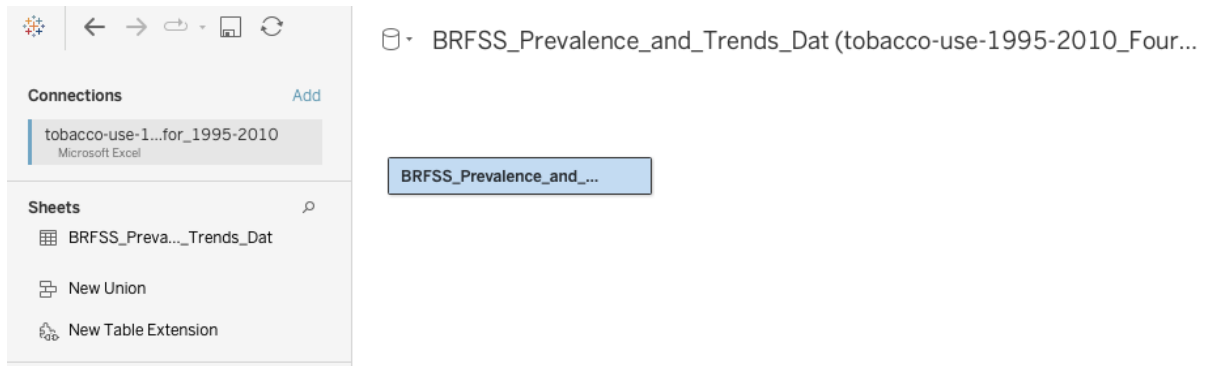


Exercise: Donut Chart on Tobacco Use

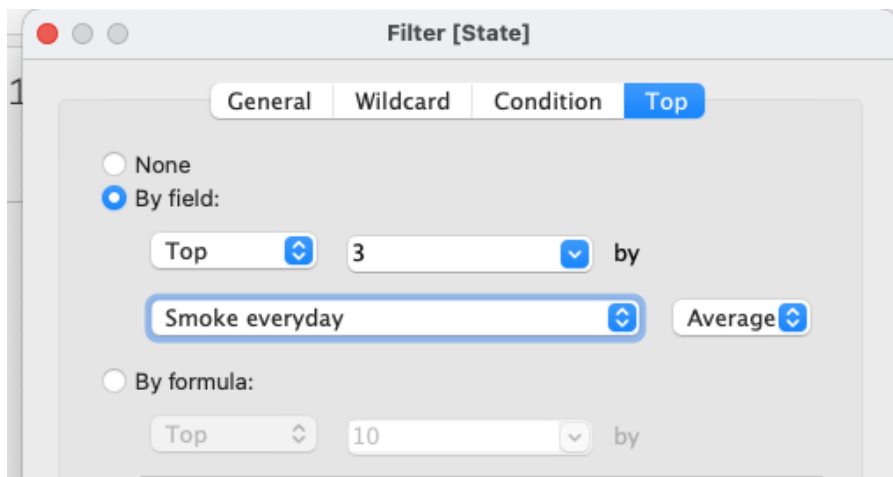
In this exercise we will create a donut chart from a dataset on Tobacco Use.

1. Connect to the Dataset *BRFSS_Prevalence_and_Trends_Dat* (*tobacco-use-1995-2010_Four_Level_Smoking_Data_for_1995-2010*).xlsx

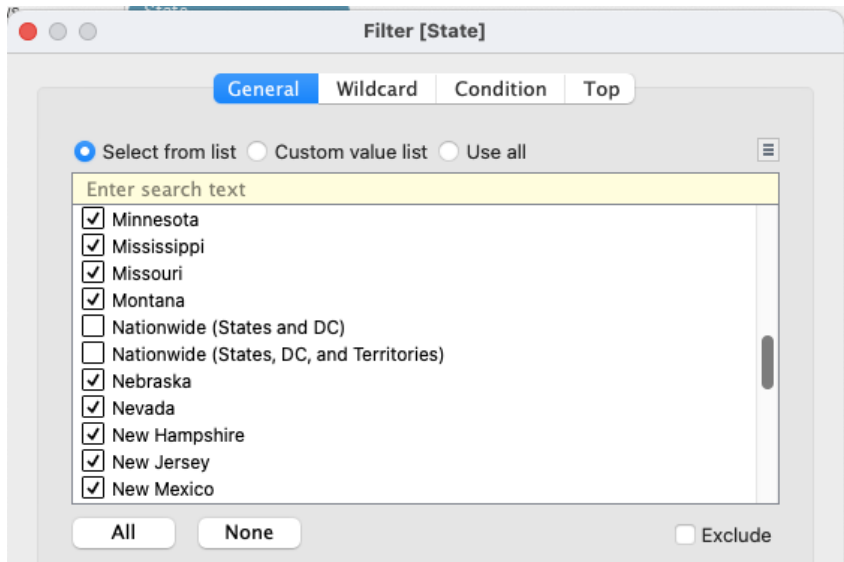


2. Click on a new sheet to start your visualization. We will represent the proportion of smokers by categories in States that have the highest % of smokers.

