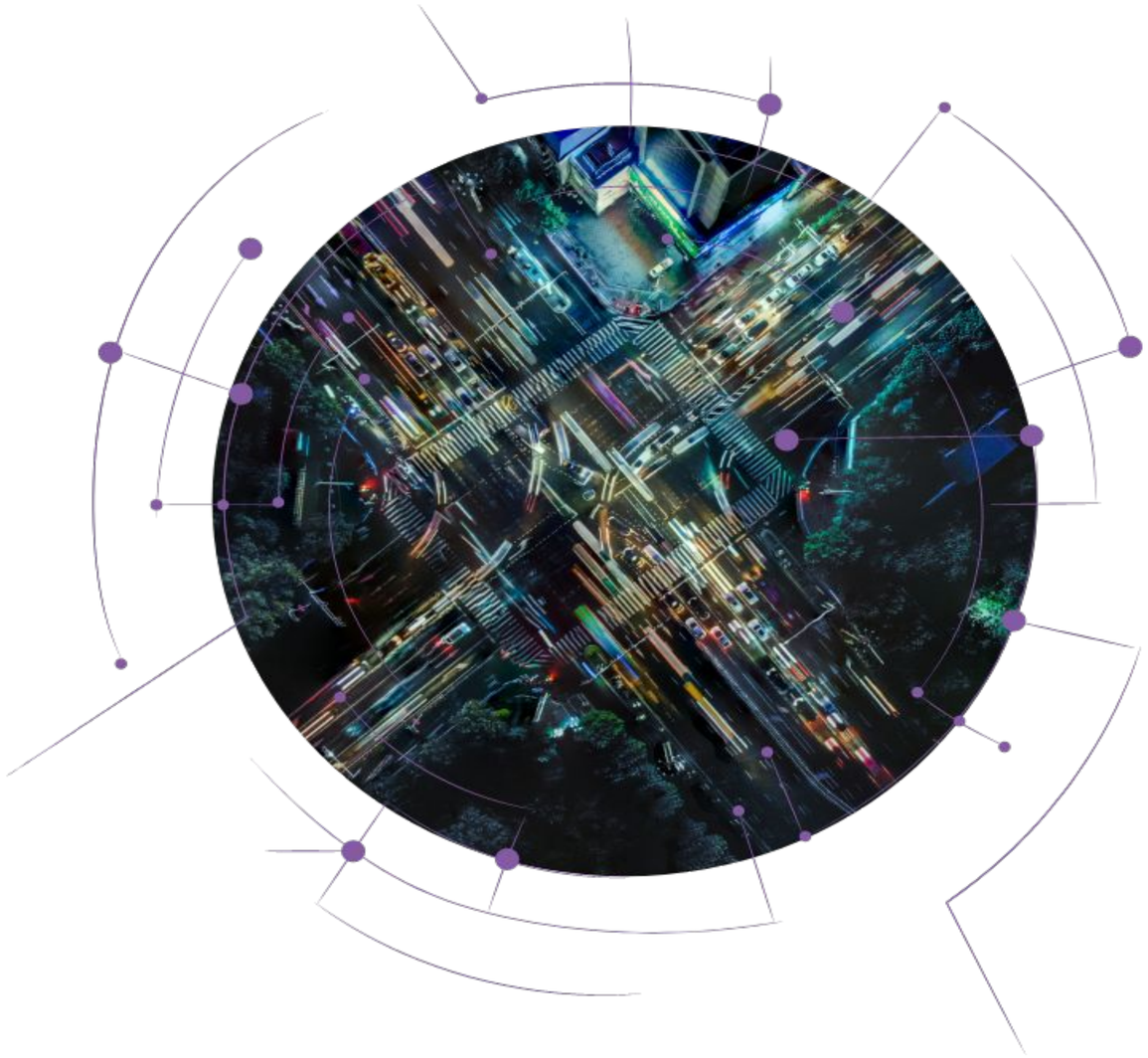
DATASOCIETY:

Introduction to Tableau

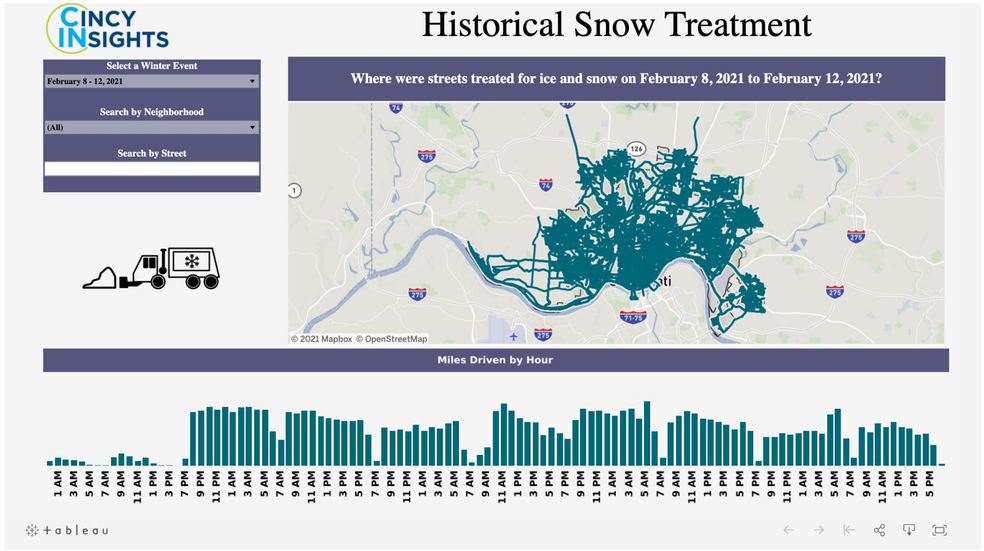
Part 12



Warm-up: Cincinnati snow tracker

- The city of Cincinnati built a **snow plow tracker map** to allow the public to see what parts of the city have been plowed out in a given weather event.

- Spend a few minutes exploring and evaluating the tool, then be prepared to comment on **what you like** and **what could be improved** in the design.



