Final Project – Due 5pm May 8

The purpose of this project is to give you the experience of using R in a realistic setting. We are going to be working with Diane McLaughlin, a graduate student in the School of Journalism. Diane is working on a story about fires. She has compared the reported causes of fatal residential fires in the period 2011 to 2015 with the reported causes of fatal residential fires the period 2006 to 2010. She noticed a 175% increase in "unknown" as the reported cause of the fatal residential fires. That sounds like a big increase. Are there news stories in the fire data?

As her first step, Diane is using the <u>National Fire Incident Reporting System</u> (FIRS). When you explore this site, you will find links to many other sites and online resources relating to fire safety and fire incidents. Diane has collected 10 years of data which is a good starting point for exploring residential fires: Diane's Residential Fire Data.

For your final project, you will do an exploration of data related to fires using data from years 2006-2015. Today you will pick from four areas of focus:

- 1. Residential fires
- 2. Residential fires with fatalities
- 3. Non-residential fires
- 4. Arson

The deliverables for this project:

- 1. Discussion and visualization of fire incidents in your area of focus. Include (1) printable pages as well as (2) dynamic pages using Shiny. Consider experimenting with 360 degree formats (see NY Times Daily 360) and other low cost VR formats such as Google Cardboard.
- 2. Look for the unusual, anomalous, out-of-place data. Combine graphical techniques and statistical methods in discussing your findings.
- 3. Submit your work as a URL to your github or other online location. Make sure you submit your code so it can be reviewed and run.

NOTE: Turn in a 1-page discussion of your project by Sunday April 30th. On Monday May 1st, the class will be about how you are approaching this project with the intent of helping you focus on deliverables. Diane is planning to attend the class and will review project discussions that are submitted in advance.

A rubric similar to the one used for the midterm project will be posted on Blackboard.