

## Using Tableau for Analyzing Health and Policy Data Class Outline

1. Import data file. Note that we can change the names of variables and also variable type (like geocoding for state)
2. Create calculated measures, for example, create Current smoker from “smoke everyday” and “smoke some days” and fix the date field: DATE("01/01/" + ([Year]))
3. Create a choropleth map
  - a. Drag desired measure into the data area
  - b. Drag state into the columns area
  - c. Change to a map in the Show Me box
  - d. Add a year filter using the calculated year
  - e. Change the colors and the scale and also the scale title
4. Create a bar chart of smoking by state by year
  - a. Drag state to columns and current smoker to rows.
  - b. Show how you can reverse this to transpose.
  - c. Add a year filter again.
  - d. Let's adjust our axis so it's constant across years
  - e. We can also have it sort our axis ascending/descending
  - f. In the analytics tab, add some reference lines
  - g. Show how to create a sort on State under Default Properties, and sort.
5. Create a line chart.
  - a. Add year to columns and current smoker to rows.
  - b. Show how dragging another measure will create a second axis. And how putting it on the axis will add it to the existing axis.
  - c. Show how to edit colors and change the name of the legend.
  - d. Explain how the sum is being calculated and why that's not especially meaningful for us. Change it to avg, which will be the average across all states.
  - e. Show how to add a state filter and also how state has to be added to the rows to get them to show as individual panes.
6. Show how to add everything to a Story
7. Show how to add everything to a Dashboard
8. Show how to export a packaged workbook
9. Show how to export a static image