

Introduction

INTRODUCTION TO TABLEAU

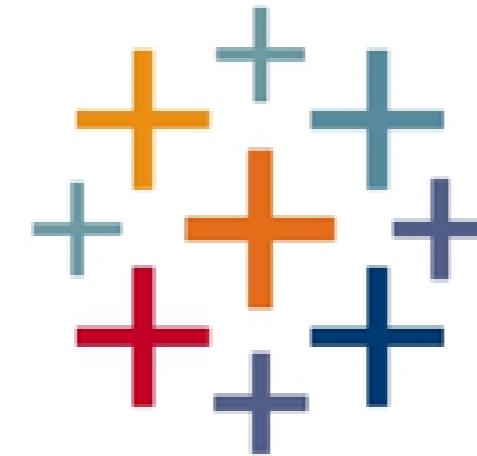


Hadrien Lacroix

Content Developer at DataCamp

What is Tableau

- Visualization tool
- VizQL
- Easy
- Beautiful
- Interactive



+ a b l e a u

Why use Tableau

Traditional photography



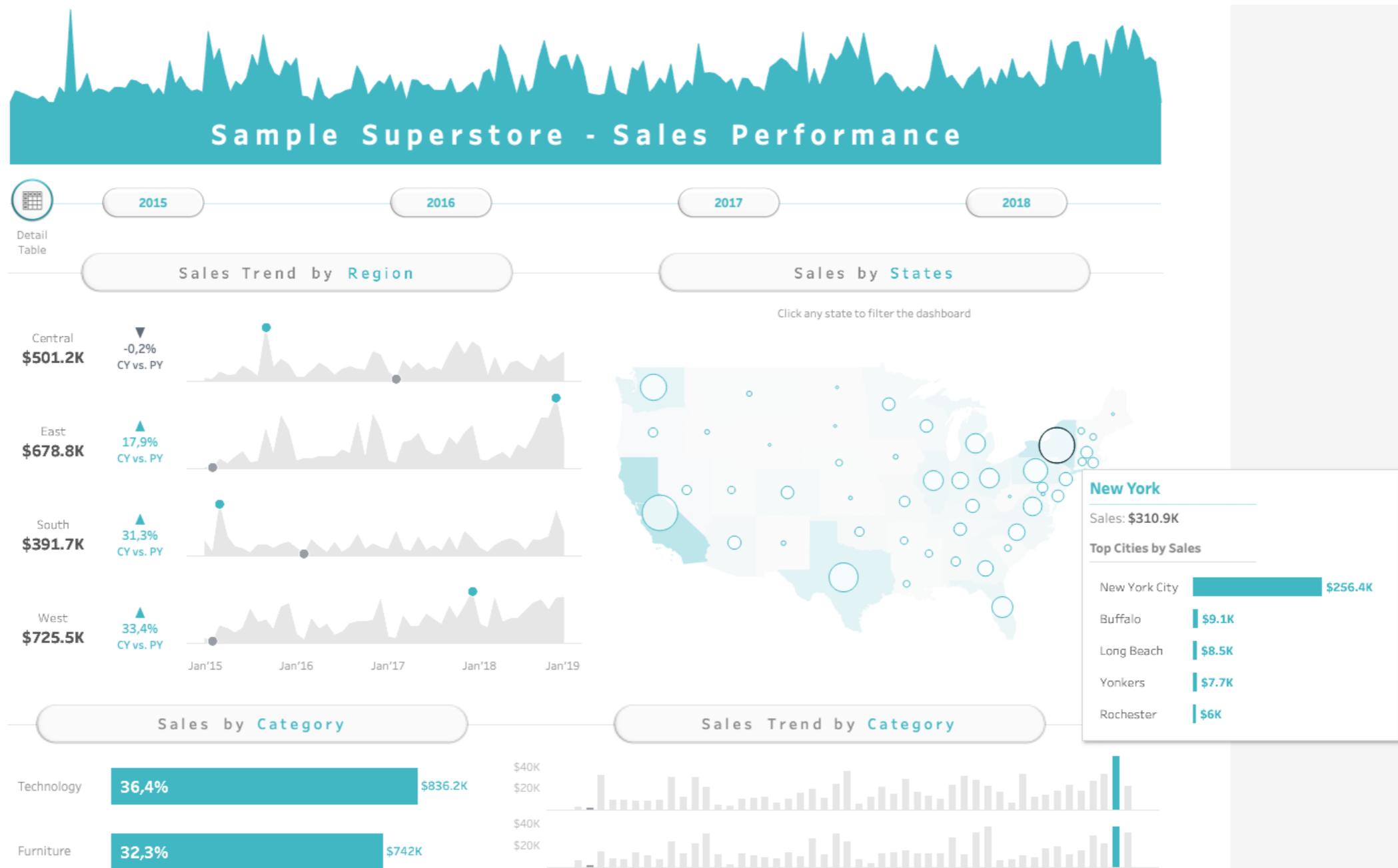
Digital photography



Why use Tableau

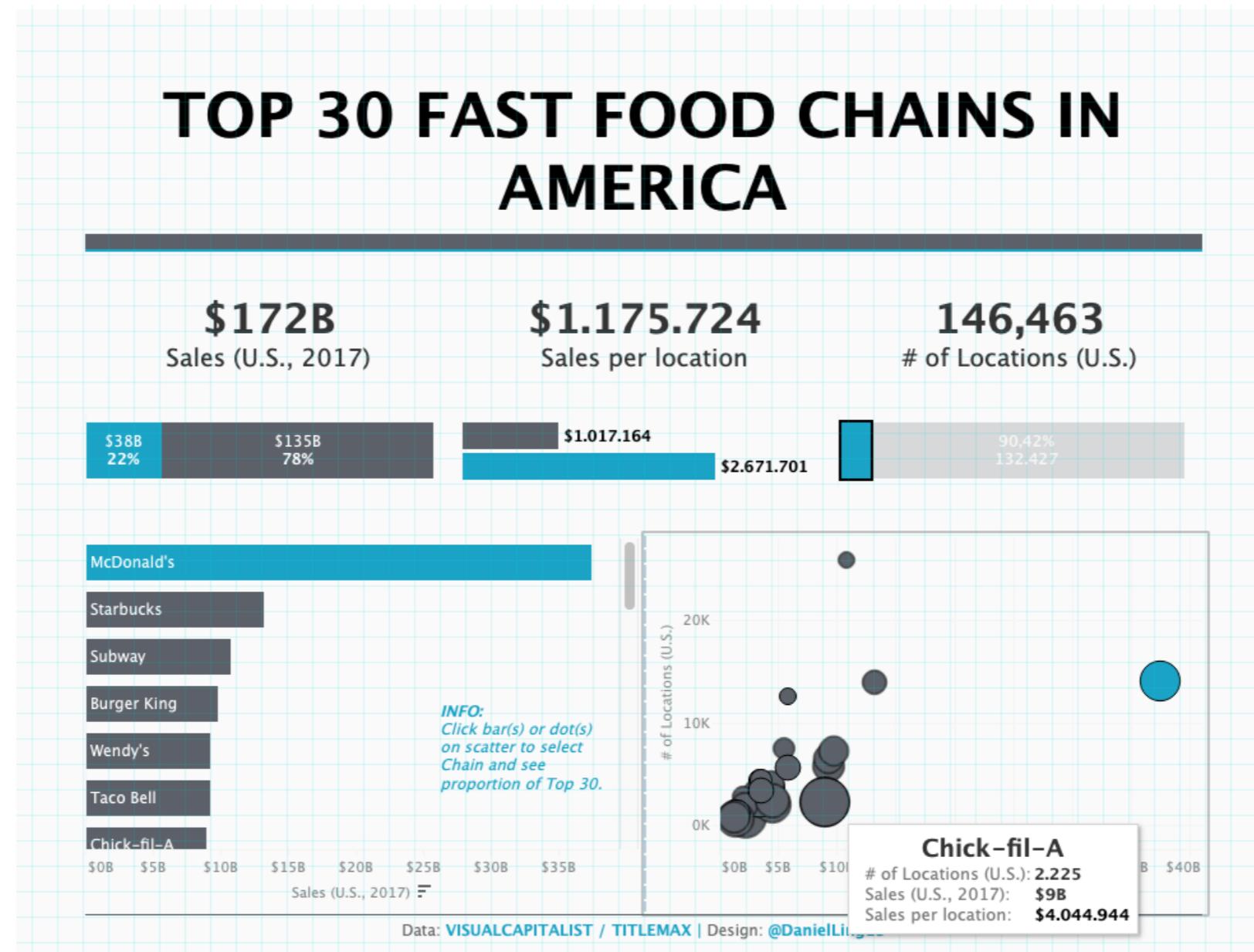
- Accessible but complete
- Flexible
