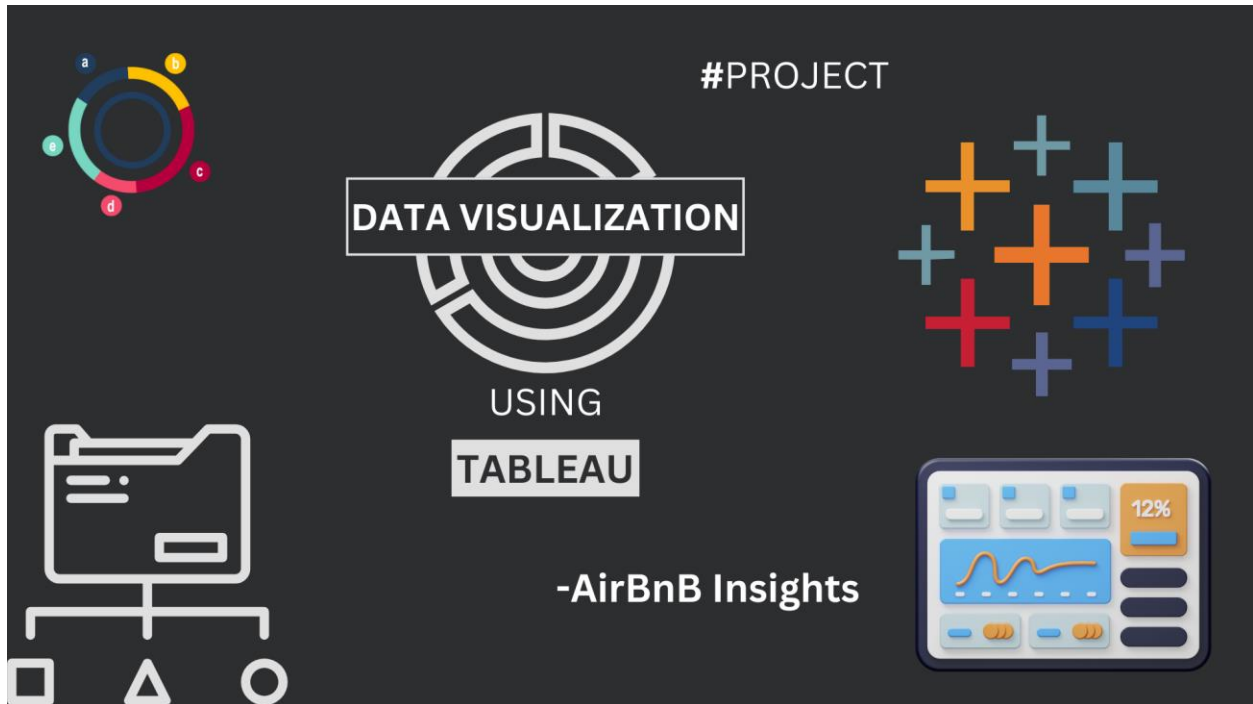# Tableau Mastery: Data Visualization Project for Airbnb Insights

Description:

In this Tableau project, I aimed to derive insights to enhance Airbnb's business using a dataset downloaded from Kaggle. Due to Tableau Public's limitations, I filtered the dataset to 10 million rows from the original 23 million. I joined multiple datasets based on common IDs and created various visualizations. These included analyzing prices by zip codes with bar charts and maps, examining revenue trends over time using line charts, exploring average prices per bedroom, and determining the total number of bedrooms. Finally, I designed a Tableau dashboard to present the findings. This project improved my skills in creating effective data visualizations, utilizing functions, filters, charts, and joins in Tableau.

Skills: Data Visualization, Tableau.

This Project is all about learning Tableau Data visualization. While doing this project I learned How to Create a Dashboard, Joins, Filters, and charts.

I faced some errors while doing this project I faced an error in joins like, those datasets totally have 23 million rows. I currently using a Tableau Public version. That they don't allow us to work with 23 million rows, they only allow us to work with 15 million rows. To work with datasets I filtered my datasets into 10 million, the filter process really took a lot of time, approximately 2 hours. and to solve that problem I used the internet community. Their a lot of people who are ready to solve my problems. If they don't help, It take a lot of time to complete this project.

This project's goal is to find the right insights to improve Airbnb's business. (Airbnb, as in "Air Bed and Breakfast," is a service that lets property owners rent out their spaces to travelers looking for a place to stay. Travelers can rent a space for multiple people to share, a shared space with private rooms, or the entire property for themselves.)

