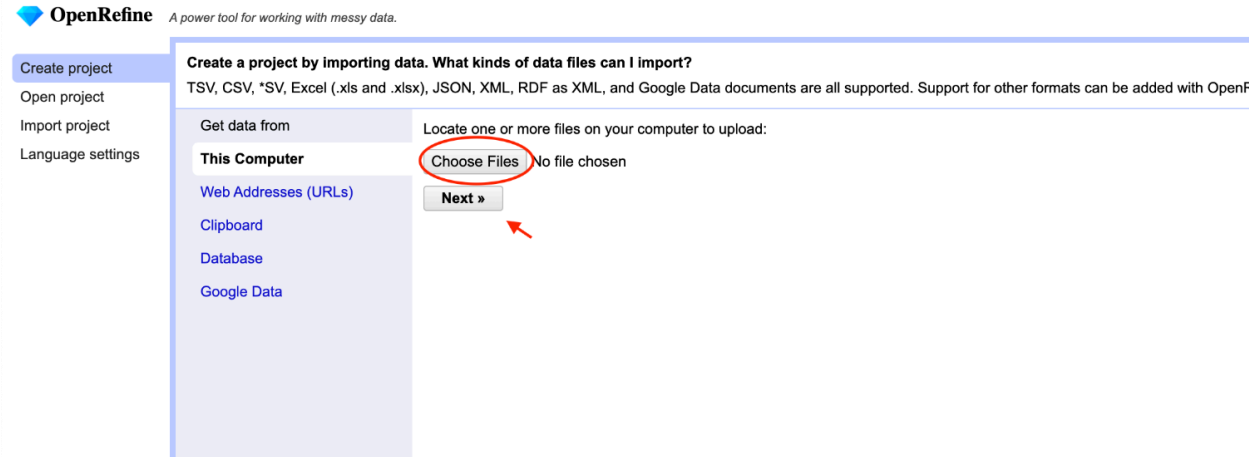
PRODUCT USER'S MANUAL

Clean Datasets

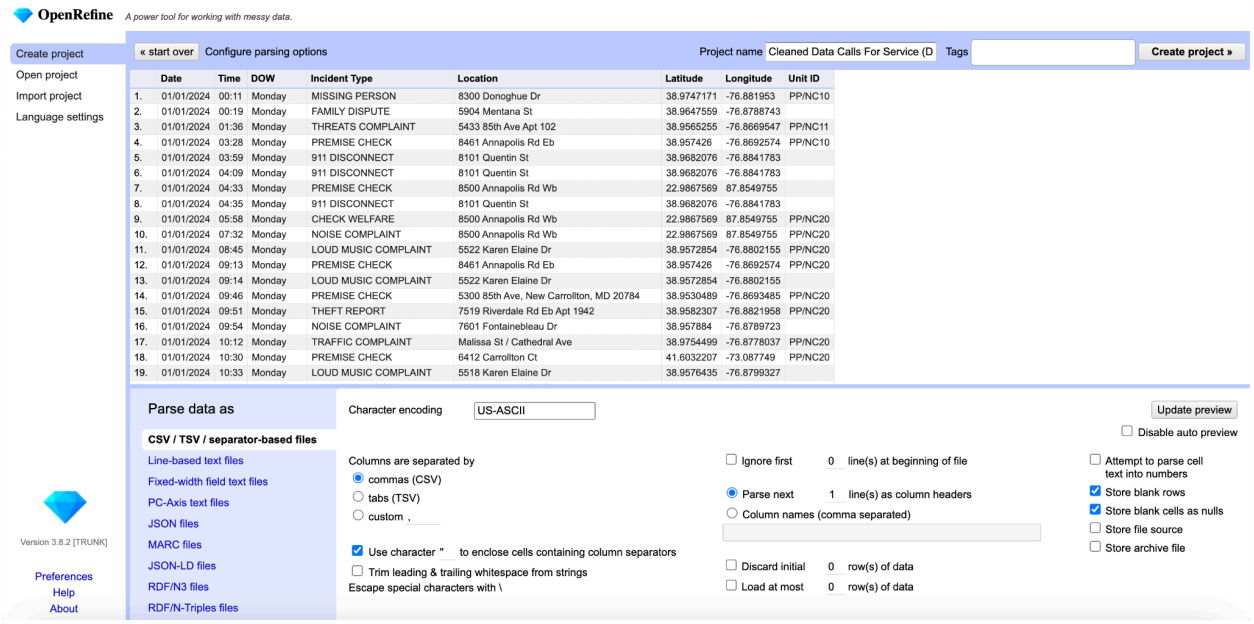
There are multiple options to clean data, including using Excel, Tableau Prep, Programming process such as using Pandas Library within Python.