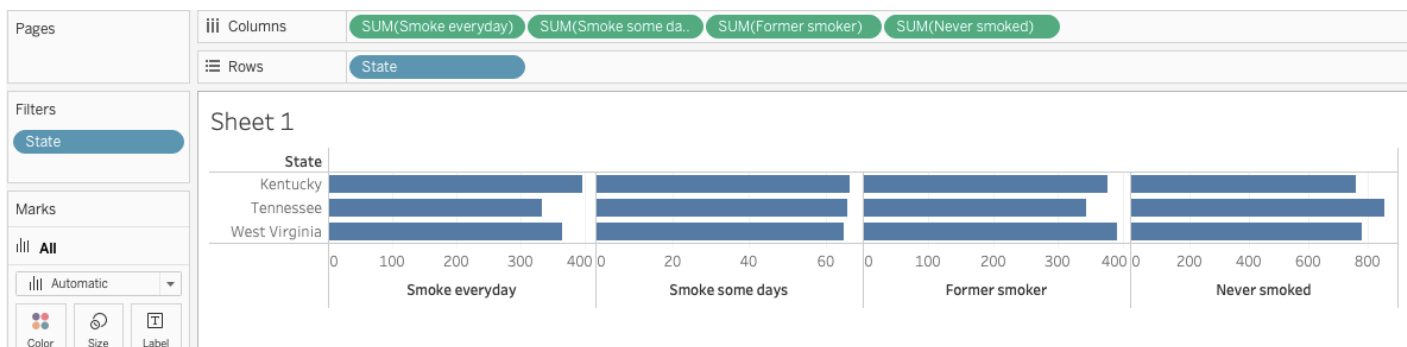
Drag *State* to Filter and select the options as follows:



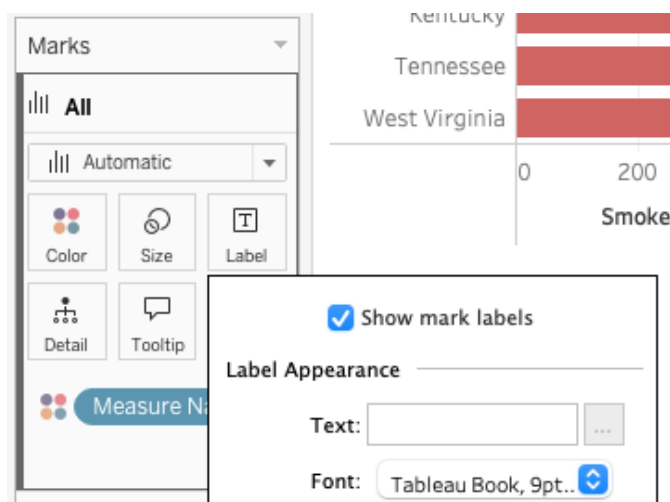
3. Click on your filter, and edit again as follow:
Deselect the *Nationwide* (both) and *Guam* from your list.



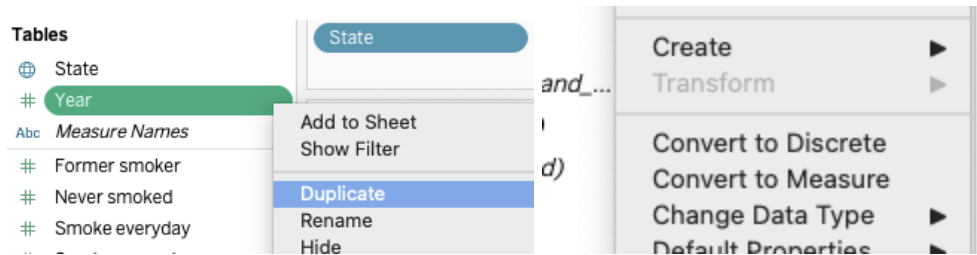
4. Drag *State* to the Row shelf and the 4 categories of smokers to the Column Shelf in that order:



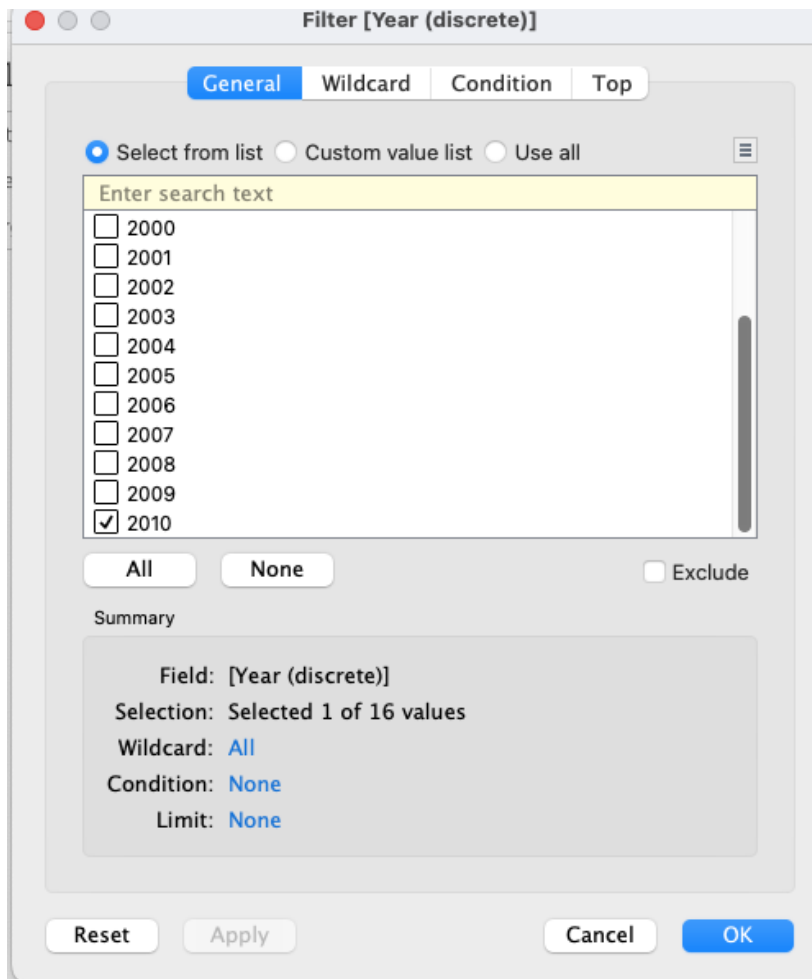
5. Drag *Measure Name* to the Color Marks and add labels by clicking on the Label Marks then selecting "Show mark labels"



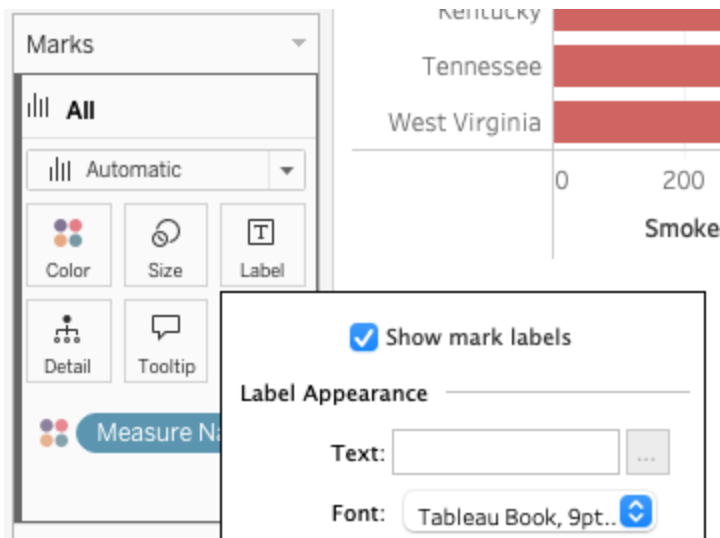
6. Select the drop-down menu for *Year* dimension and duplicate your field. Rename it *Year (Discrete)* and convert it to a discrete from the field drop-down menu..



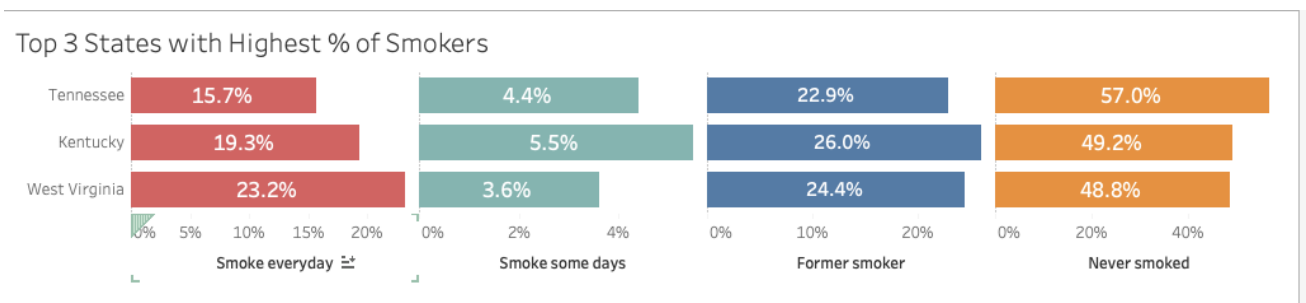
7. Drag *Year (Discrete)* to Filter and select 2010 (the last year of data).



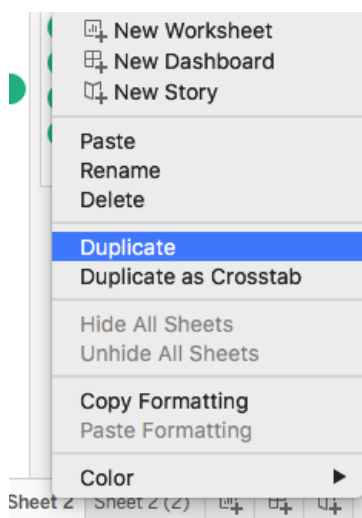
8. Remove noise from your graph and format your numbers without decimals.