To start this project, I downloaded Airbnb Data set from Kaggle Website.

To check that file, I opened Excel and I started doing projects.

Then I imported it into Tableau.
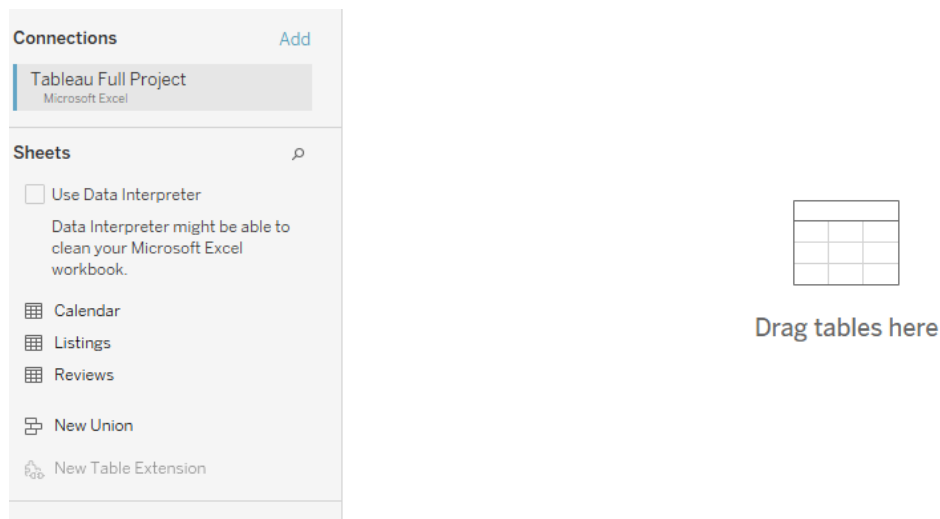
After that, I started to Join those datasets. To do that I opened Listing's dataset, then created a new window for joining multiple datasets. I joined those datasets by having a common thing (ID and Listings ID).
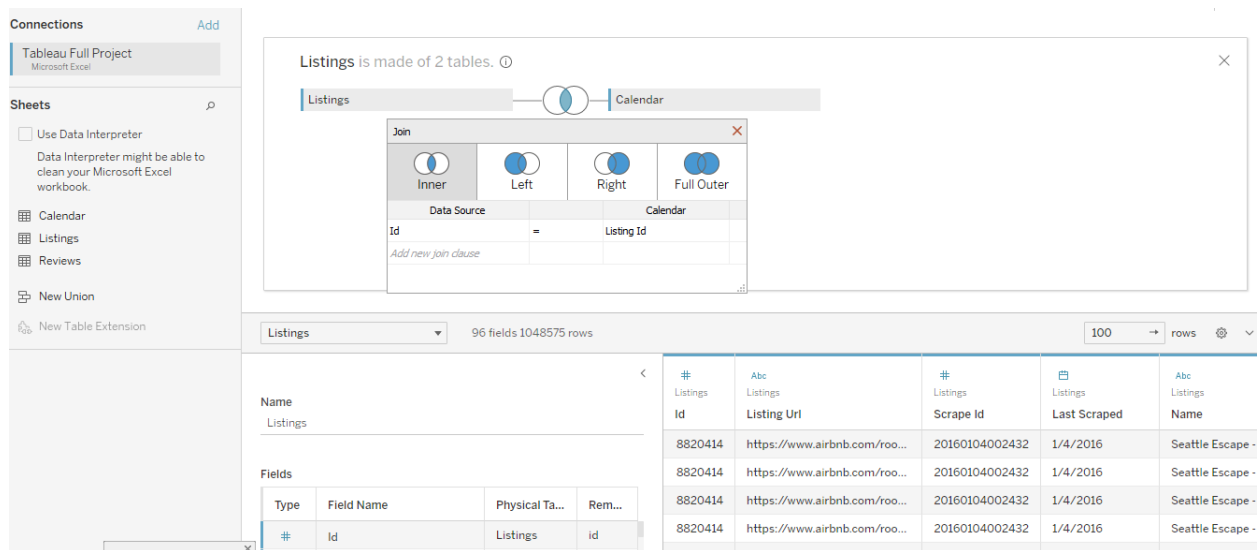
Then I created a Sheet to create charts to find insights.