We used **OpenRefine** for this process.

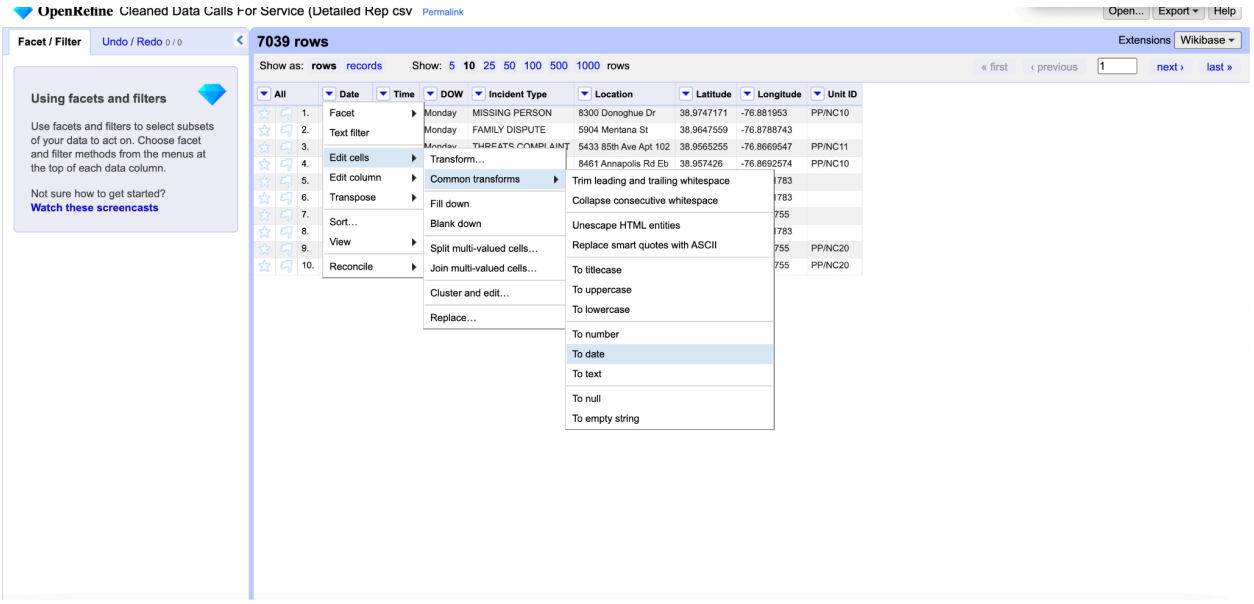
1. **Download and Open OpenRefine:**
    a. Open OpenRefine and it should open in your Web Browser
2. **Create a project:**
    a. Upload the dataset file that you want to clean and click **Next**



    b. Make sure the data is showing clearly in the table
        i. If there are issues, you can change the 'Columns are separated by'
            1. *This works by separating the columns by different options such as commas, tabs, or custom option*
    c. Click Create Project in the Top Right corner
3. **Clean the data:**



a. Clean the data through Editing Cells and making transformations such as:
   i. Create Text facets to view different values of a column
   ii. Ensuring dates are in the proper date format
   iii. Ensuring numerical values are in number format
   iv. Removing Blank or Null rows



b. Once finished cleaning data, Export the dataset as Excel (.xls)

