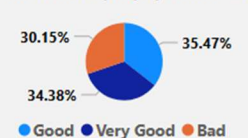
Years in which properties were built



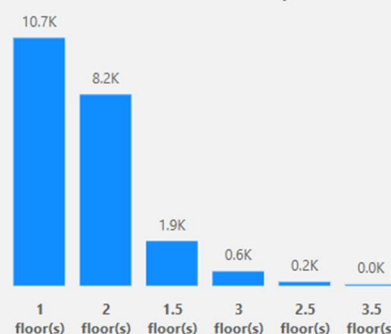
Renovation Status



Waterfront (Yes) by Condition



Floors contained in Properties



Overview



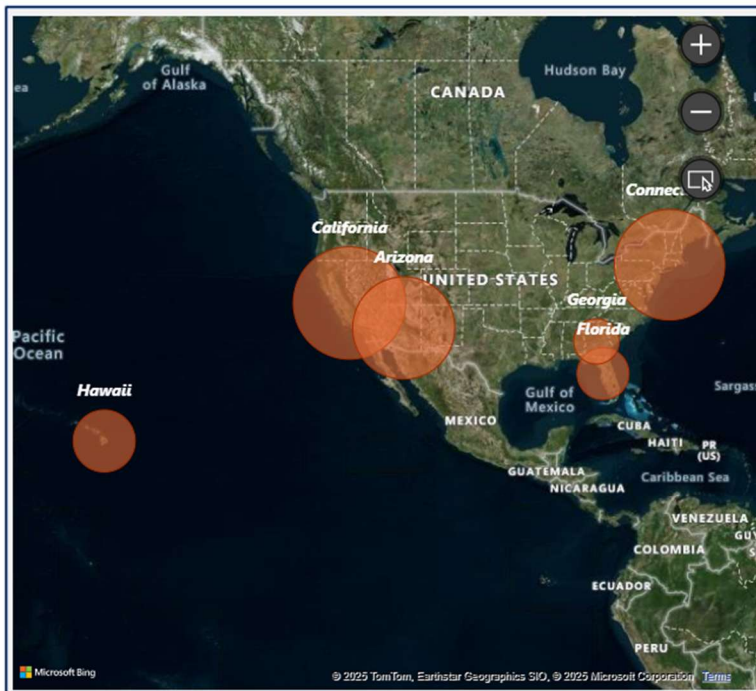
Locations



About



Properties By Locations



Total Properties and its Condition across States

Property location	Very Good	Good	Bad
Arizona	403	4025	875
California	919	4662	980
Connecticut	1267	3950	1085
Florida	291	697	70
Georgia	97	555	93

Total Floors and its Condition across States

Floors	Very Good	Good	Bad
1 floor(s)	1466	7488	1726
1.5 floor(s)	298	1355	257
2 floor(s)	1213	5657	1371
2.5 floor(s)	23	110	28
3 floor(s)	55	457	101
3.5 floor(s)	2	4	2



Overview



Locations



About



This Dashboard is about Real estate and properties management. We delve into the number of properties in various locations, various types of floors, waterfront and locations. wise

The analysis look at the status of the properties for the decision makers to know which properties need attention and quick fix.

Source : Kaggle