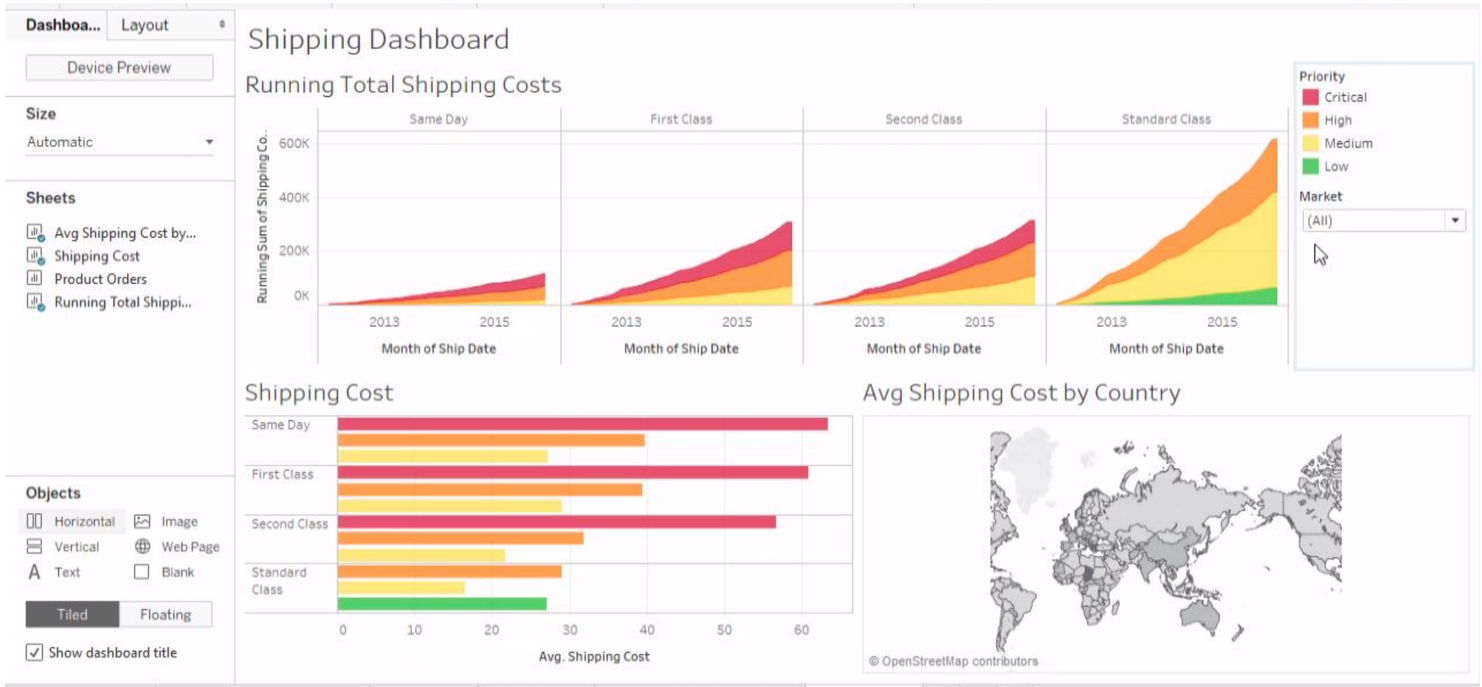
[Cincinnati Snow Tracker (link)]

Module completion checklist

Objective	Complete
Introduce the concept of geospatial visualization	✓
Implement geospatial visualization for given dataset	✓
Identify and correct errors to facilitate proper joining with geospatial data	✓
Introduce the concept of Dashboards	
Combine previously created visualizations into Dashboard	

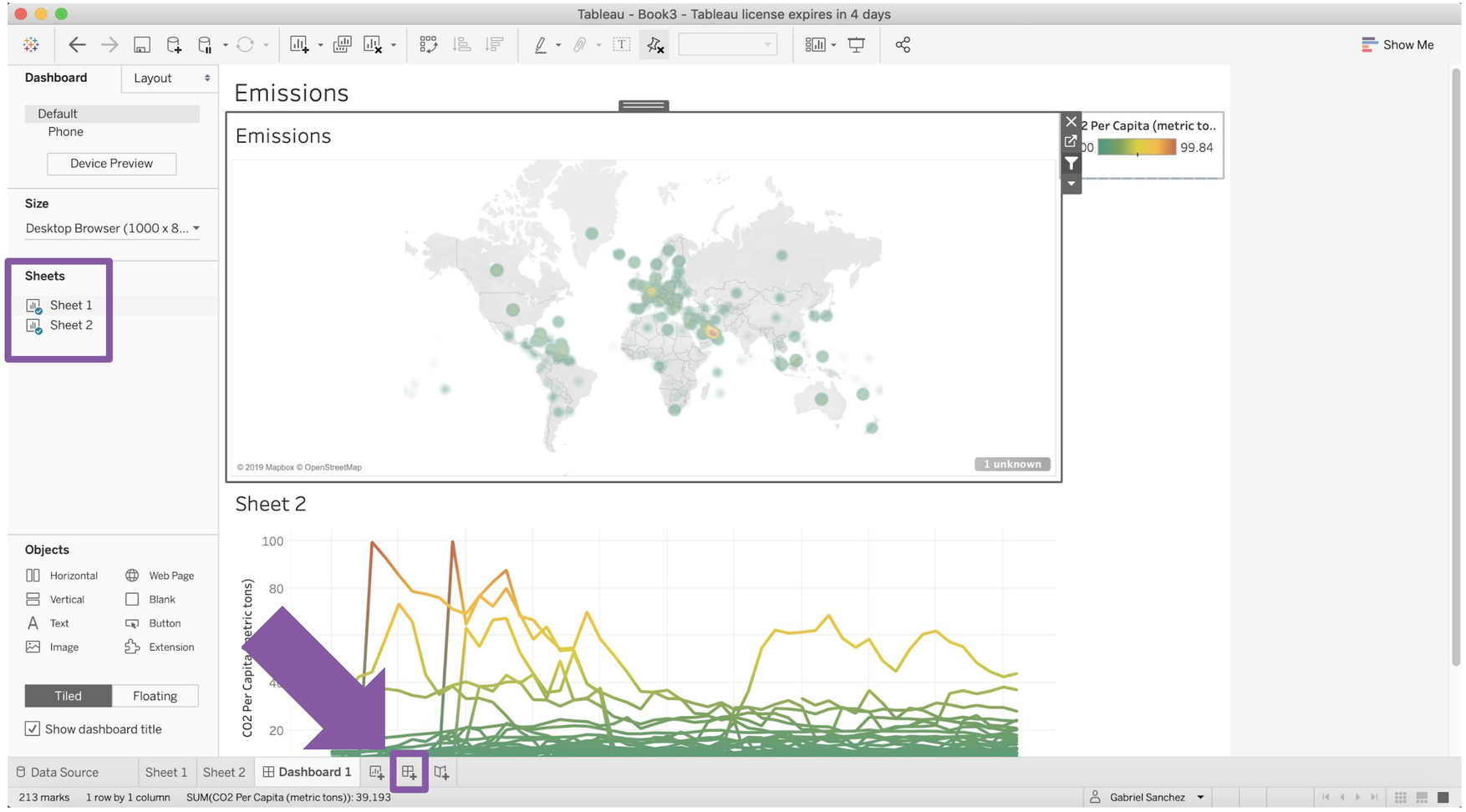
Dashboards and stories

- A **dashboard** is a panel with a group of objects with a common theme.
- A **story** is a linear plot of related dashboards.
- Interactive and multi-part.
- Size and shape can be customized.