Get Tableau Public

1. Download Tableau

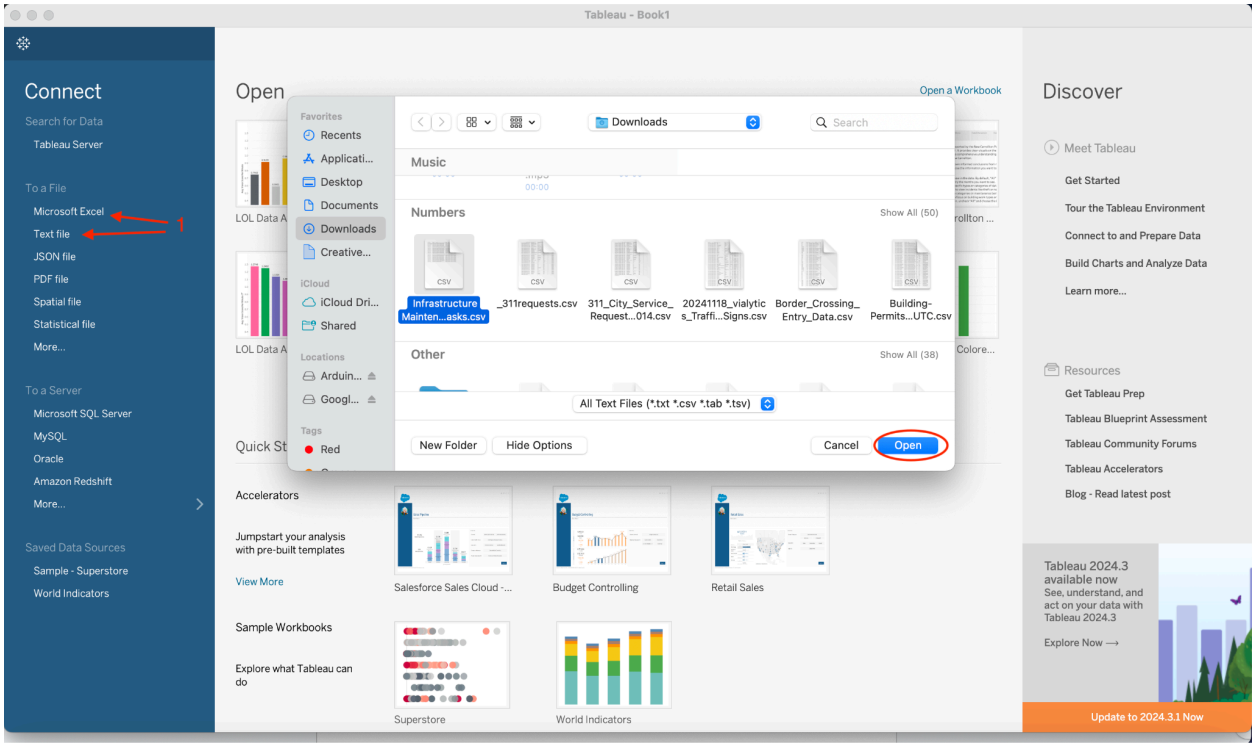
a. Search on Google - "Tableau Public"

b. Or use this link: [Tableau Public]
c. Download Tableau Desktop Public Edition
    i. Or Professional Edition (If you have purchased license)

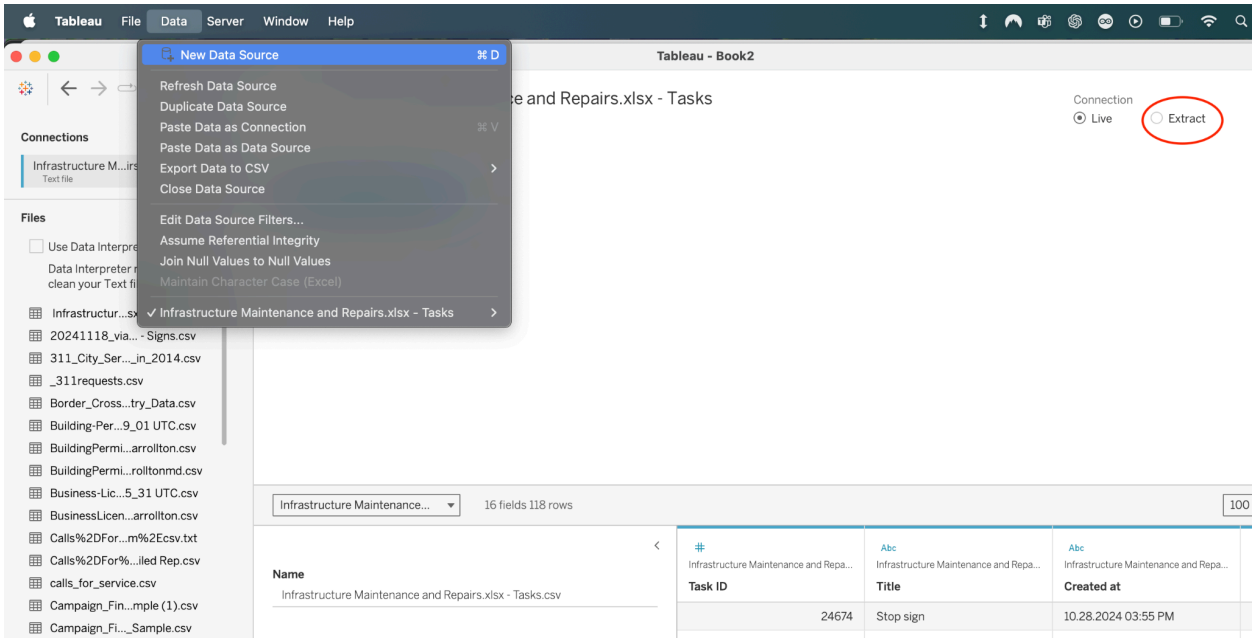
2. **Sign in Using New Carrollton Credentials**
    a. Top right of the Screen you will see a "sign in" button, click it and sign in using these:
    b. **Email:** newcarrollton3@gmail.com
    c. **Password:** NewCarrollton123!