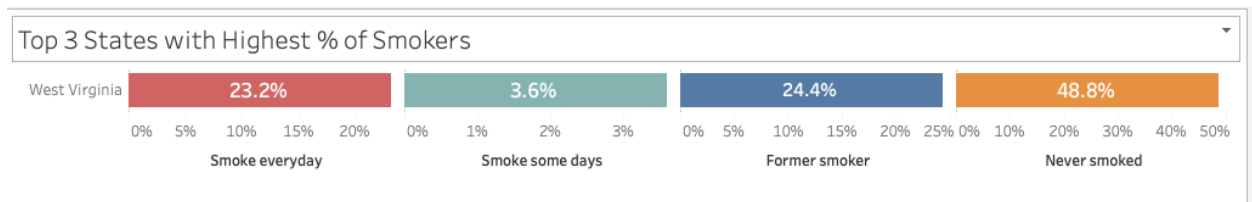
9. Add the title, hide your legend to add space, and sort your values for the “*Some everyday*”. Your final graph should be as follows:



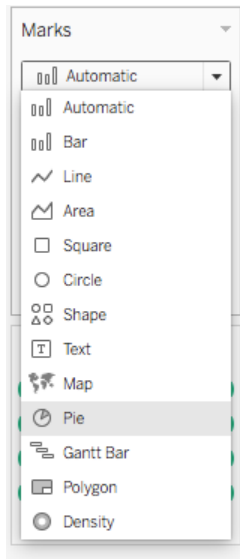
10. Right-click on the sheet tab and select *Duplicate* to duplicate your sheet.



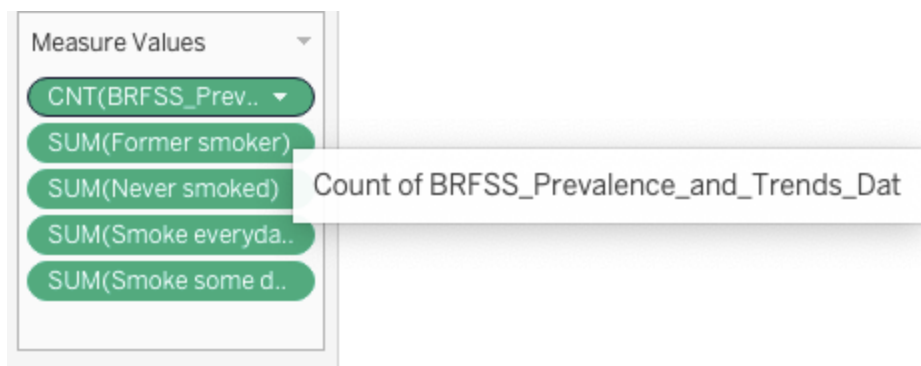
11. Drag another State to Filter and select only *West Virginia*, and click *Apply* then *OK*. Your graph should now only show the values for West Virginia.



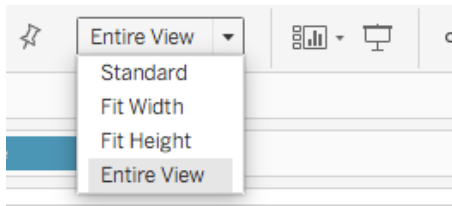
12. In the Marks Card, select the Pie chart symbol



13. Remove All pills from Columns and then drag from the data panel *Measure Value* to the Size mark. Remove the *Count of BRFSS* from the *Measure Value*.

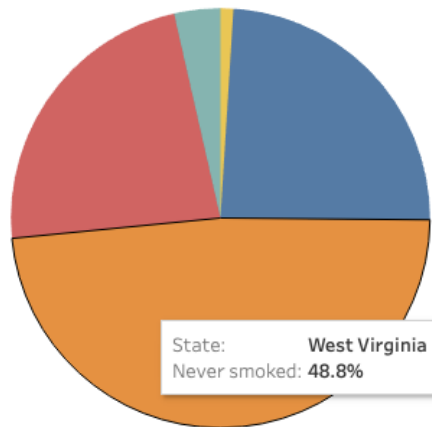


14. You should now see your pie chart in full as below. To make it larger, select *Entire View* from the view dropdown in the menu bar.