- Intuitive
- Quick and robust prototyping
- Frame business questions
- Import and clean data
- Analyze and visualize data
- Drive business decisions
- Present insights

Why use Tableau - Monitoring performance



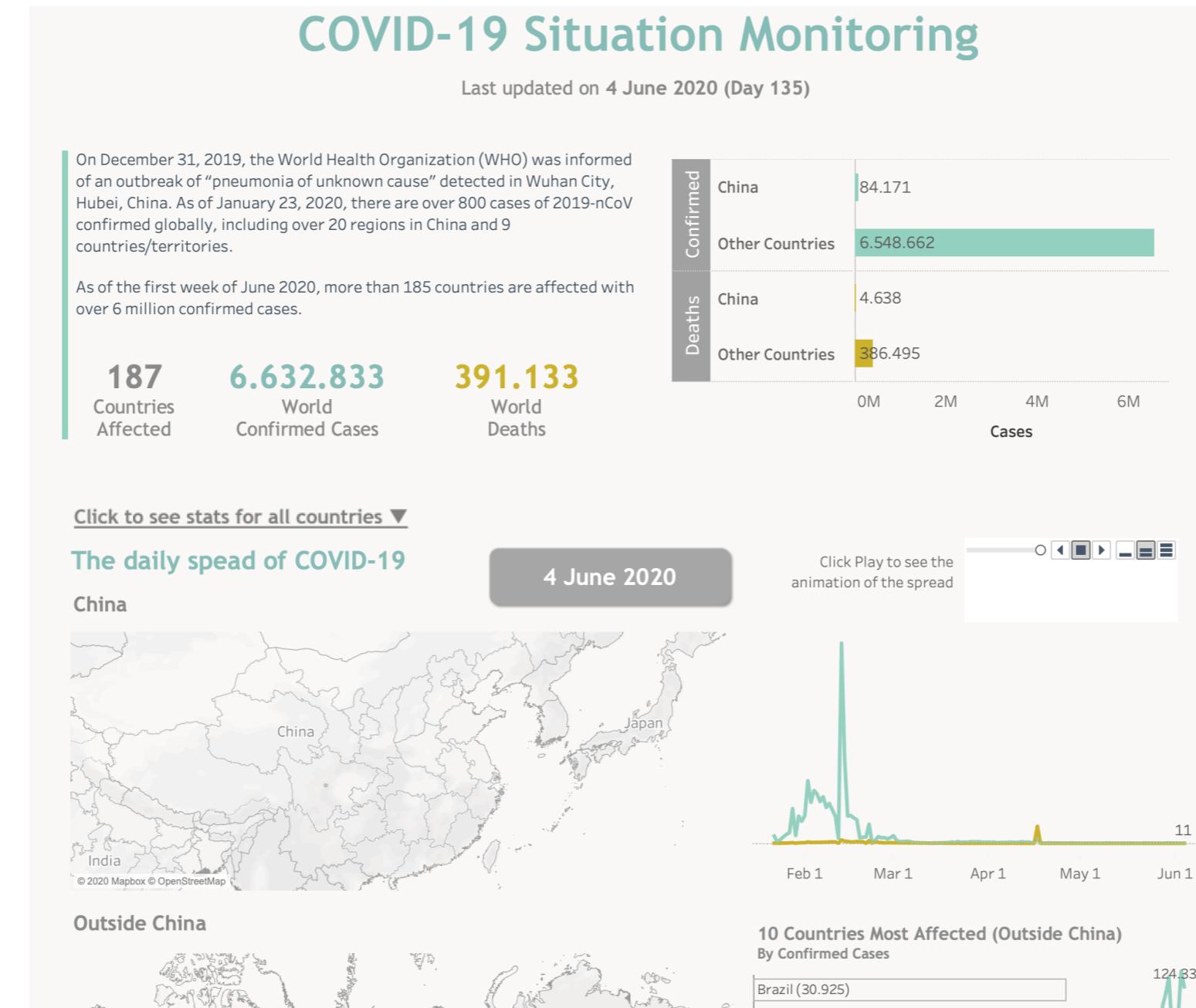
¹ Author: Pradeep Kumar G. Originally published on: Tableau Public

Why use Tableau - Competitive analysis



¹ Author: Daniel Ling. Originally published on: Tableau Public.

