Overview

In this exercise, you will practice using RStudio to create graphics and a dashboard using packages like <u>highcharter</u>, <u>ggplot</u>, <u>shinydashboard</u>, and <u>flexdashboard</u>. The datasets needed to complete the exercise are located in the course directory:

\\faa-courses.ad.uillinois.edu\Urban\Fall 2016\UP 494 BW\Student-Use

Please copy the data from this location to a folder on the computer you are using before beginning work. The $C:\Temp$ and $C:\WorkSpace$ directories are good candidates in the lab.

TASK 1: CREATING A DASHBOARD WITH R

We will write an R script that uses the R packages and techniques demonstrated in class to build familiarity with data visualization on the web. Using the example script provided last week (shinydashboard showing daily jail population) as a foundation, create an R script that: (1) creates two graphics using the police data we have acquired through the FOIA requests (see network folder) or Stuart Levy's bookings data, and (2) presents these graphics on the web as a dashboard. You may use any R package you like to create the graphics and dashboard (e.g., highcharter, ggplot, shinydashboard, flexdashboard).

Examples that you can use to draw inspiration include the following:

https://www.rstudio.com/products/shiny/shiny-user-showcase/

https://blog.rstudio.org/2016/05/17/flexdashboard-easy-interactive-dashboards-for-r/

You may work on this assignment in small groups, but each student is responsible for submitting their own report, script, and dashboard.

WORK PRODUCTS

Submit a short report (one to two pages) briefly describing your procedures and discussing any findings, conclusions, or insights. This report should also include a link to your dashboard on shinyapps.io. Please upload this **short report** as well as your **R script** to Compass by **2:00 pm** (the start of class) on **Tuesday November 8th**.