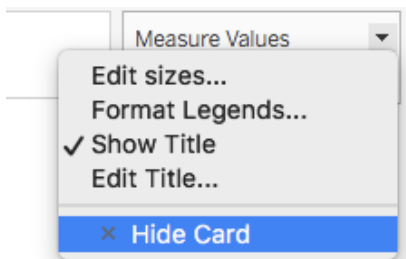


Top 3 States with Highest % of Smokers

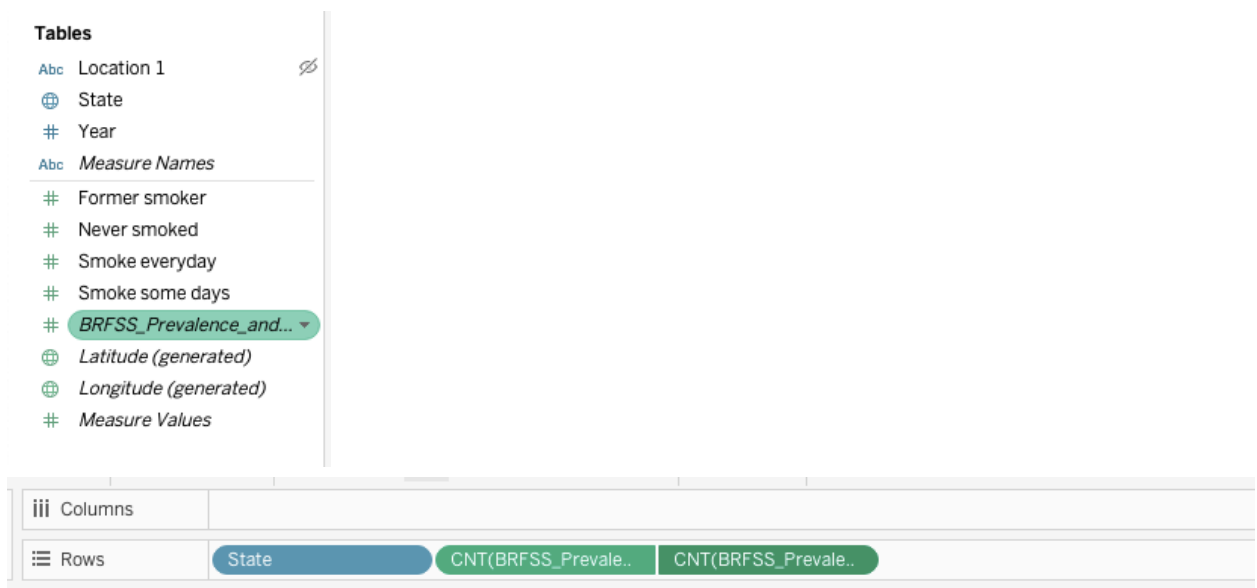
West Virginia



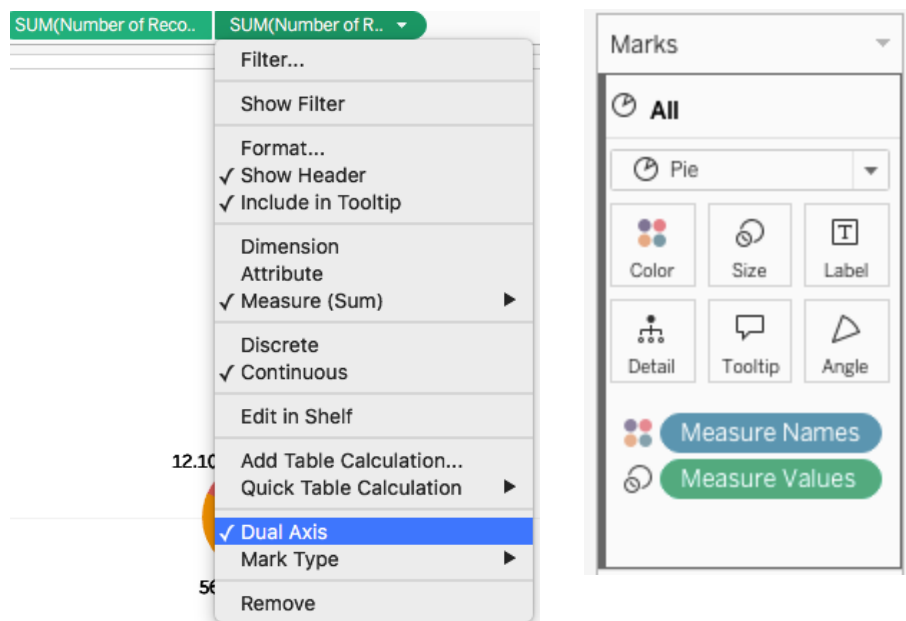
- Hide the card measure values



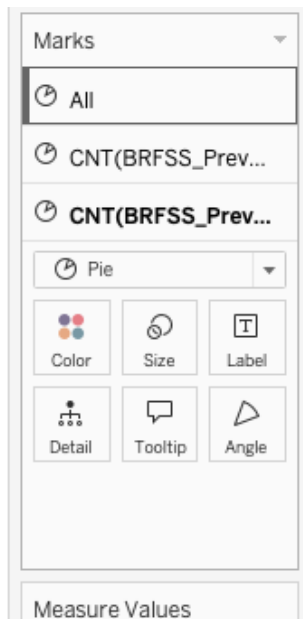
- Drag the *Count* field to the Row Shelf, then do the same thing again.
This field is a calculated field which is associated with each of your *records* and by default has a value of 1.