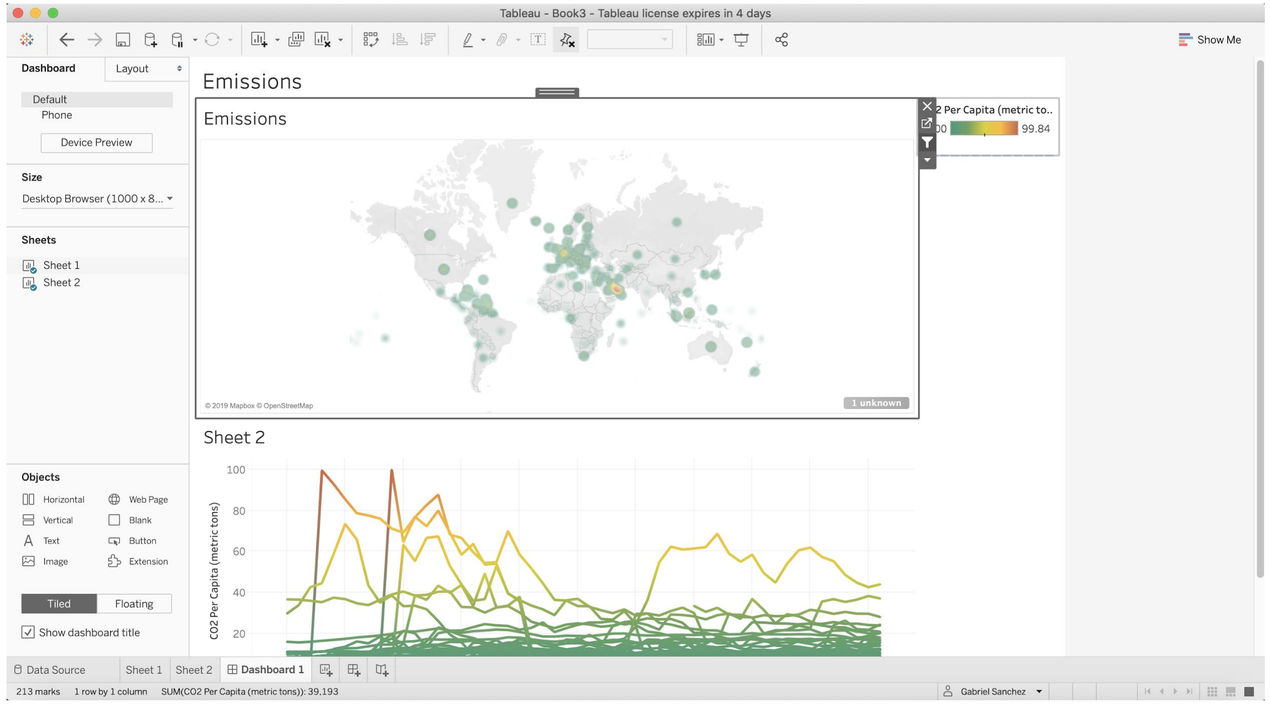
Creating a new dashboard

New Dashboard Button



Best practices for dashboards

- Know your purpose and audience.
- Leverage the most-viewed spot.
- Be mindful of your final display size.
- Limit the number of views.
- Be security-savvy.
- Add interactivity to encourage exploration.
- Show filters.
- Enable highlighting.



Module completion checklist

Objective	Complete
Introduce the concept of geospatial visualization	✓
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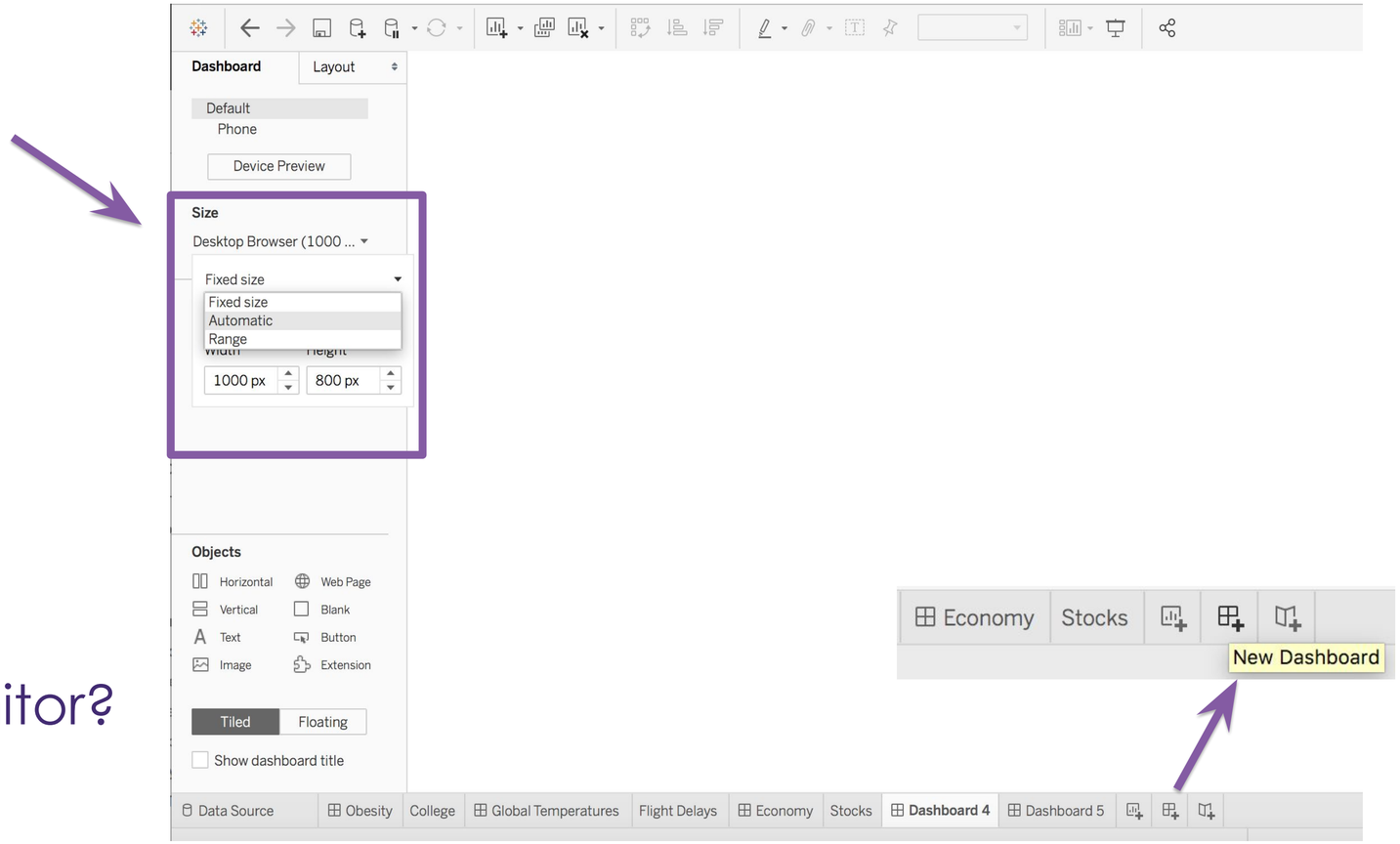
Dashboard implementation

- Add a dashboard by clicking on the tab at the bottom.
- Consider the **size** of the final dashboard.
  - Fixed
  - Automatic
  - Range (manual)
- Consider the **purpose** of the dashboard.
  - Is this for a mobile device?
  - Will it be used on a large monitor?