Navigate Tableau Desktop Application

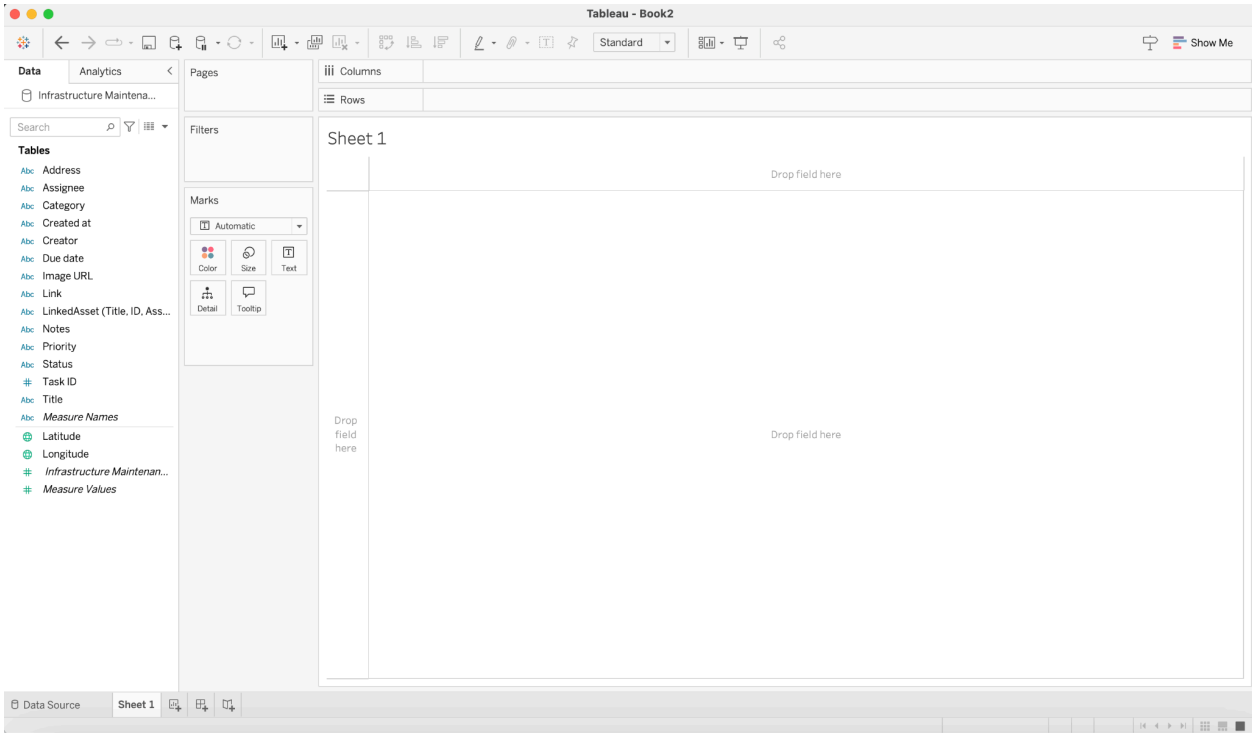
1. **Open Tableau Desktop:**
    a. Launch the Tableau Desktop application.
    b. On the start page, select "Open" to load the cleaned dataset (Excel file) into Tableau.