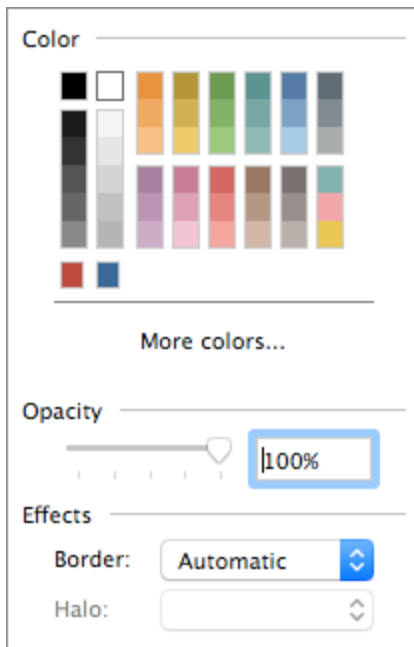
17. Right-click the second instance of *CNT*, and select *Dual Axis* from its menu. Then adjust the size of the chart using the size Marks on the *All* shelf mark.



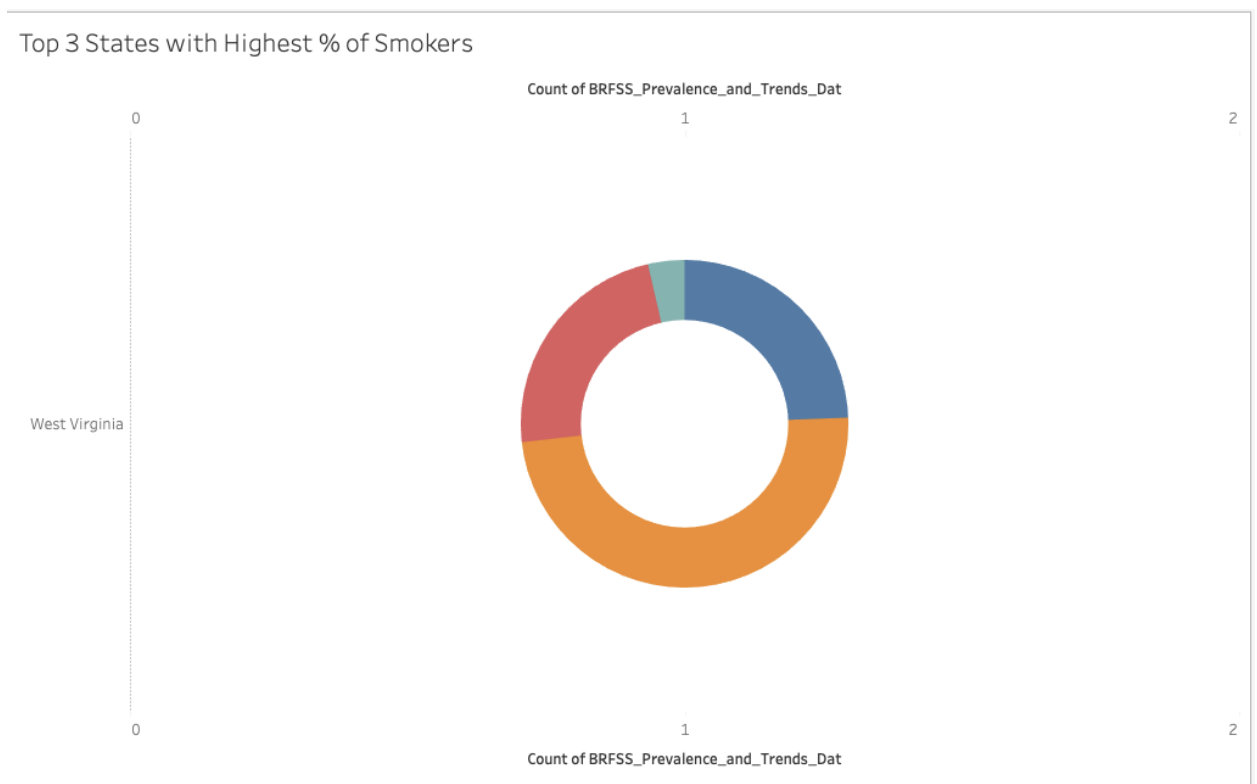
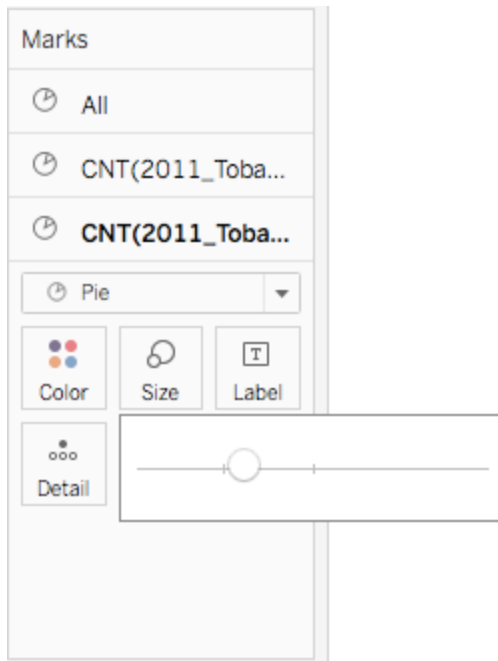
18. At the bottom of the Marks Card, click the second *CNT Panel*, and remove *Measure Names* from Color, then *Measure Value* from Size.