Building your first dashboard

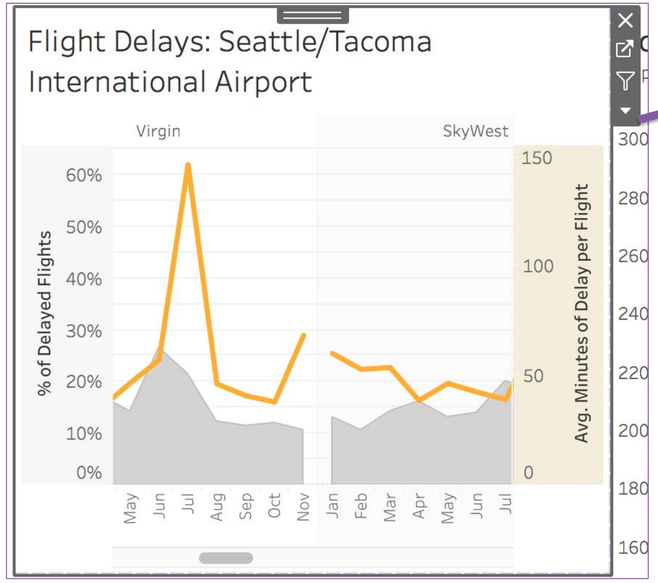
- Use the plots you have been making and saving with the world dataset to **create a dashboard.**

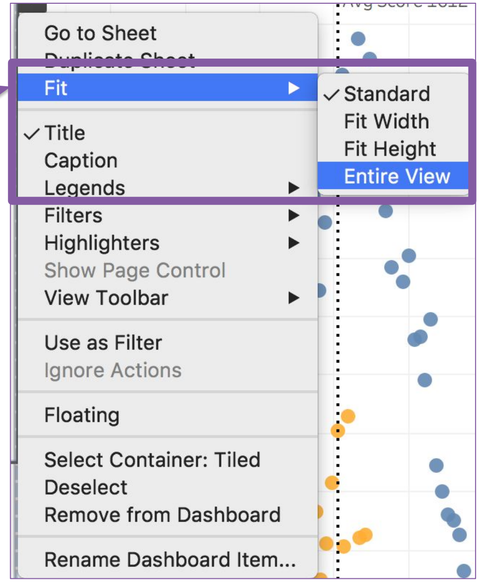
- Feel free to focus on just a subset of variables and choose the visualizations that you think are most interesting.

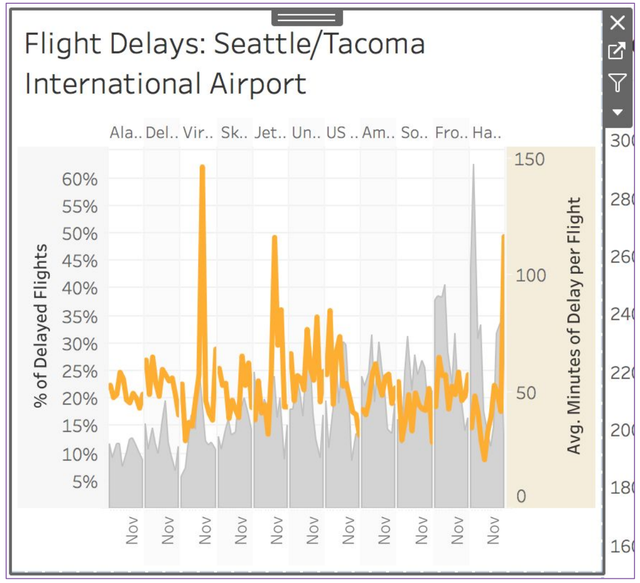
- Use the best practices for Dashboards to guide you in your choice.

Sheet dropdown menu options

- Fit options
  - Fix issues with out-of-frame sheets
- Filter options
- Title options





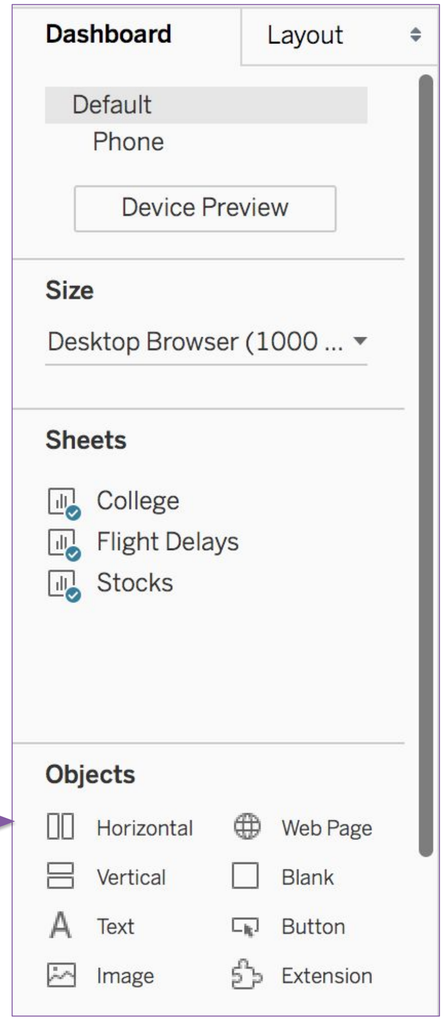


Objects and containers

- The Dashboard menu can add objects and containers.

- Containers hold items and scale them together.

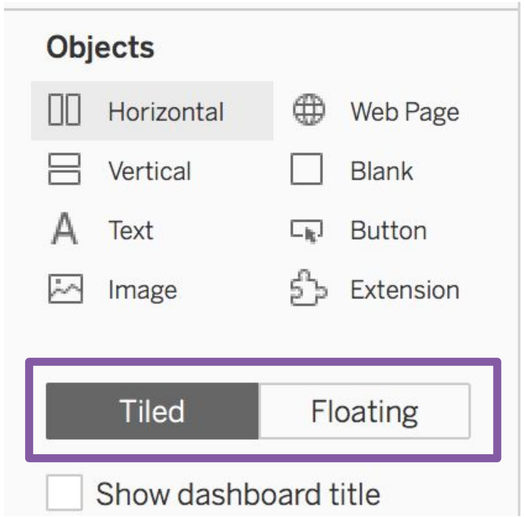
- You can also add other kinds of objects:
  - Web pages.
  - Blank spacers.
  - Images.
  - Text.
  - Extensions.
  - Buttons.