2. **Connect to Your Data Source:**
    a. In the Connect pane, choose the appropriate file type (e.g., Excel, CSV).
    b. Browse and select your cleaned dataset.
    c. Tableau will load the data into the Data Source tab.

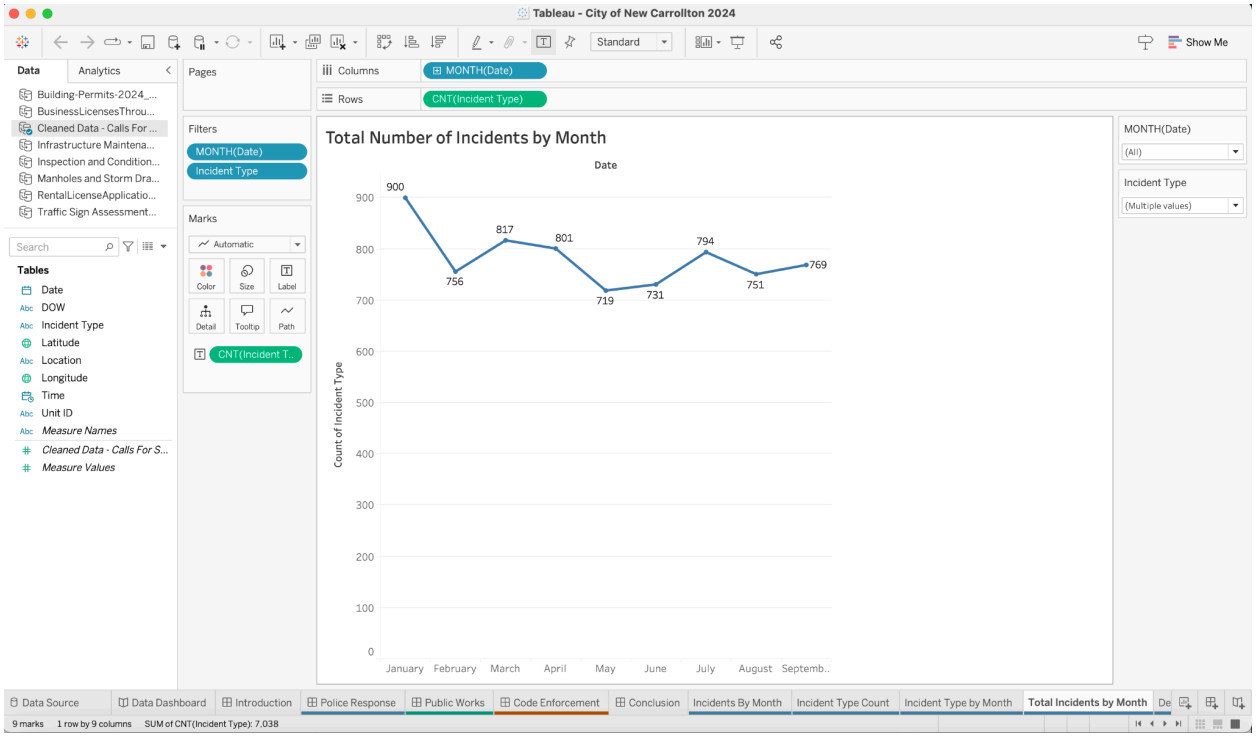


3. **Go to the Worksheet:**
    a. At the bottom, click on the "Sheet 1" tab to start working with the data.
    b. Tableau's workspace will now open, showing the Data Pane (left), the Columns/Rows shelves (top), and the blank canvas (center).