Why use Tableau - Tracking outbreaks



¹ Author: Thi Ho. Originally published on: Tableau Public

Who uses Tableau

Roles

- Data analyst
- Business analyst
- Quantitative analyst

Who uses Tableau

LinkedIn

The Cisco logo consists of a series of blue vertical bars of varying heights followed by the word "CISCO" in a bold, blue, sans-serif font.The Adobe logo features a red stylized 'A' icon followed by the word "Adobe" in a large, black, sans-serif font.

Walmart



tripadvisor

¹ <https://enlyft.com/tech/products/tableau>

Tableau versions

Tableau Public

- Free
- Create beautiful visualizations
- Only CSV, Excel and text files
- Save online
- 15 millions rows of data
- Public reports

Tableau Desktop

- Paid
- Create beautiful visualizations
- All listed data sources
- Save locally
- Unlimited rows of data

Let's practice!

INTRODUCTION TO TABLEAU

Connecting to data

INTRODUCTION TO TABLEAU



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Content Developer at DataCamp

Let's practice!

INTRODUCTION TO TABLEAU

Navigating Tableau

INTRODUCTION TO TABLEAU



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Content Developer at DataCamp

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" theme switch. The left sidebar contains the "Data" and "Analytics" tabs, with "Data" selected. Under "Data", there is a connection named "san_francisco". A search bar and a filter icon are also present. The main workspace is titled "Sheet 1" and features three empty columns labeled "Drop field here". On the left, the "Tables" shelf lists various data fields: Id, Neighbourhood, Reviews per Month, Room type, Measure Names, Availability 2019, Days Occupied in 2018, F1, Latitude, Longitude, Minimum Nights, Number of Reviews, Price, san_francisco.csv (Count), and Measure Values. The "Marks" shelf on the right shows options for Automatic, Color, Size, Text, Detail, and Tooltip.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations, zoom, and standard view. The left sidebar features the Data pane (selected), Analytics pane, Pages pane, and a search bar. The Data pane lists a single data source named "san_francisco". The Sheets pane shows "Sheet 1". The Marks shelf on the left contains various mark types: Automatic, Color, Size, Text, Detail, and Tooltip. The main workspace is titled "Sheet 1" and contains three blank drop zones labeled "Drop field here".

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. The left sidebar contains the "Data" and "Analytics" tabs, with "san_francisco" selected under Data. A search bar and a filter section are also present. The main workspace is titled "Sheet 1" and features three large, empty rectangular areas labeled "Drop field here". To the left of these areas is the "Marks" shelf, which is currently set to "Automatic" and offers options for Color, Size, Text, Detail, and Tooltip. Above the Marks shelf are the "Pages", "Columns", and "Rows" shelves, all currently empty. The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other standard window controls.

san_francisco

Search

Tables

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc *Measure Names*
- # Availability 2019
- # Days Occupied in 2018
- # F1
- .LatLng Latitude
- LatLng Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # *san_francisco.csv (Count)*
- # Measure Values

Drop field here

Marks

Automatic

Color

Size

Text

Detail

Tooltip

Drop field here

Drop field here

Data Source Sheet 1

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the left, the Data pane displays a project named "san_francisco" with a search bar and a "Tables" section containing various data fields. The "Reviews per Month" field is currently selected and highlighted with a blue border. The Marks shelf on the right lists "Automatic" as the mark type, with options for Color, Size, Text, Detail, and Tooltip. The main workspace, titled "Sheet 1", features three blank drop zones labeled "Drop field here" in each row. The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" theme switch. The left sidebar contains the "Data" and "Analytics" tabs, with "san_francisco" selected under Data. A search bar and a filter section are also present. The main workspace is titled "Sheet 1" and features three empty columns labeled "Drop field here". The left pane lists various data fields categorized under "Tables":

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc Measure Names
- # Availability 2019
- # Days Occupied in 2018
- # F1
- ⊕ Latitude
- ⊕ Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # san_francisco.csv (Count)
- # Measure Values

The "Marks" shelf on the right side of the workspace is set to "Automatic" and includes options for Color, Size, Text, Detail, and Tooltip.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" theme switch. The left sidebar contains the "Data" tab selected, showing a project named "san_francisco" and a search bar. Below the search bar is a "Tables" section listing various data fields:

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc Measure Names

The "Measure Names" item is highlighted with a blue border. Other listed items include:

- # Availability 2019
- # Days Occupied in 2018
- # F1
- @ Latitude
- @ Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # san_francisco.csv (Count)
- # Measure Values

The main workspace is titled "Sheet 1". It features a grid with four quadrants, each labeled "Drop field here". The top-left quadrant is currently active. The right side of the workspace includes a "Marks" pane with options for Automatic, Color, Size, Text, Detail, and Tooltip.

At the bottom of the interface, there is a navigation bar with tabs for "Data Source" and "Sheet 1", along with other standard toolbar icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. The left sidebar contains the "Data" and "Analytics" tabs, with "san_francisco" selected under Data. A search bar and a filter dropdown are also present. The main workspace is titled "Sheet 1" and features three empty drop zones labeled "Drop field here". The bottom navigation bar includes "Data Source", "Sheet 1", and other sheet tabs.

