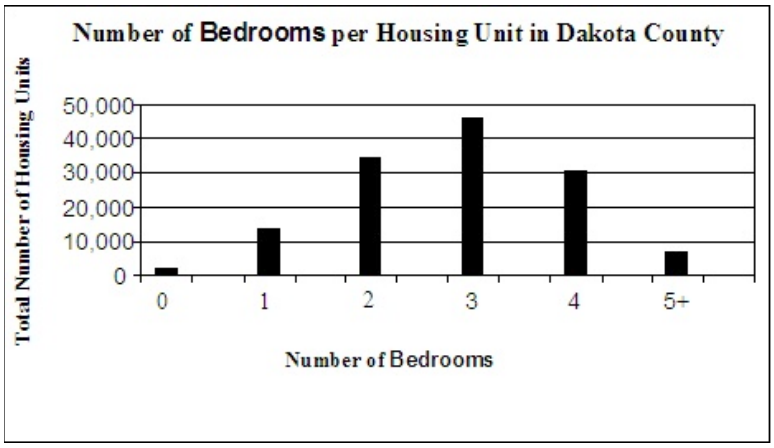
Statistics Civic Engagement Project
University of Minnesota, Morris
2004-05

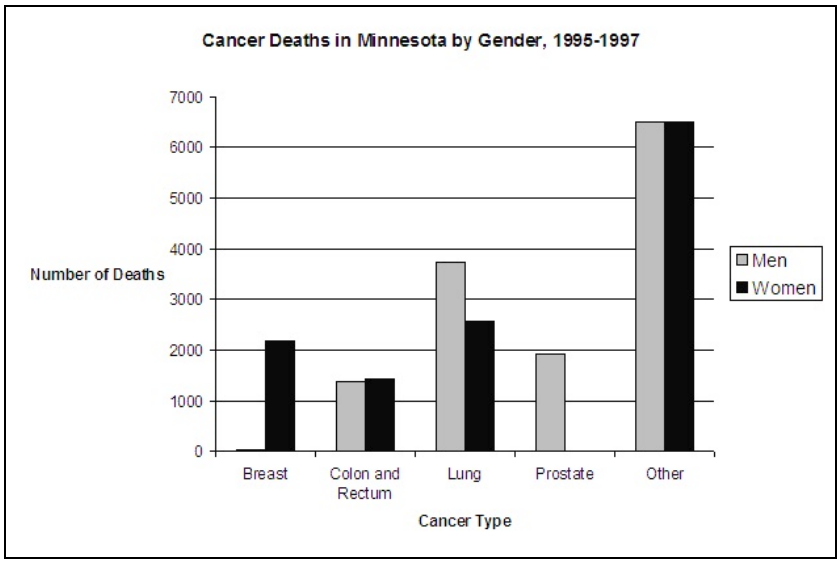
Tricks and Tips for Completing the Statistics Civic Engagement Project

- Choose unusual, interesting statistics to report on. To see what previous classes have done, take a look at: http://www.mrs.umn.edu/services/cst/statbook/maps/ and browse through some of the stats. This will also give you an idea of what your finished project should look like, and what you need to complete before uploading your information.

- Comparisons are more interesting than reporting simple data—instead of stating raw numerical data, compare and contrast areas or changes in a given area over a period of time.



This first graph, for example, is merely informational. It might have been more interesting to compare Dakota County with the Minnesota state average number of bedrooms (using percentages rather than raw numbers).

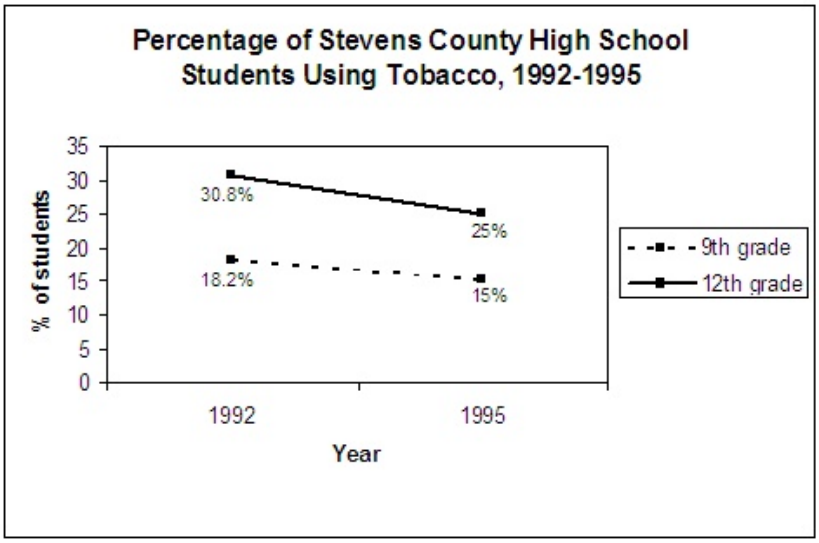


This graph, on the other hand, clearly compares cancer deaths with respect to gender in the state of Minnesota. Also, the bars are clearly differentiated and there is a simple legend, making the graph clear and easier to interpret.

- When creating your graph, include data labels if you feel the data is unclear with relation to the axis lines, or if you think that the actual numbers are useful. This also will help verify any numbers you use in your interpretation.

- Be careful when you choose comparison data! It is easy to try to look at statistics that do not compare directly.

- When studying statistical trends over time, include a long enough time period to indicate a perceived trend, rather than looking at only a couple of different data points, as in the following graph:



This graph, while having an interesting topic, covers a very short time period, so it is hard to tell if this downward slant was a general trend for the 1990s or not. Also, grid lines might make the slopes easier to interpret.

- Don't try to extrapolate too extravagantly from your data—many factors may be at work determining trends and information, and it is sometimes very hard (though not always) to say that "this is what is causing that trend to show up in the data." Keep your interpretation simple and clear—explain what your data is telling the reader, and keep in mind that your target audience may not be familiar with technical statistical terms, so try to word your interpretation in a fashion that will be easily understood by someone who has never had a statistics course.

- Have someone else read your report to make sure it is easy to follow and free of grammar mistakes. The interpretation is one of the trickiest parts of the project.