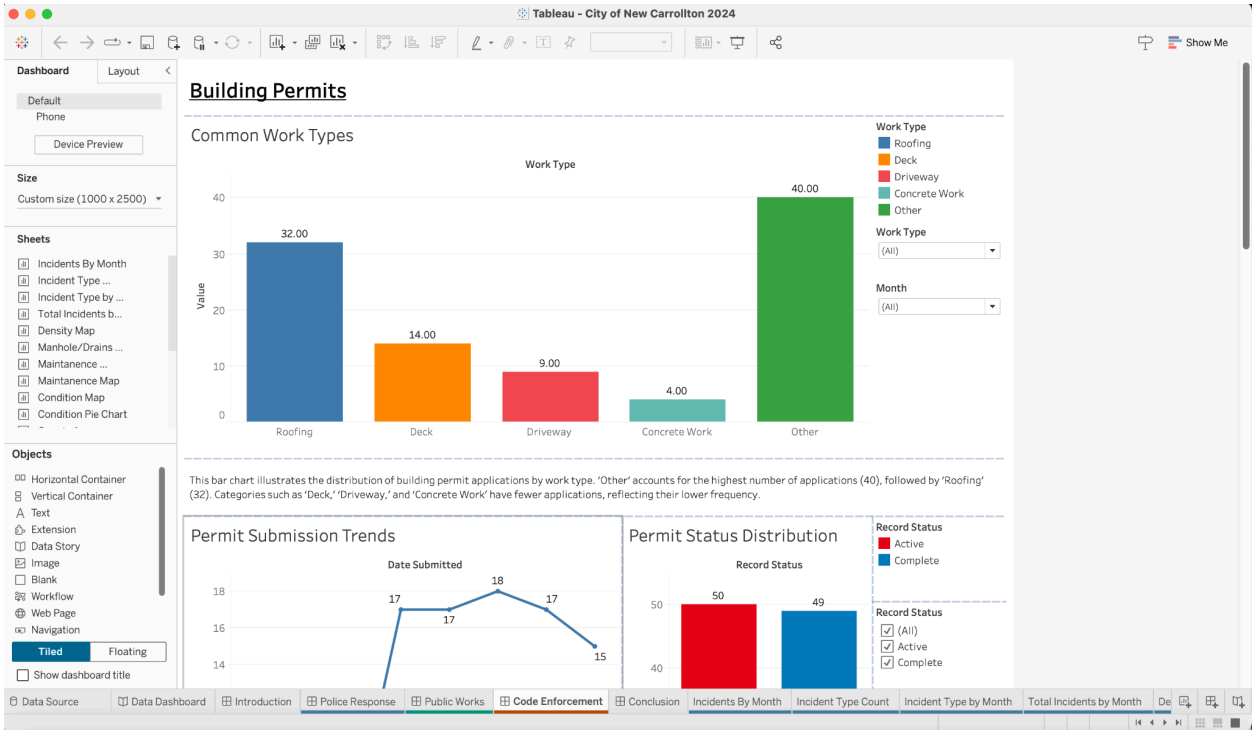


Editing Tableau Dashboards

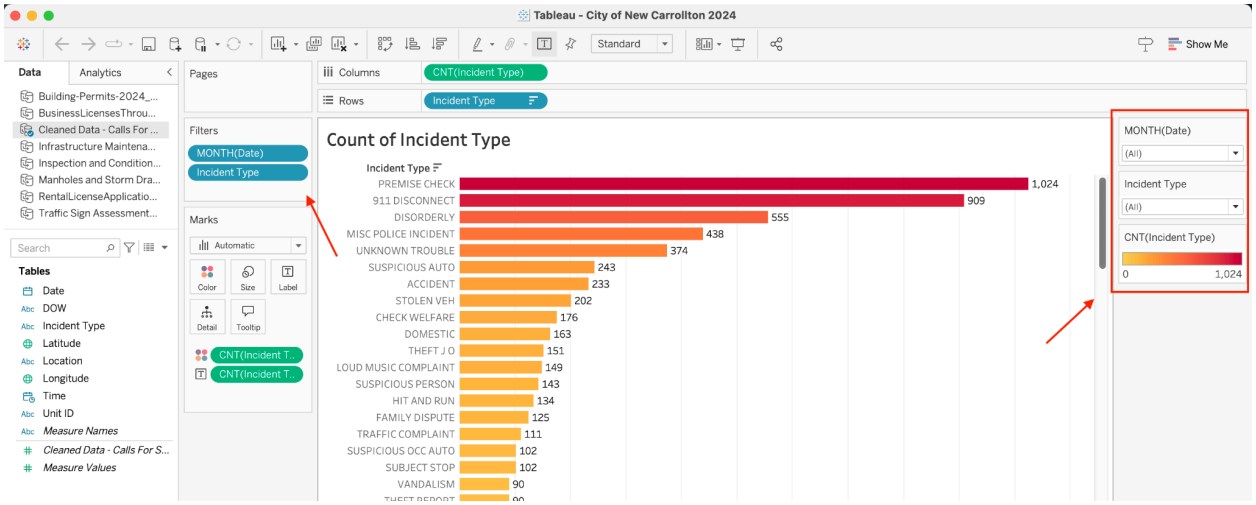
1. **Start Building Visualizations:**
    a. Drag and drop fields from the Data Pane into the Rows and Columns shelves to create charts.
    b. Use the “Show Me” panel (top-right) to choose chart types, such as bar charts, line graphs, or maps.