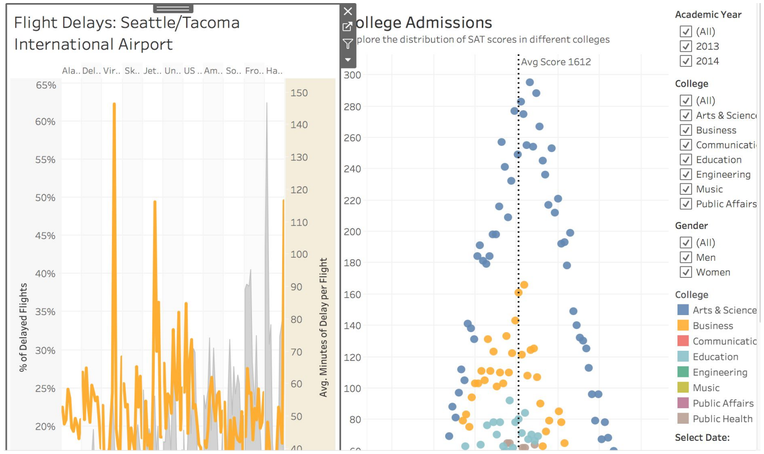
Horizontal or vertical container

Tiled vs. floating elements

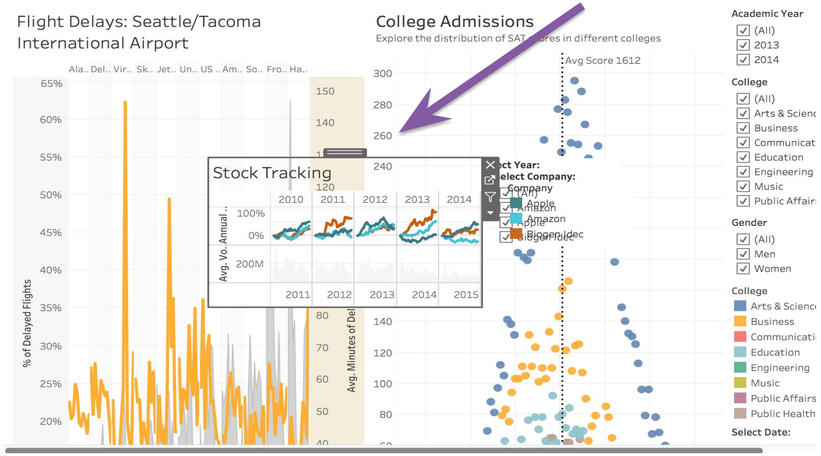
- Each object or layout container can be either **tiled** or **floating.**
- Different effects on shape and sizing.



- **Tiled**
  - Arranged in a single layer grid.
  - Adjust in size based on the total dashboard size and other objects.

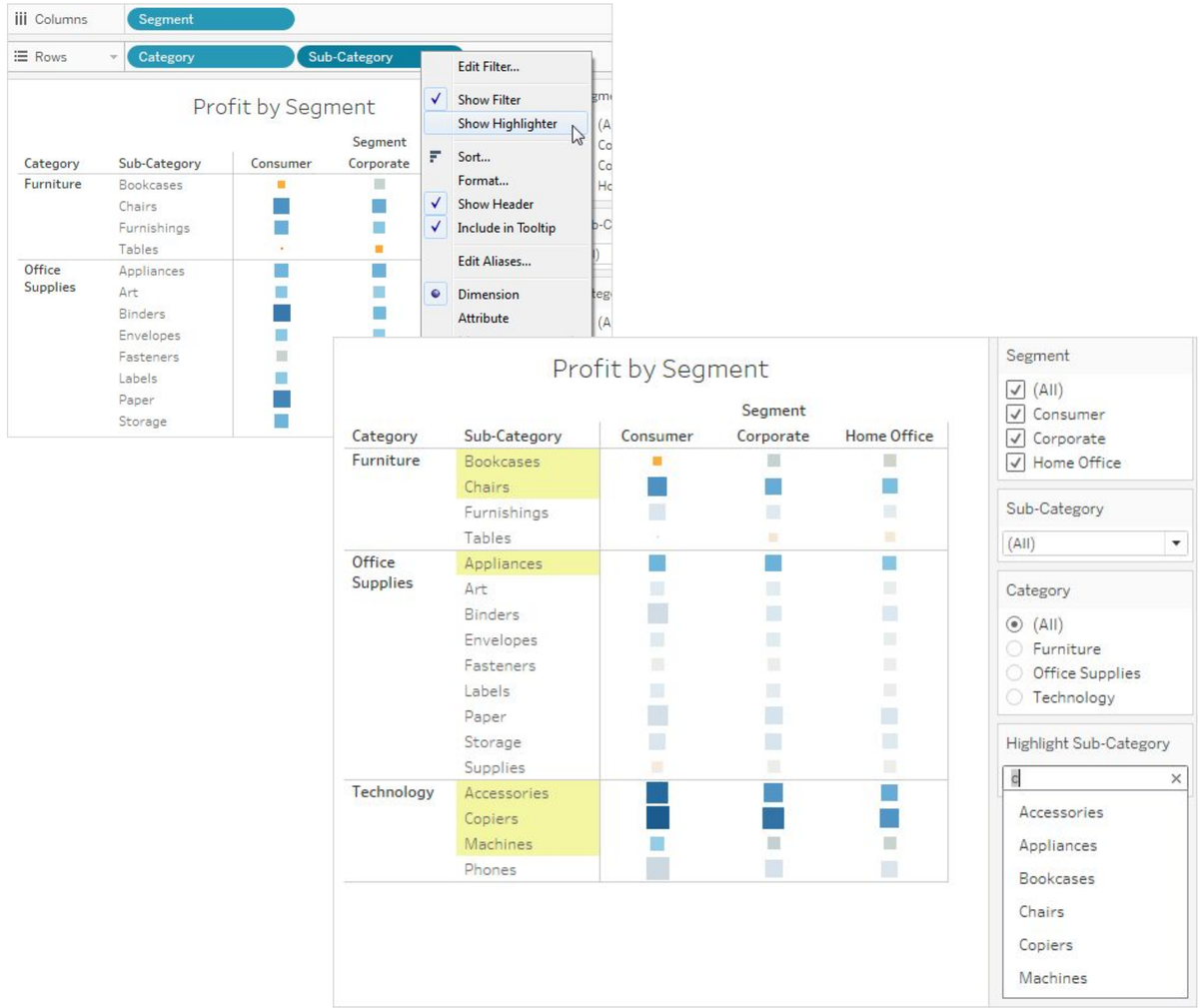


- **Floating**
  - Layered on top of other objects.
  - Can have a fixed size and position.



Highlighting

- You can use the **Highlight** button on the toolbar to set up highlighting between views.
- When highlighting is turned on, a filtered selection in one view will highlight related data in the other views.
- You can turn on highlighting for all fields or select specific fields.