Data **Analytics**

san_francisco

Search

Tables

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc *Measure Names*
- # Availability 2019
- # Days Occupied in 2018
- # F1
- # Latitude
- # Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # *san_francisco.csv (Count)*
- # Measure Values

Pages

Columns

Rows

Marks

Automatic

Color

Size

Text

Detail

Tooltip

Sheet 1

Drop field here

Drop field here

Drop field here

Data Source Sheet 1

Segmenting with dimensions

- Dimensions and measures affect visualizations differently:
 - Dimensions are used to **segment** data
 - Measures can be aggregated
- **Segmenting** = grouping similar data together
- For example: price per neighborhood, days occupied by room type

The screenshot shows the Tableau desktop interface with the following details:

- Top Bar:** Includes icons for file operations (New, Open, Save, etc.), zoom, and standard view.
- Data Tab:** Selected tab, showing a connection named "san_francisco".
- Search Bar:** Contains a search input and a refresh icon.
- Tables Panel:** Lists data items:
 - # Id
 - Abc Neighbourhood
 - # Reviews per Month (highlighted with a green border)
 - Abc Room type
 - Abc Measure Names
 - # Availability 2019
 - # Days Occupied in 2018
 - # F1
 - @ Latitude
 - @ Longitude
 - # Minimum Nights
 - # Number of Reviews
 - # Price
 - # san_francisco.csv (Count)
 - # Measure Values
- Marks Context Menu:** A context menu is open for the "Reviews per Month" item, with the "Convert to Measure" option highlighted in blue.
 - Add to Sheet
 - Duplicate
 - Rename
 - Hide
 - Create ▾
 - Convert to Discrete
 - Convert to Measure (highlighted)
 - Change Data Type ▾
 - Geographic Role ▾
 - Default Properties ▾
 - Group by ▾
 - Folders ▾
 - Hierarchy ▾
 - Replace References...
 - Describe...
- Sheet 1 View:** A blank sheet titled "Sheet 1" with two "Drop field here" placeholder areas.
- Bottom Navigation:** Includes tabs for "Data Source" and "Sheet 1", along with other standard navigation icons.

The screenshot shows the Tableau desktop interface with the following details:

- Top Bar:** Includes icons for file operations (New, Open, Save, etc.), zoom, and standard view.
- Data Tab:** Selected tab, showing a connection named "san_francisco".
- Search Bar:** Contains a search input and a refresh icon.
- Tables Panel:** Lists various data fields:
 - # Id
 - Abc Neighbourhood
 - # Reviews per Month (highlighted with a green border)
 - Abc Room type
 - Abc Measure Names
 - # Availability 2019
 - # Days Occupied in 2018
 - # F1
 - @ Latitude
 - @ Longitude
 - # Minimum Nights
 - # Number of Reviews
 - # Price
 - # san_francisco.csv (Count)
 - # Measure Values
- Marks Context Menu:** A context menu is open for the "Reviews per Month" measure, with the "Convert to Discrete" option highlighted.
 - Add to Sheet
 - Duplicate
 - Rename
 - Hide
 - Create ▾
 - Convert to Discrete
 - Convert to Measure
 - Change Data Type ▾
 - Geographic Role ▾
 - Default Properties ▾
 - Group by ▾
 - Folders ▾
 - Hierarchy ▾
 - Replace References...
 - Describe...
- Sheet 1 View:** A blank sheet titled "Sheet 1" with three placeholder drop zones labeled "Drop field here".
- Bottom Navigation:** Includes tabs for "Data Source" and "Sheet 1", along with other standard navigation icons.

The screenshot shows the Tableau Data Prep interface. At the top, there's a toolbar with icons for file operations, data import/export, and standard settings. Below the toolbar, the main workspace is divided into several sections:

- Data:** A sidebar on the left containing a search bar and a list of tables from the current project: "san_francisco".
- Analytics:** A dropdown menu in the top right corner.
- Pages:** A section where you can manage different pages of your analysis.
- Columns:** A section where you can manage columns.
- Rows:** A section where you can manage rows. The field "Neighbourhood" is currently selected and highlighted in blue.
- Filters:** A section where you can apply filters to your data.
- Marks:** A section where you can choose how to represent data in your visualization. The "Automatic" option is selected, and other options like "Color", "Size", "Text", "Detail", and "Tooltip" are available.
- Sheet 1:** The main workspace area where you can drag fields to build your visualization. There are three empty drop zones labeled "Drop field here".

At the bottom, there's a navigation bar with tabs for "Data Source" and "Sheet 1", along with other standard browser-style controls.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. The left sidebar contains the "Data" and "Analytics" tabs, with "san_francisco" selected under Data. A search bar and a filter dropdown are also present. The main workspace is titled "Sheet 1" and features three large, empty rectangular areas labeled "Drop field here". To the left of the workspace is the "Marks" shelf, which is currently set to "Automatic" and offers options for Color, Size, Text, Detail, and Tooltip. The bottom navigation bar includes buttons for "Data Source", "Sheet 1", and other sheet tabs.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" view switcher. On the left, the "Data" pane lists a single data source named "san_francisco". The "Analytics" pane is currently selected. The main workspace is titled "Sheet 1" and contains three empty rectangular drop zones labeled "Drop field here". To the right of these zones is a "Marks" shelf with options for Color, Size, Text, Detail, and Tooltip. The bottom navigation bar features tabs for "Data Source" and "Sheet 1", along with other standard window controls.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations, a search bar, and a 'Standard' view switcher. The left sidebar has tabs for 'Data' and 'Analytics', with 'san_francisco' selected. A 'Tables' section lists various data fields. The main workspace is titled 'Sheet 1' and features a 'Rows' shelf at the top. The 'Marks' shelf on the left contains options for 'Automatic' marks (Color, Size, Text) and specific detail (Detail, Tooltip). The workspace area has three 'Drop field here' placeholder boxes.

san_francisco

Search

Tables

- # Id
- Abc Neighbourhood
- # Reviews per Month
- Abc Room type
- Abc *Measure Names*
- # Availability 2019
- # Days Occupied in 2018
- # F1
- ⊕ Latitude
- ⊕ Longitude
- # Minimum Nights
- # Number of Reviews
- # Price
- # *san_francisco.csv (Count)*
- # *Measure Values*

Pages Columns Rows

Sheet 1

Drop field here

Marks

Automatic

Color Size Text

Detail Tooltip

Drop field here

Drop field here

Data Source Sheet 1

The screenshot shows the Tableau desktop application interface. At the top, there's a toolbar with various icons for navigation, zooming, and filtering. Below the toolbar, the top navigation bar includes 'Data' (selected), 'Analytics' (dropdown), 'Standard' (dropdown), and a 'Show Me' button.

In the left sidebar, under 'Tables', the 'san_francisco' data source is listed. A search bar is also present in this sidebar.

The main workspace is titled 'Sheet 1'. It features three large, empty rectangular areas labeled 'Drop field here' in each corner, indicating where data fields can be placed for visualization.

On the right side of the workspace, there are two sections: 'Columns' and 'Rows', which are typically used for defining the structure of the output visualization.