First I am going to find Prices by Zipcodes. To do that I dragged Zipcodes from the listing table to columns and I dragged prices into rows. Then I added color to the bars, by adding color and labels we can easily understand the charts.
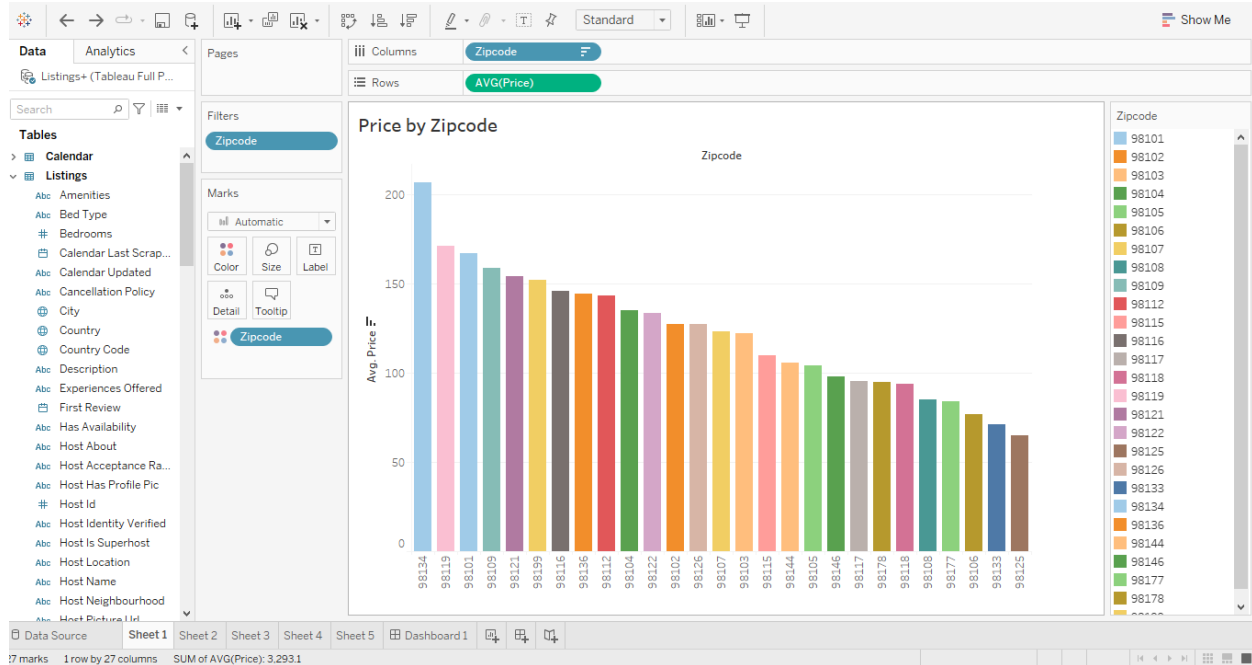
Next, To understand this more easily I added a Map chart. By adding a map people can understand those zip code places wise.
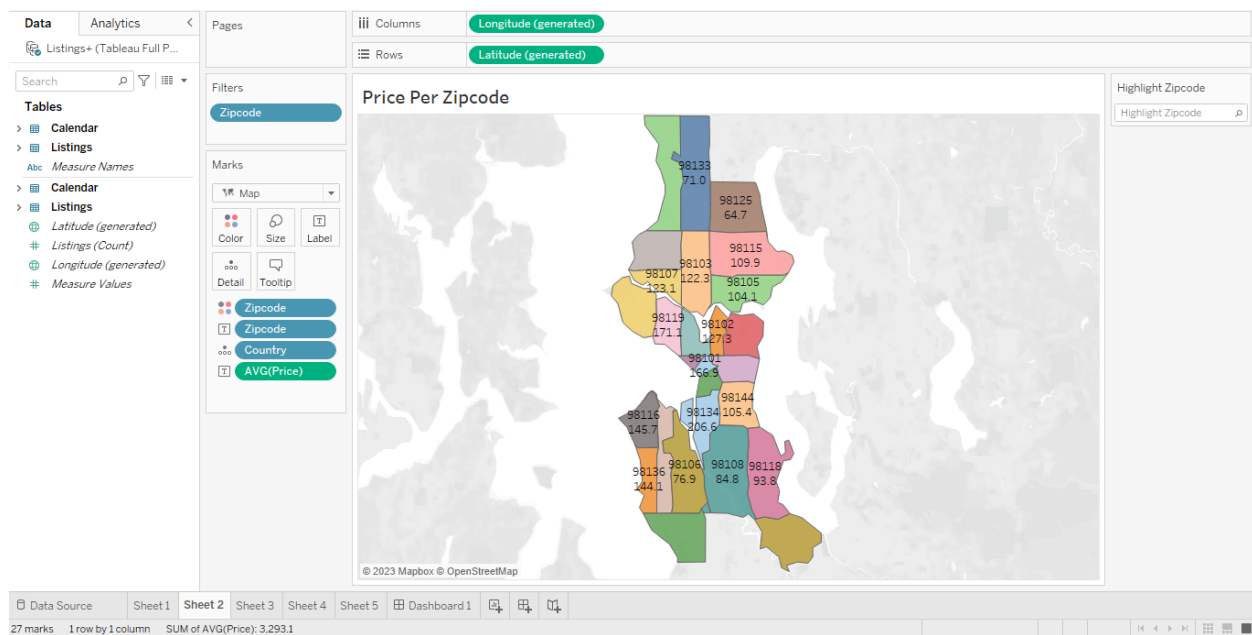