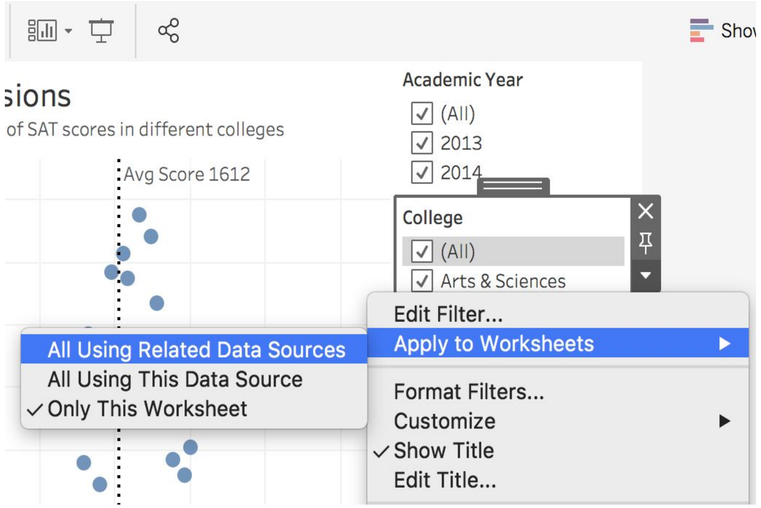
Couple filtering

- If your dashboard panels share data you might want to enable **couple filtering** to apply a filter across the whole dashboard.

- Couple filtering can be enabled using two options:

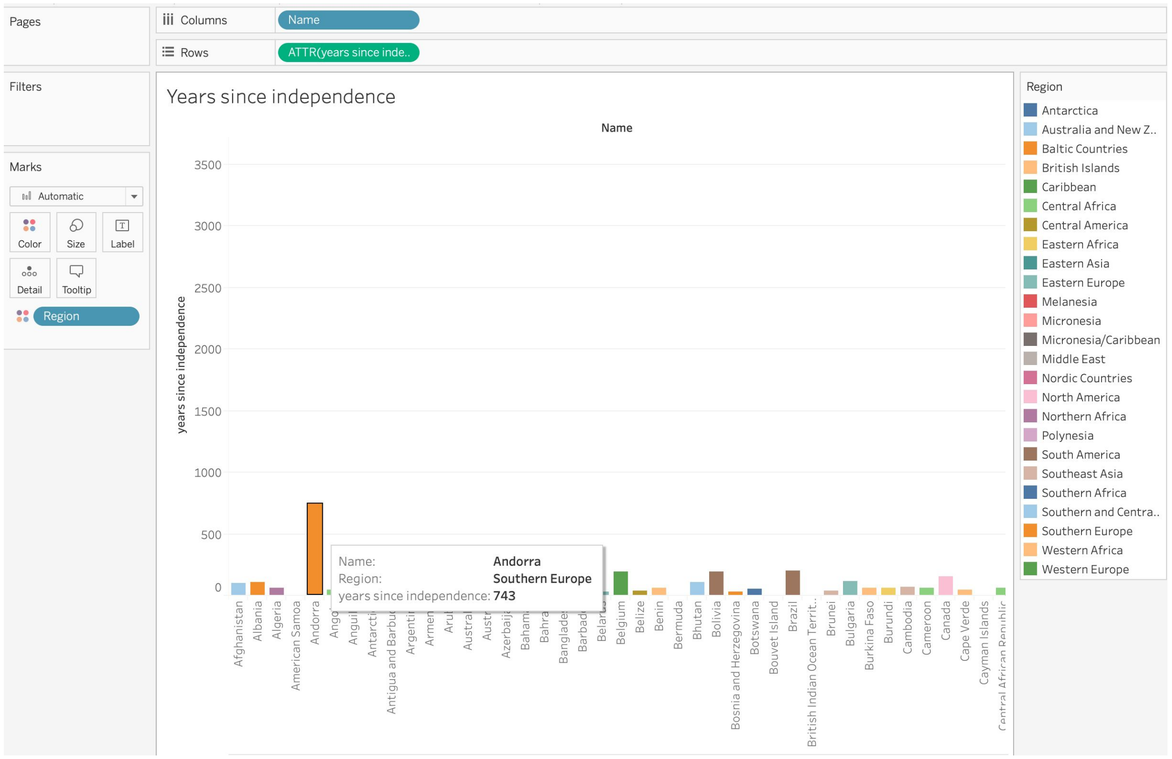
  - Option 1: Filter panels, as on the right.

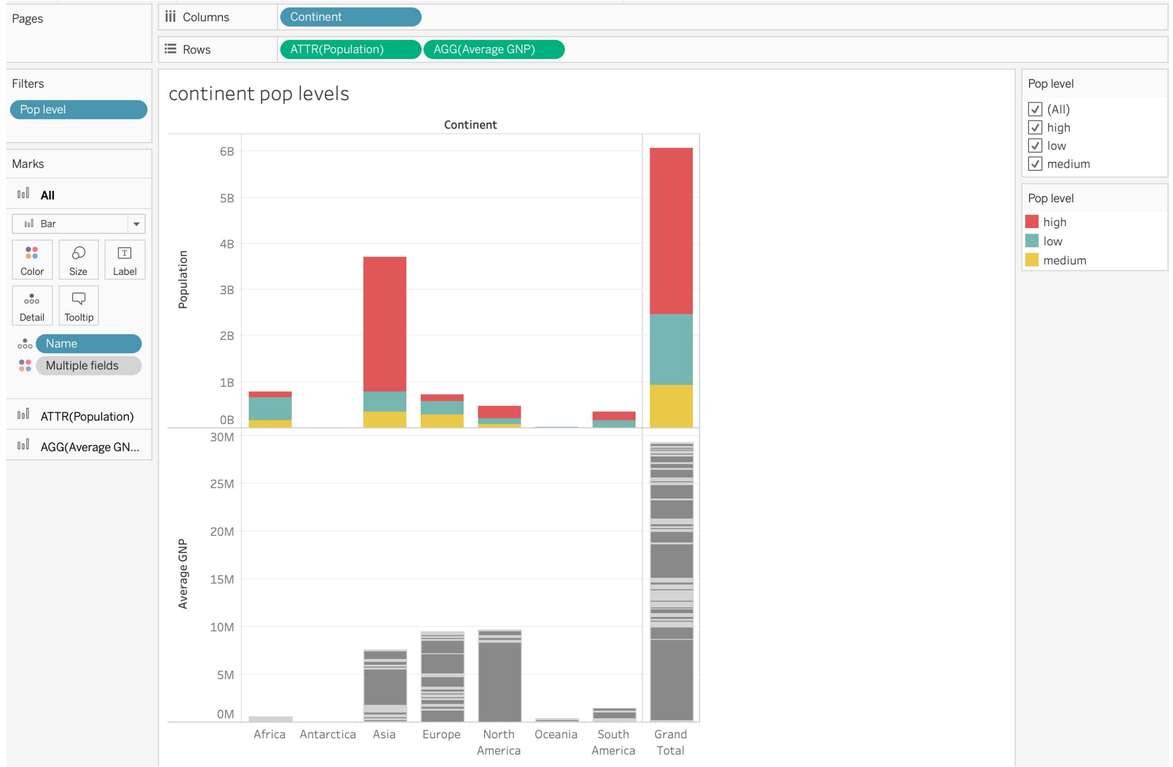
  - Option 2: Clicking the **Filter** on a given sheet, which will use it to filter other sheets.