On the far left, within the main workspace area, there's a 'Marks' shelf containing options for 'Automatic' marks (Color, Size, Text) and specific detail and tooltip controls.

At the bottom of the screen, the navigation bar includes 'Data Source' (with a dropdown arrow), 'Sheet 1' (selected), and other sheet tabs.

The screenshot shows the Tableau desktop application interface. At the top, there is a toolbar with various icons for navigation, zooming, and filtering. Below the toolbar, the top navigation bar includes 'Data' (selected), 'Analytics' (dropdown), 'Pages' (card), 'Columns' (card), 'Rows' (card), and 'Standard' (dropdown). On the far right of the top bar is a 'Show Me' icon.

The left sidebar contains a 'Tables' section listing data fields: Id, Neighbourhood, Reviews per Month, Room type, Measure Names, Availability 2019, Days Occupied in 2018, F1, Latitude, Longitude, Minimum Nights, Number of Reviews, Price, san_francisco.csv (Count), and Measure Values. Above the tables list, there is a 'san_francisco' connection icon and a search bar.

The main workspace is titled 'Sheet 1'. It features three 'Drop field here' placeholder areas. To the left of these areas is a 'Filters' card and a 'Marks' card. The 'Marks' card is set to 'Automatic' and includes options for Color, Size, Text, Detail, and Tooltip.

At the bottom of the interface is a navigation bar with tabs: 'Data Source' (disabled), 'Sheet 1' (selected), and three additional tabs represented by icons.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" theme switch. The left sidebar contains the "Data" tab selected, showing a project named "san_francisco" and a search bar. Below this is the "Tables" section listing various data fields: Id, Neighbourhood, Reviews per Month, Room type, Measure Names, Availability 2019, Days Occupied in 2018, F1, Latitude, Longitude, Minimum Nights, Number of Reviews, Price, san_francisco.csv (Count), and Measure Values. The "Analytics" tab is also present in the top header.

The main workspace is titled "Sheet 1". It features a grid with three columns and three rows. The first column has a header "Drop field here" and the second and third columns have headers "Drop field here". A "Marks" shelf is visible on the left side of the workspace, containing options for "Automatic" marks (Color, Size, Text) and "Detail" marks (Detail, Tooltip). The overall layout is clean and organized, typical of a data visualization tool like Tableau.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations (New, Open, Save, etc.), a search bar, and a "Standard" theme switch. The left sidebar contains the "Data" and "Analytics" tabs, with "Data" selected. Under "Data", there is a section for "san_francisco" containing a "Search" field and a "Tables" list. The "Tables" list includes fields like Id, Neighbourhood, Reviews per Month, Room type, Measure Names, Availability 2019, Days Occupied in 2018, F1, Latitude, Longitude, Minimum Nights, Number of Reviews, Price, san_francisco.csv (Count), and Measure Values. The main workspace is titled "Sheet 1" and features three empty columns labeled "Drop field here". On the right side of the workspace, there is a "Marks" shelf with options for Color, Size, Text, Detail, and Tooltip, currently set to "Automatic". The bottom navigation bar includes buttons for "Data Source", "Sheet 1", and other sheet navigation.

The screenshot shows the Tableau desktop application interface. The top navigation bar includes icons for file operations, a search bar, and a 'Standard' theme switch. The left sidebar has tabs for 'Data' and 'Analytics', with 'san_francisco' selected. A 'Tables' section lists various data fields: Id, Neighbourhood, Reviews per Month (highlighted in green), Room type, Measure Names, Availability 2019, Days Occupied in 2018, F1, Latitude, Longitude, Minimum Nights, Number of Reviews, Price, san_francisco.csv (Count), and Measure Values. The 'Marks' shelf, which is currently open, displays a list of visualization types: Automatic (selected), Bar, Line, Area, Square, Circle, Shape, Text, Map, Pie, Gantt Bar, Polygon, and Density. The main workspace is titled 'Sheet 1' and contains three 'Drop field here' placeholder boxes.

The screenshot shows the Tableau Data Prep interface. At the top, there's a toolbar with various icons for navigation and file operations. Below the toolbar, the left sidebar displays a "Data" tab and an "Analytics" dropdown set to "san_francisco". A search bar and a filter section are also present. The main area is titled "Sheet 1" and contains three large, empty rectangular fields labeled "Drop field here" in each row. To the left of these fields is a "Marks" panel with options for "Automatic" and "Color", "Size", "Text", "Detail", and "Tooltip". Above the marks panel are sections for "Columns" and "Rows". The bottom navigation bar includes tabs for "Data Source" and "Sheet 1", along with other icons.

Our business question

Which neighborhood and room type has the highest price on Airbnb listings?

Let's practice!

INTRODUCTION TO TABLEAU

A tour of the interface

INTRODUCTION TO TABLEAU



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Let's practice!