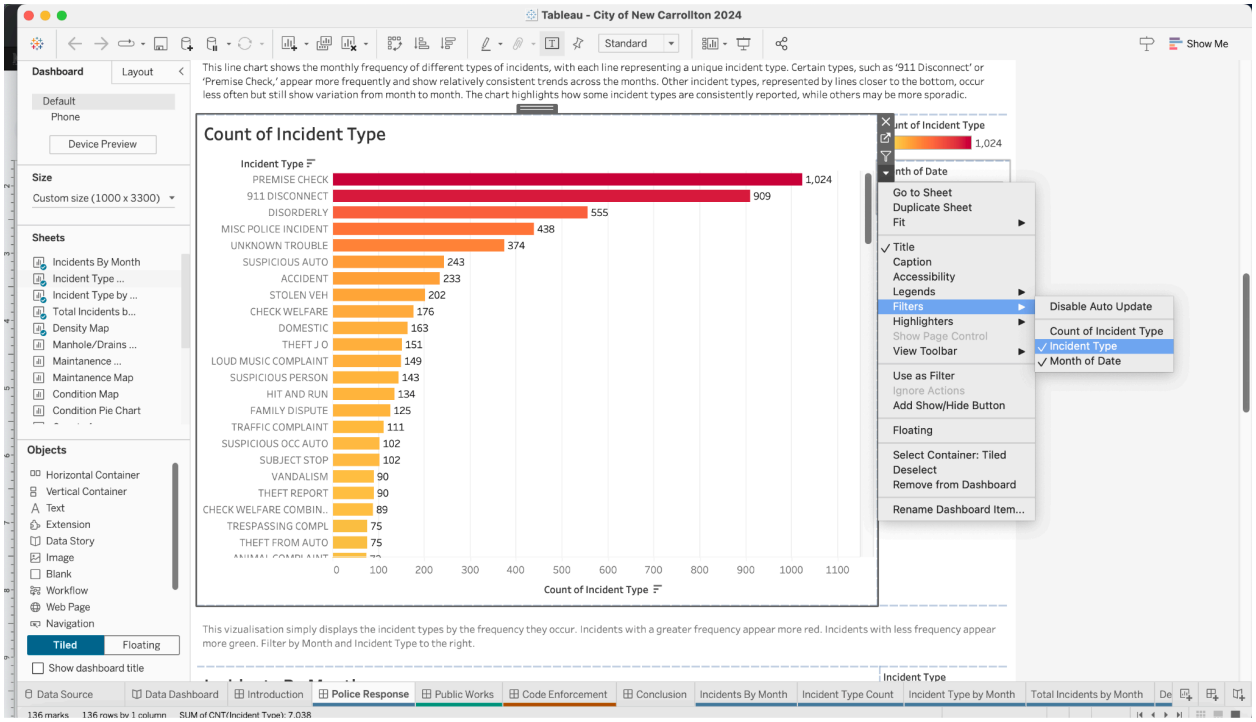


2. **Build Dashboards:**
    a. Click on the Dashboard icon at the bottom to create a new dashboard.
    b. Drag your worksheets onto the dashboard canvas to arrange them.
    c. Use Tiled or Floating options to position charts, filters, and legends.



3. **Customize and Add Interactivity:**
    a. Add Filters: Drag filters onto the dashboard to allow users to explore the data (e.g., by date or category).
    b. Add Titles and Instructions: Use the Text Object to add titles or user instructions.
    c. Format charts: Right-click on visual elements to edit fonts, colors, and borders.





4. **Create Data Story:**
   a. Click on the Story icon at the bottom to create a new Story.
   b. Drag your dashboard onto the story canvas.
   c. Click on Blank under New Story Point to create a page for each dashboard.
5. **Save and Export:**
   a. Save the project locally as a .twbx file (Packaged Workbook) or .twb file.
   b. If using Tableau Public, click File > Save to Tableau Public to publish it.