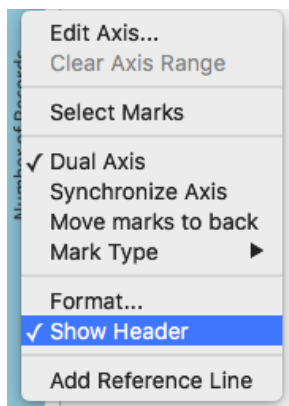
19. The second *CNT Panel*, click on the Color, and choose the same color as the background. In this example, select White.



20. On the same second *CNT Panel*, click the Size, and drag the slider to the left to make the circle smaller, it should now reveal the other chart beneath it.

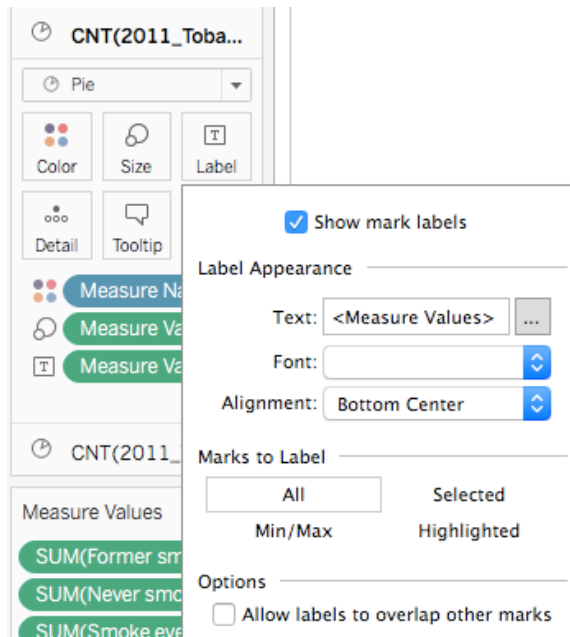


21. We need to clean-up the chart:
Right-click on your left Axis and deselect *Show Header*.

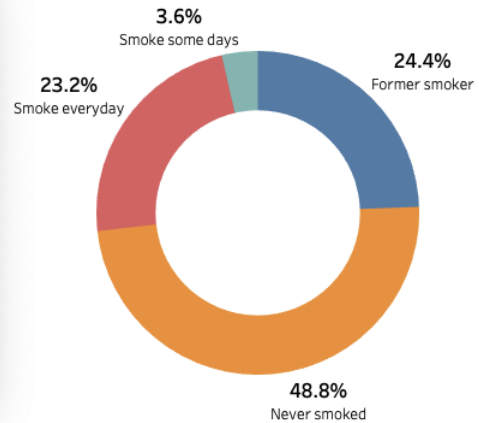
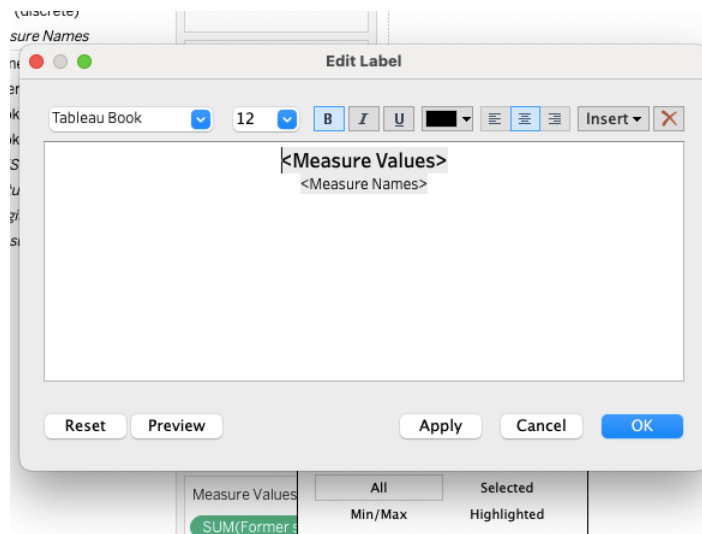


Repeat this step for the CNT header.