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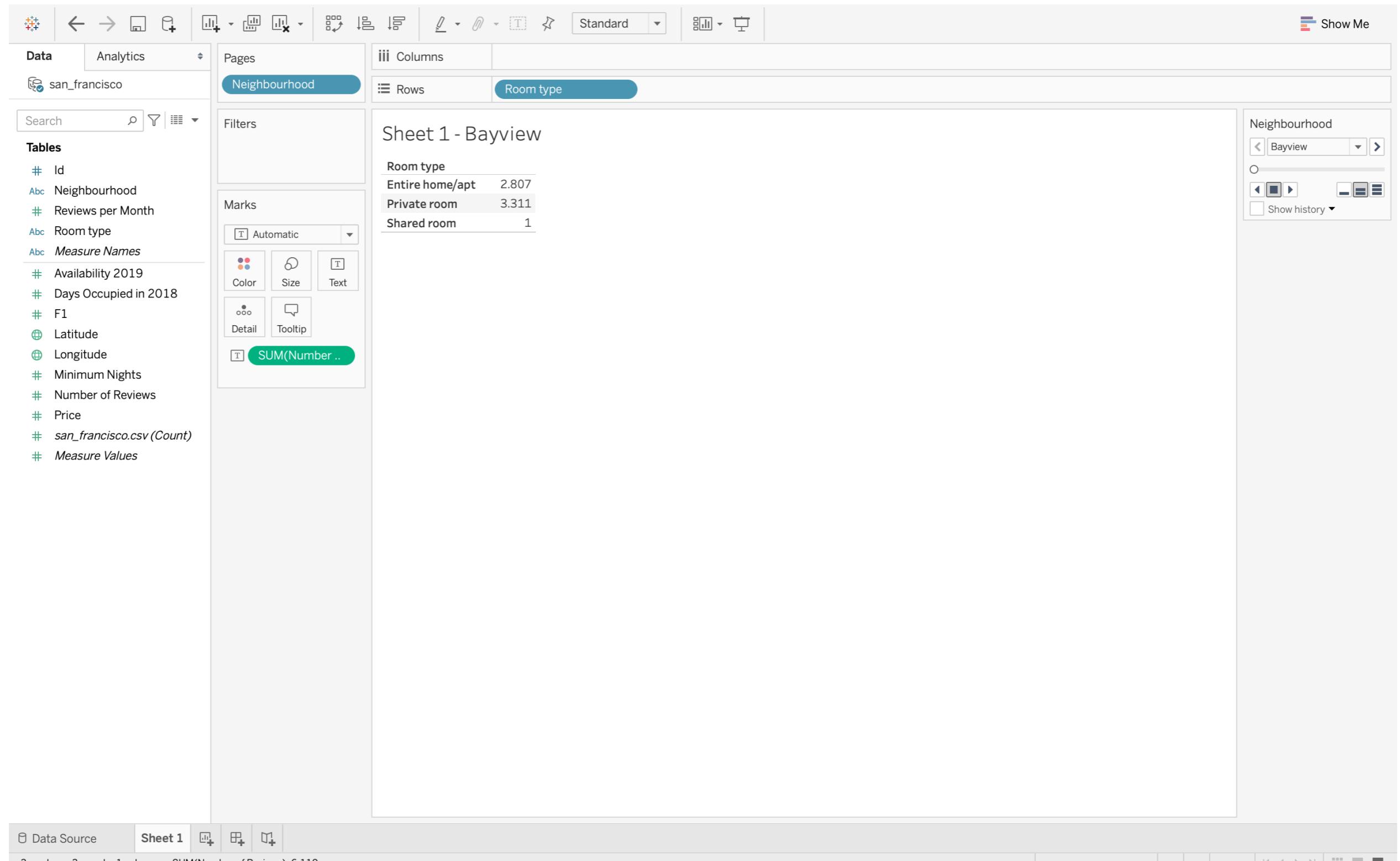
Your first visualization

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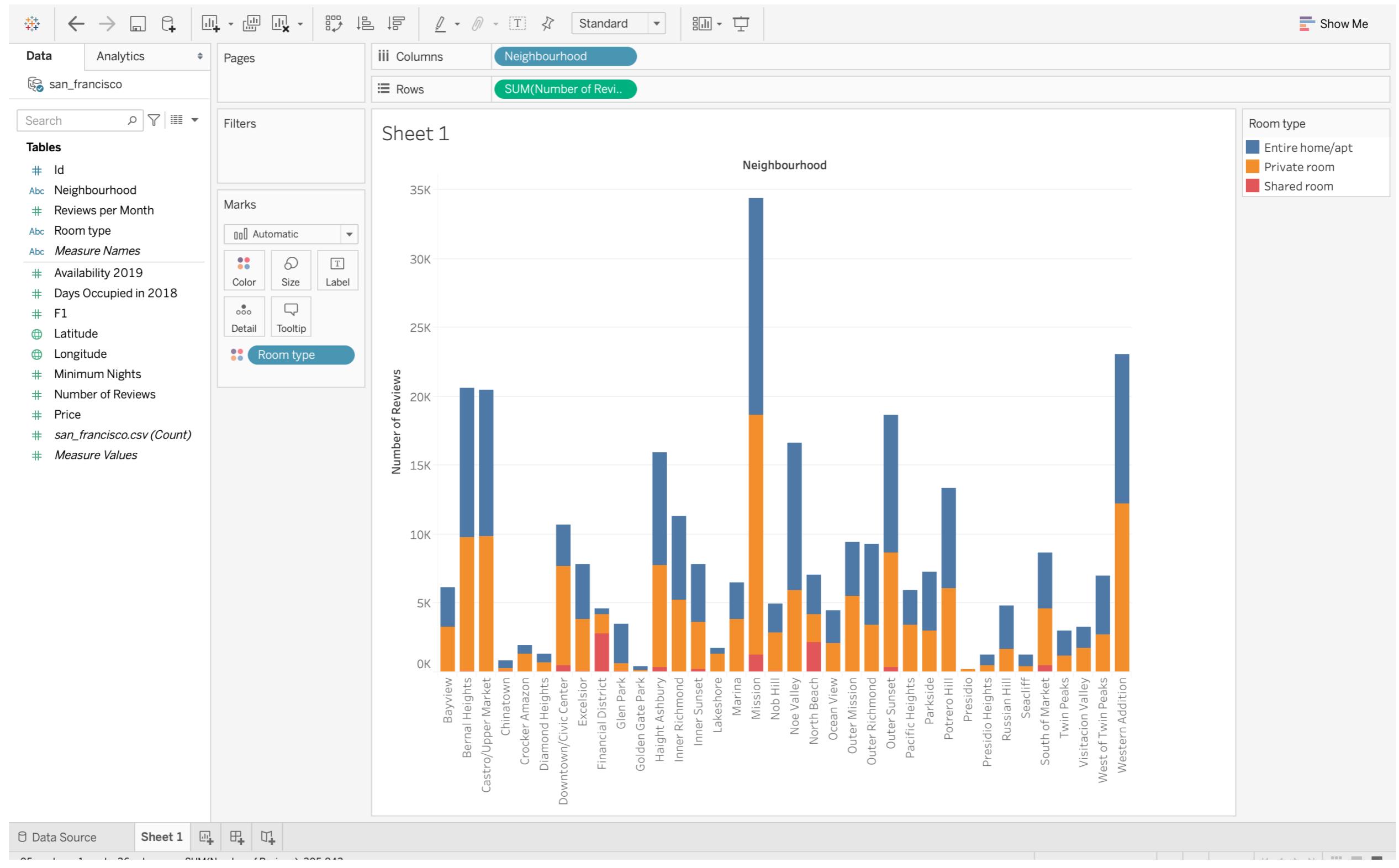