And Next, I created a third sheet to find Revenue for the year. To find that I dragged the date into the column filtered week-wise, and I added the price into Rows. This time I inserted a Line chart.
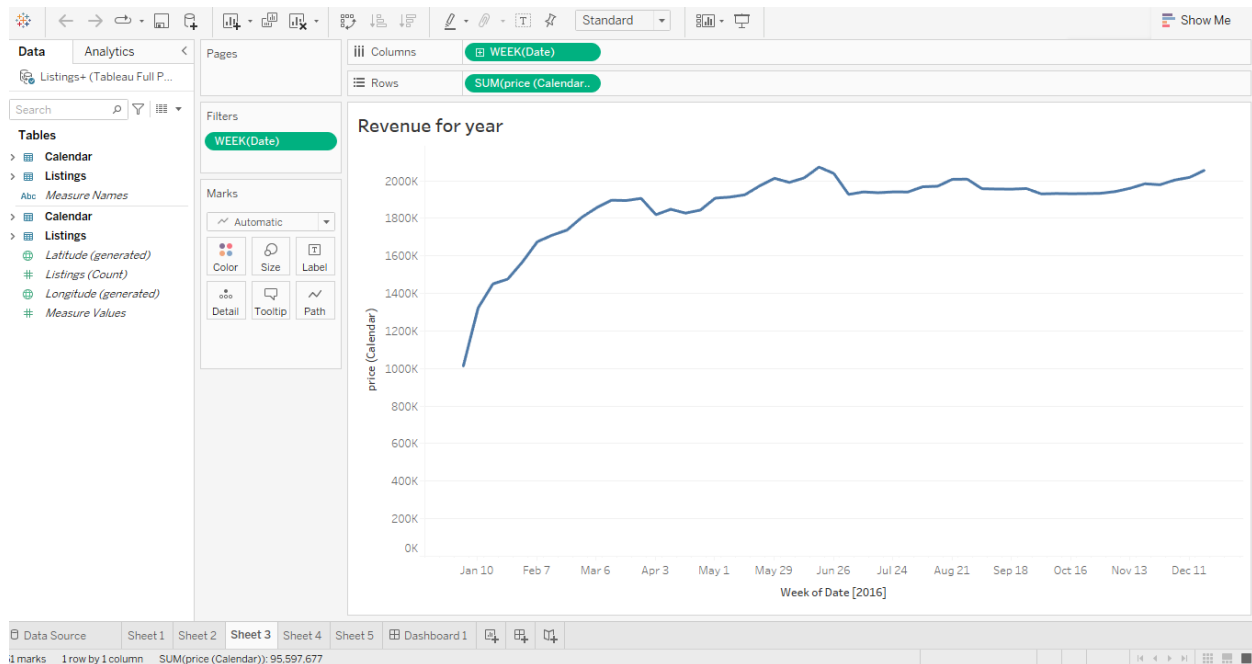
Then I created a Fourth sheet to find Avg price per bedroom. To do that I added a Bedroom to the Tableau column and next, I measured price by average then I added to the rows.
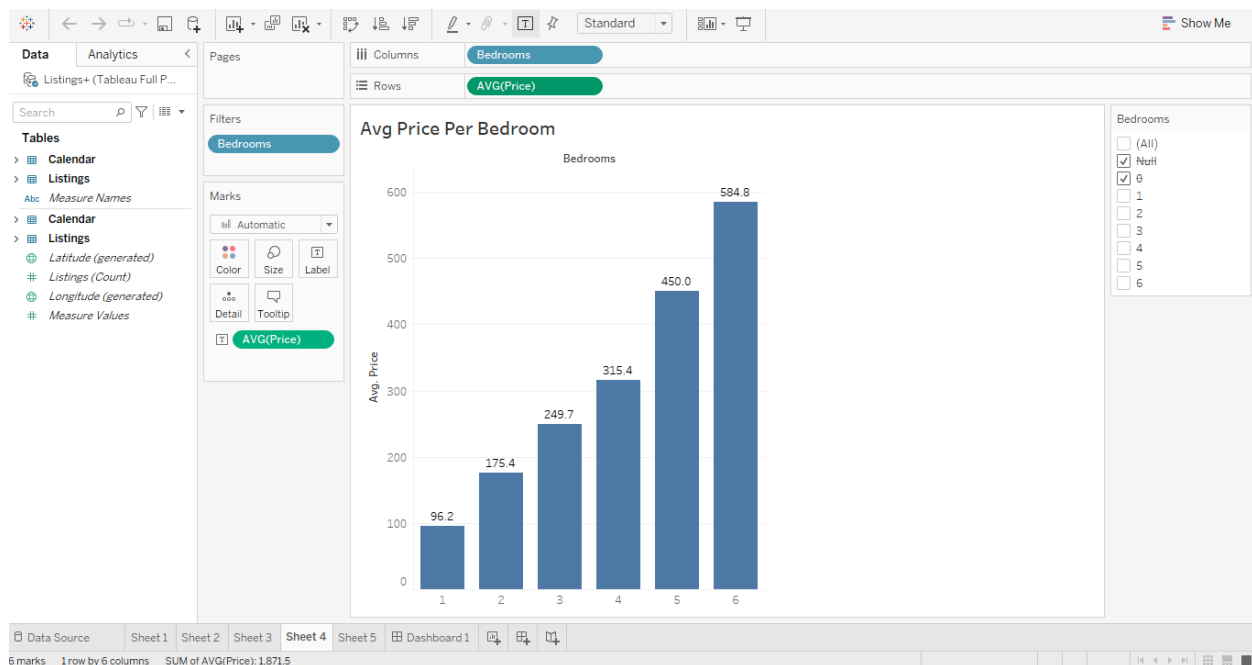
In the last sheet, I created to find how many bedrooms they totally have.
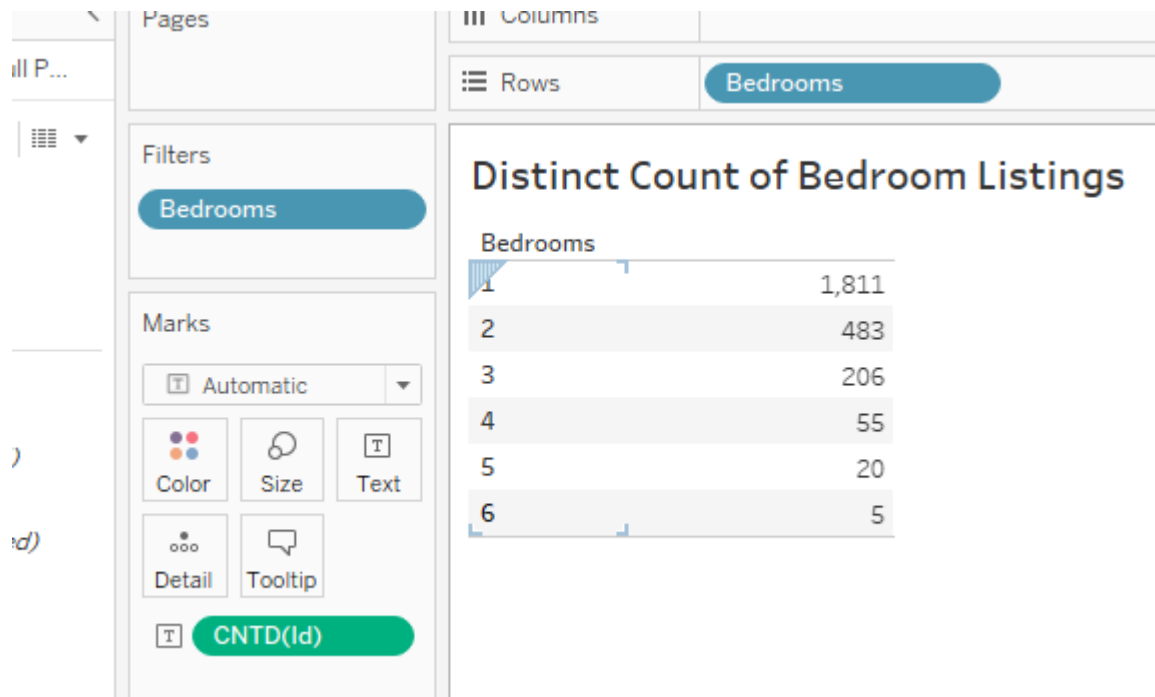