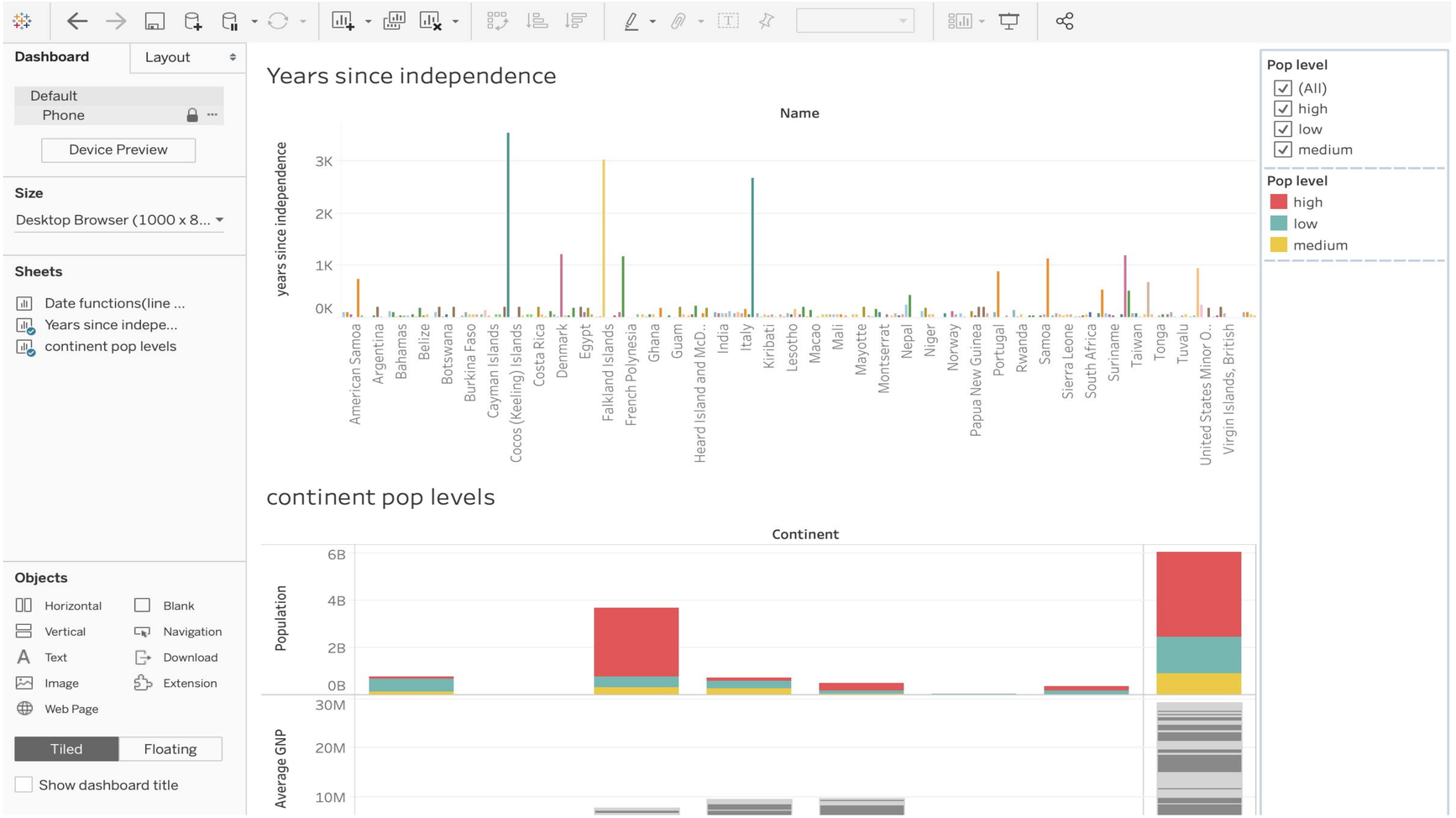
Inspiration from previous modules

- To practice using multiple filters, let's revisit some charts we have built.





Add charts to dashboard

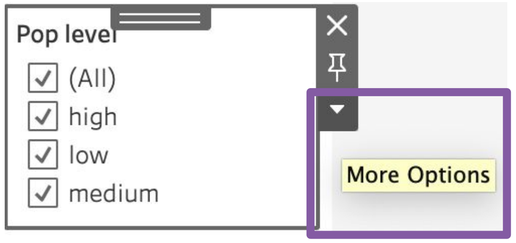


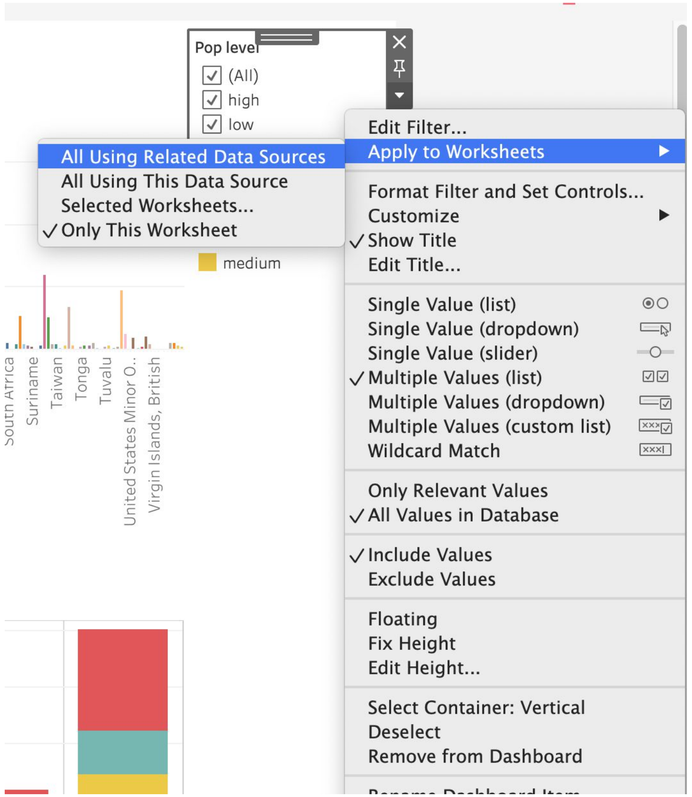
Couple filtering: option 1

- At this point, the pop level filter on the dashboard **only** applies to the **continent** pop level chart.