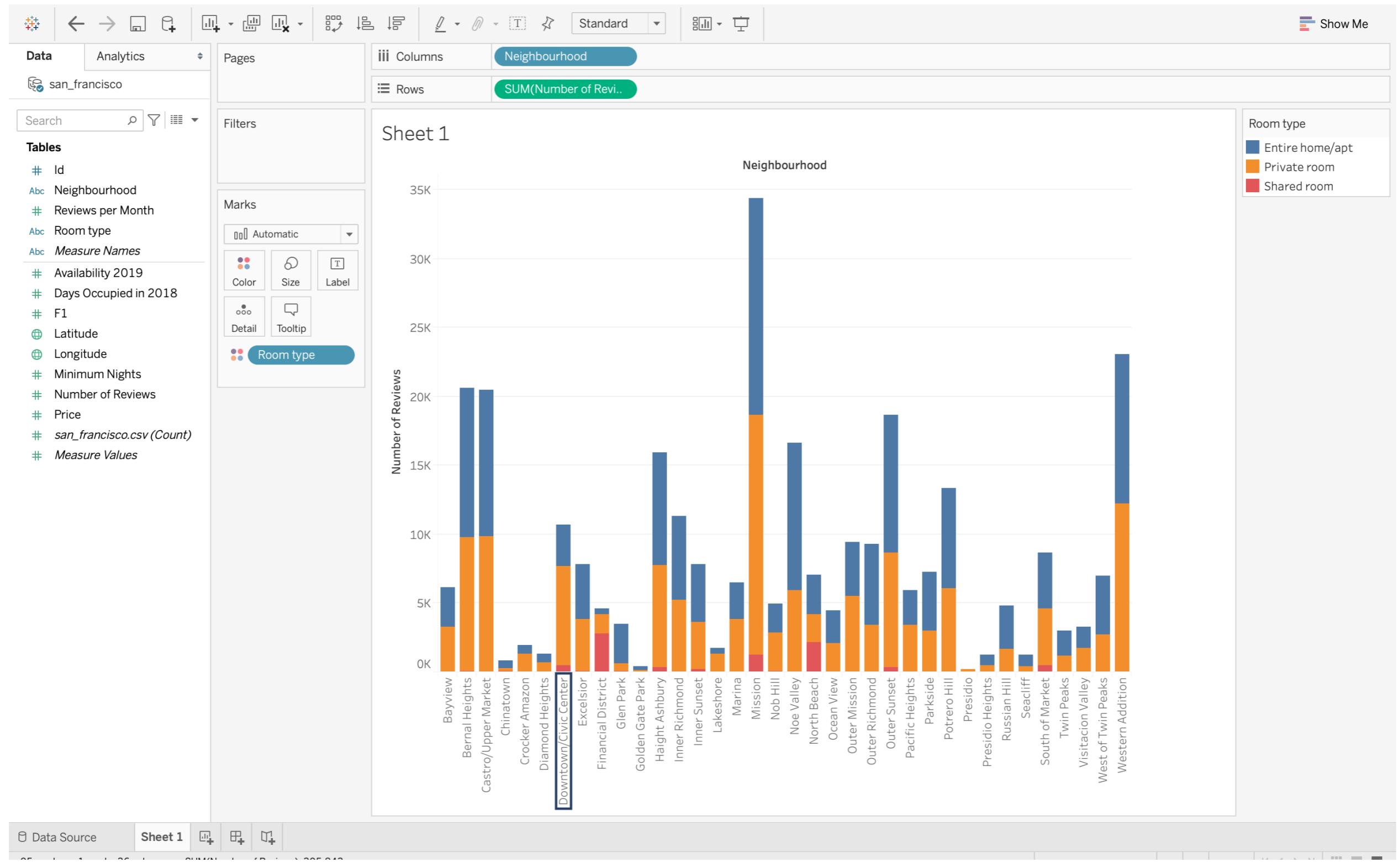
The screenshot shows the Tableau Data Prep interface. At the top, there are navigation icons for back, forward, search, and refresh, followed by a toolbar with standard and advanced options. The main workspace is divided into several sections:

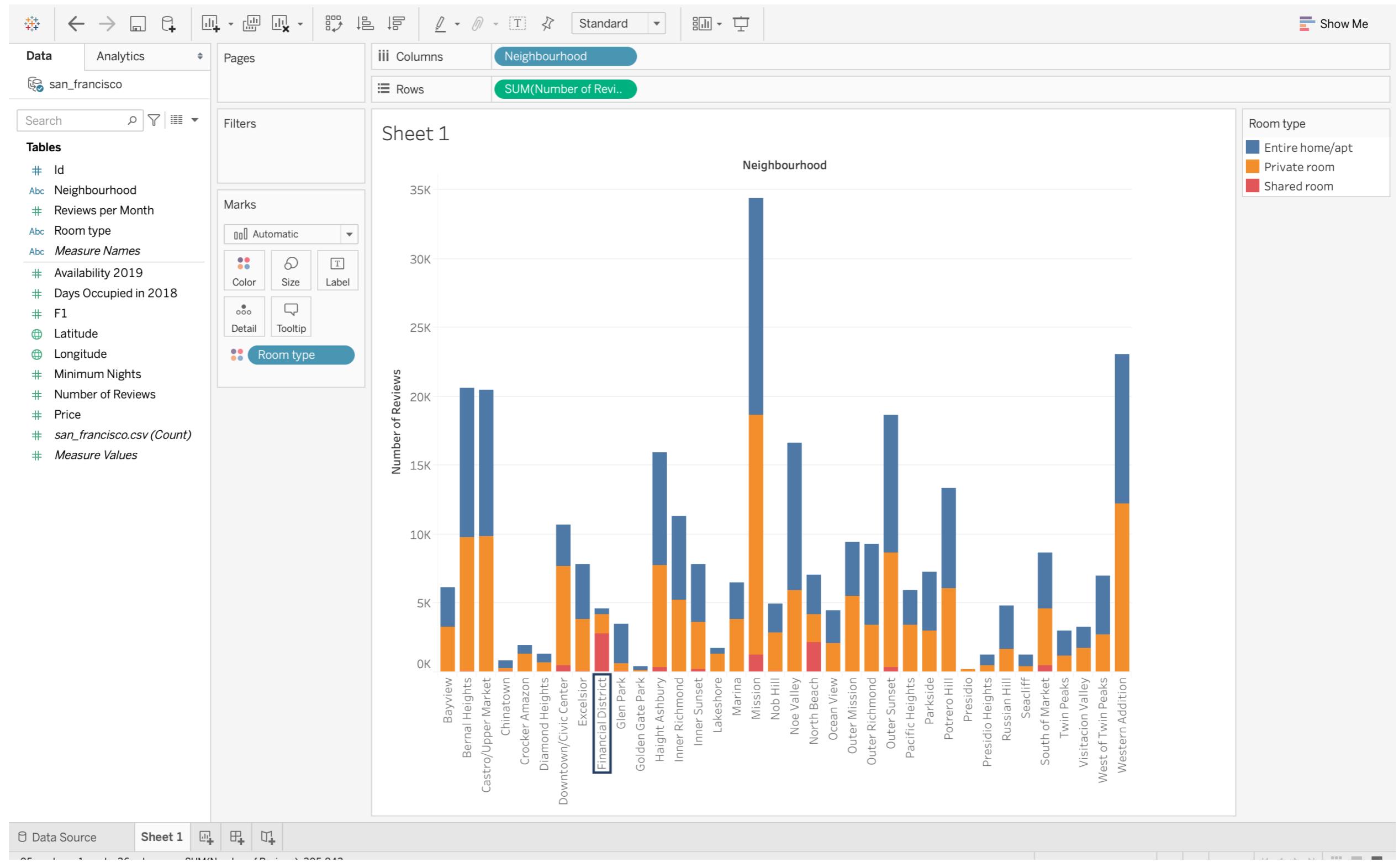
- Data:** A sidebar listing tables and measures, including:
 - # Id
 - Abc Neighbourhood
 - # Reviews per Month
 - Abc Room type
 - Abc Measure Names
 - # Availability 2019
 - # Days Occupied in 2018
 - # F1
 - ⊕ Latitude
 - ⊕ Longitude
 - # Minimum Nights
 - # Number of Reviews
 - # Price
 - # san_francisco.csv (Count)
 - # Measure Values
- Pages:** A section showing the current page is "Neighbourhood".
- Columns:** A section showing the current column is "Room type".
- Rows:** A section showing the current row is "Neighbourhood".
- Filters:** A section showing the current filter is "Room type".
- Marks:** A section showing the current mark is "Automatic".
- Sheet 1 - Bayview:** The main visualization area displays a summary of room types in Bayview.