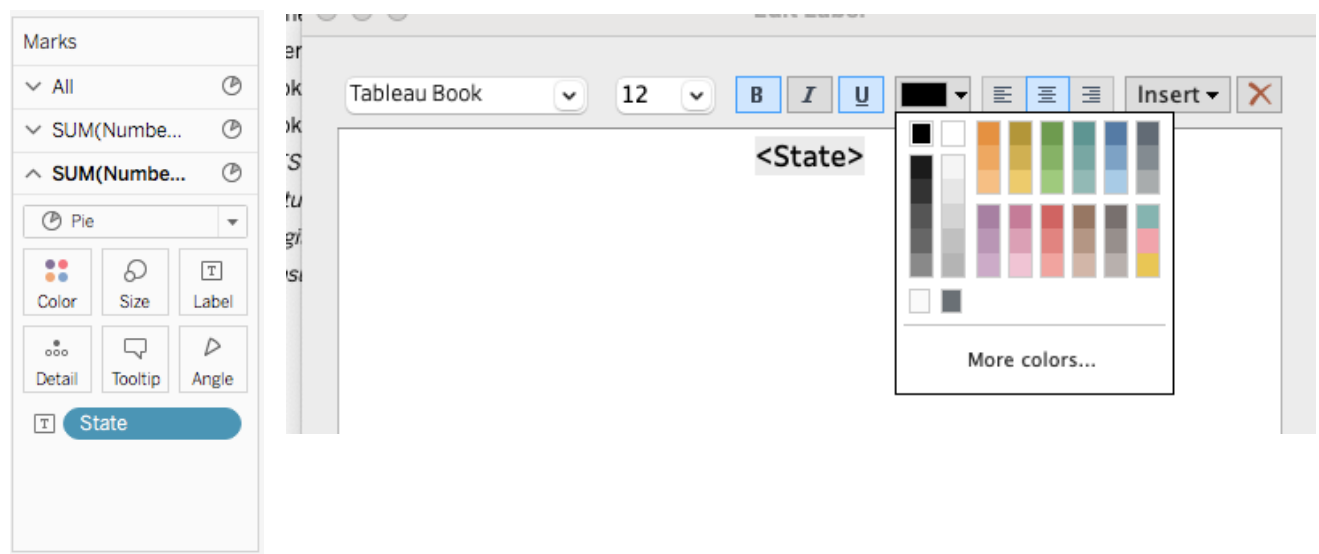
22. Select the 1st CNT Panel and display the Labels as follow:



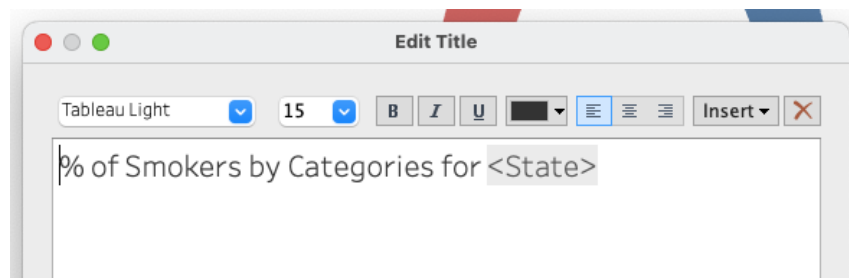
23. Adjust your size for the first and second marks card, then edit your text size. Your graph should be similar to the image below:



24. Drag *State* from the dimensions to the last Label mark shelf to display it in the middle of your chart. Make sure to change the color to black as it should still show as white.

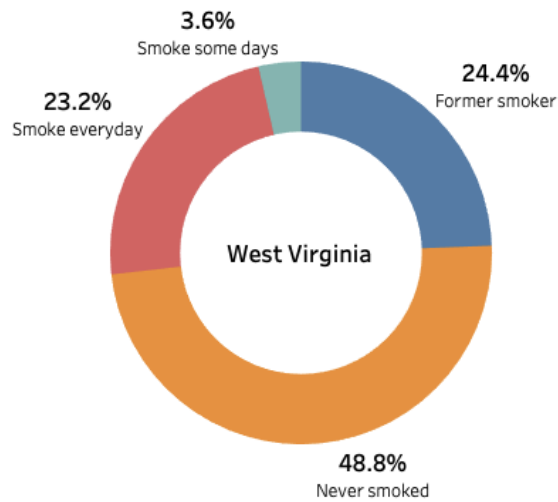


25. Edit your title as follow:

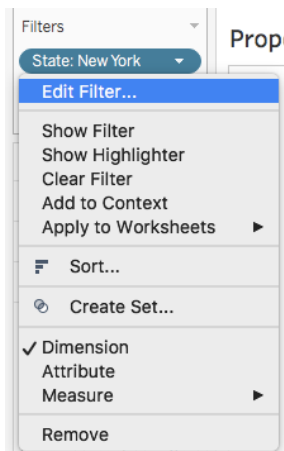


After removing all the noise, your final graph should look like the one below.

% of Smokers by Categories for West Virginia



You can quickly create similar pie charts for other States by duplicating your sheet and selecting another state from the filter.



On a dashboard, this can be useful to compare States side by side, while displaying your filter to have control on the choice of States.