- To apply this filter to the years since independence chart:
  - Select the Pop level filter.
  - Click on the **"More Options"** dropdown menu
  - Select **"Apply to Worksheets" -> "All Using Related Data Sources."**

- Now when you select an option in the Pop level filter, both charts are updated.

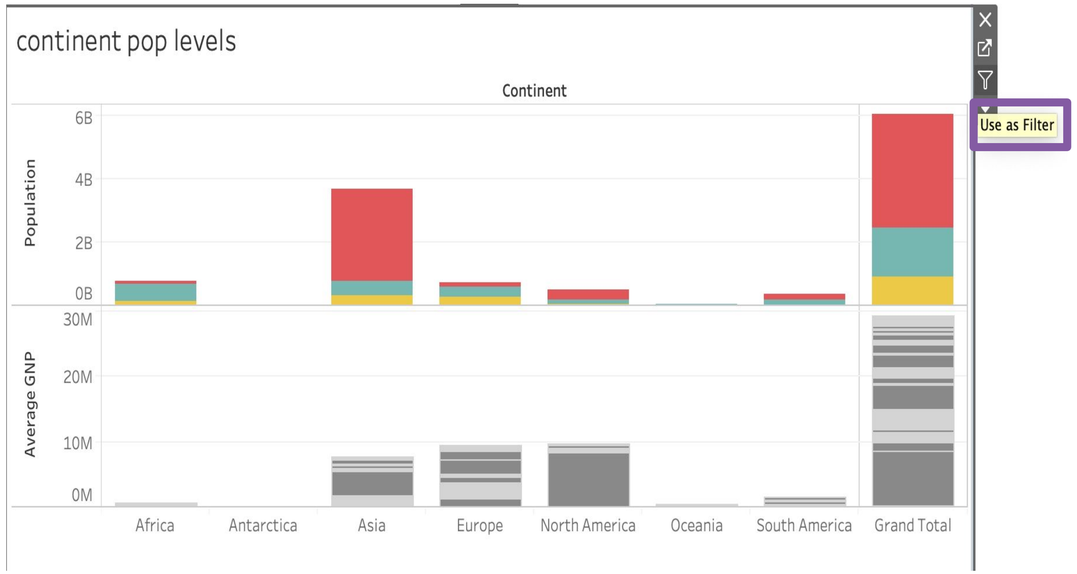




Couple filtering: option 2

- You can also use a **chart** in your dashboard **as a filter.**

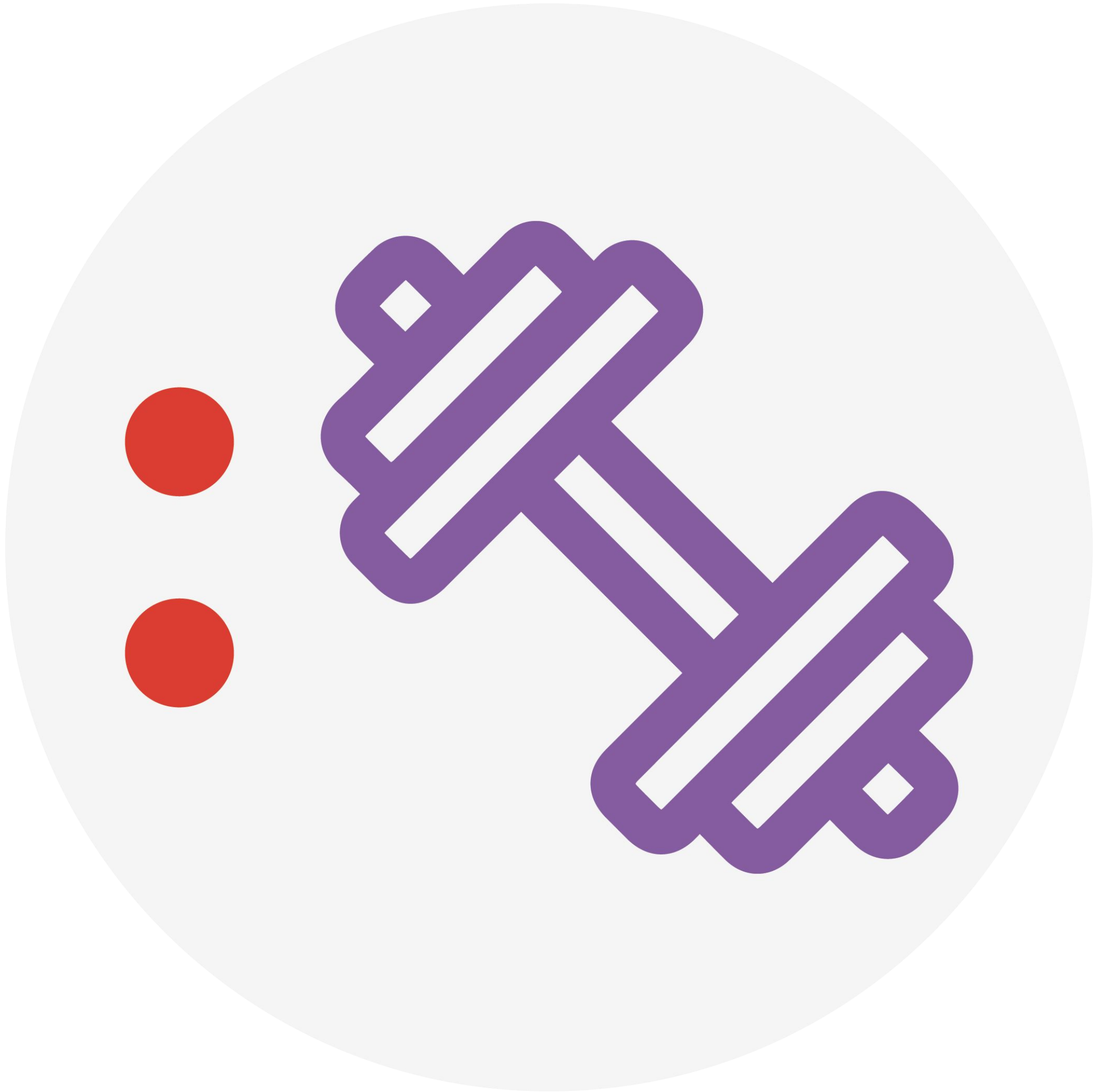
- Select the chart and click on the **filter icon** to the right.



- Now if we select **“Europe”** from the pop levels chart, you can see that the years since independence chart updates, too.

Knowledge check 12

Exercise 12



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Congratulations!

In the past few modules, we covered:

- Defining geospatial visualization
- Generating coordinates
- Cleaning and fixing geospatial data
- Creating a final dashboard

End of Part 12

DATASOCIETY:

Congratulations!