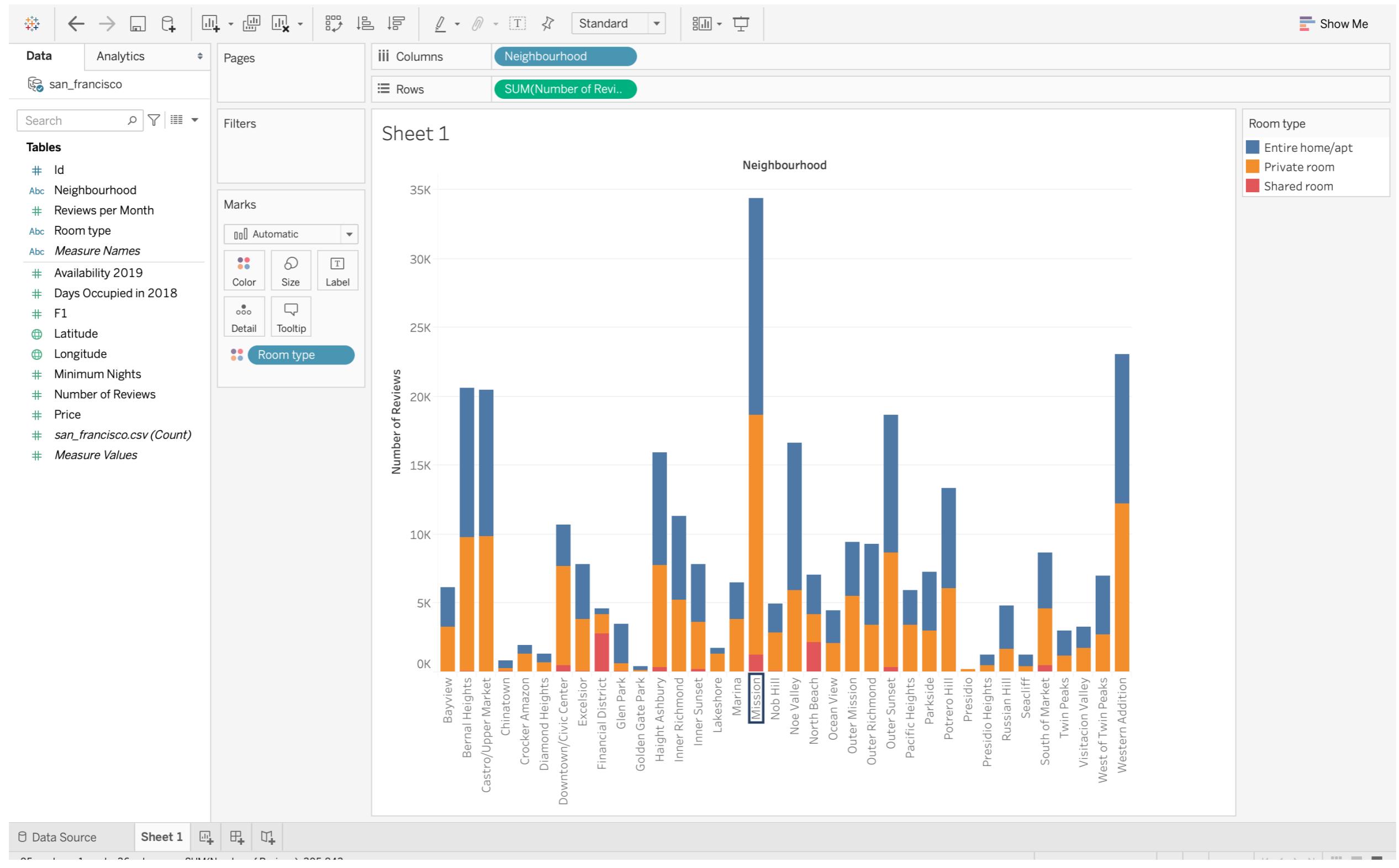
Room type	Value
Entire home/apt	2.807
Private room	3.311
Shared room	1
- Neighbourhood:** A sidebar on the right showing the current selection is "Bayview".











Let's practice!

INTRODUCTION TO TABLEAU

Building and improving visualizations

INTRODUCTION TO TABLEAU



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