Next, I started to create a dashboard to showcase my results.
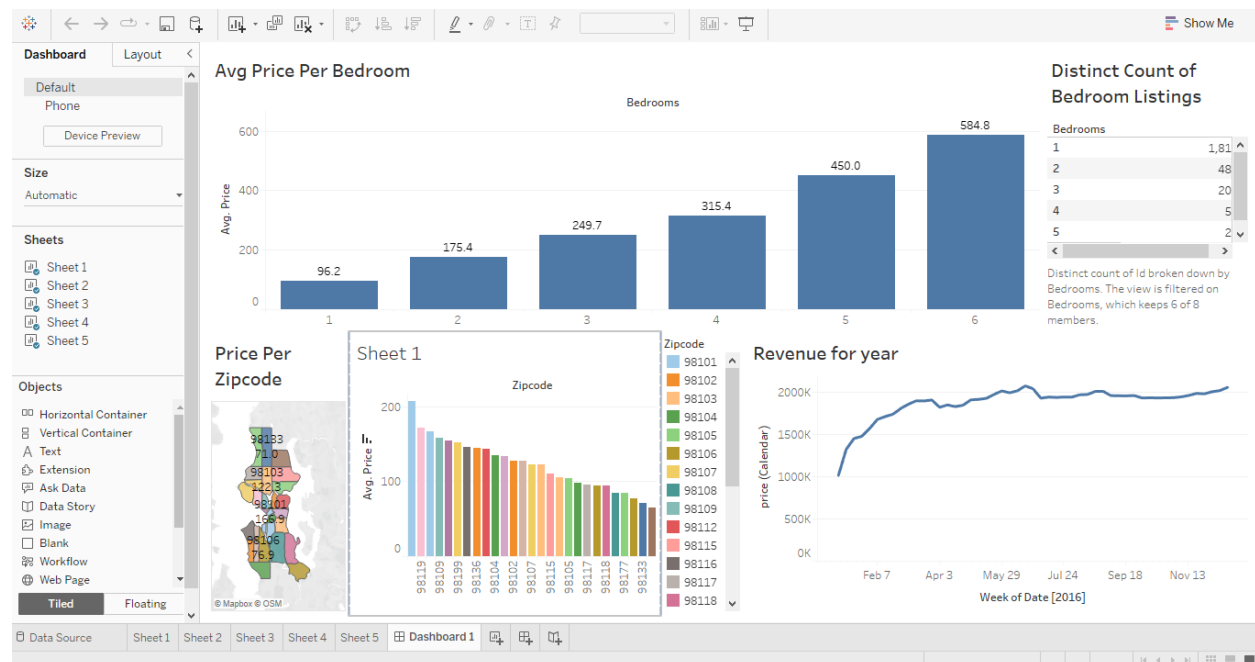
By creating a dashboard for data visualization the stakeholders can easily understand and it leads to take data-driven decision-making. Data visualization is the graphical representation of information and data. By using visual elements like charts, graphs, and maps, data visualization tools provide an accessible way to see and understand trends, outliers, and patterns in data.

In this project, I learned how to use Tableau to create wonderful dashboards and functions, filters, charts, and Joins. This experience really helped to increase my skills.

Avg Price Per Bedroom

Bedrooms

Distinct Count of Bedroom Listings

Bedrooms	
1	1,811
2	483
3	206
4	55
5	20

Distinct count of Id broken down by Bedrooms. The view is filtered on Bedrooms, which excludes Null and 0.

Price Per Zipcode

© Mapbox © OSM

Sheet 1

Zipcode

Zipcode	
	98101
	98102
	98103
	98104
	98105
	98106
	98107
	98108
	98109
	98112
	98115
	98116
	98117

Revenue for year