Statistics Lab on Descriptive Statistics

Math 1600, Fall 2016

Dr. Melanie Martin

Instructions on how the data we will be using was retrieved:

“A project of the Annie E. Casey Foundation, KIDS COUNT is the premier source for data on child and family well-being in the United States.” Go to their web site:

<http://datacenter.kidscount.org/>

Click on DATA BY LOCATION

Click on California

Under LOCATIONS in menus on left side of page, under “Show indicators with data:”

choose “By County”

In the menu in the center of the page choose

Median household income

Children living in poverty

Percentage of 3-5 year olds that do NOT attend preschool, nursery school, or Head Start for at least 10 hours a week

Near top of page in main frame look for “TOOLS” and click on “Raw Data” to download a .csv file (comma separated variable file), open this in Excel.

**Use the files linked to the class web page.**

This will give you a file with data for California and all the counties. In order to make a chart we need to create a new table with the data we are interested in. Our primary interests are the six counties served by CSU Stanislaus, but you may also include up to three other counties you are interested in. You must include: California, Amador, Mariposa, Merced, San Joaquin, Stanislaus, and Tuolumne.

Start by typing the names in a column:



Now we want to put the years in a row across the top of our table



Notice that the dates are in descending order. We will want to change this later, but for now we want to put in the data for our counties. Highlight the cells you want and copy them. The go to the cell in the table where you want the first cell to appear. To turn the column you copied into a row in the new table you need to use “Paste Special: transpose”.

Your table should look like this:



This would be a good time to save your work. You should use “Save As”, give it a name, a location and save it as a .xls or .xlsx file.

Now we want to put the columns in ascending order. You can do this by copying the columns into a new table in the order you want them.



To make a chart, highlight the new table and click on the Charts Menu. Choose “Columns” and “Clustered Columns”. Your chart should look like this:



Make a second chart the same way, but once it is made, in the data section of the chart menu, click on “Switch Plot” to get:



This would be a good time to save your work again.

Repeat this process for the other two links:

* Median Household Income
* Children Living in Poverty

Consider the graphs for children living in poverty:

1. Which county has the highest percent of children living in poverty? (Explain how you determined this.)

2. Which county has the lowest percent of children living in poverty?

3. Why to we use percent rather than the number of children?

4. List at least three factors that you think might affect the percent of children living in poverty.

a.

b.

c.

We will be using this data again in the next lab, so be sure to save your file. Email a copy to each of the members of your group and copy me in: [mmartin@cs.csustan.edu](mailto:mmartin@cs.csustan.edu)

The subject line of the email should be “Math 1600, Lab 4.”