

Econ 294 Final Exam

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What to Turn In - You will turn in github links to the r-markdown and compiled document (either html or pdf) for your assignment.

See the various .Rmd assignments files in your instructors assignments folder for tips on getting started with r markdown documents. Here is a handy [cheatsheet for working with R-Markdown](#).

Data - Work with the r package `nycflights13`. Build your solutions by querying from the `nycflights13_sqlite()` sqlite database (see lecture 8 notes, `dplyr`'s [two table verb](#) and [databases](#) vignette for insight on how to do this). To be clear, this SQLite database must be your starting point, ***you may not load your data from any other source***.

Here is a [detailed explanation of each database table, variable, and source](#).

Explain the relationship between **departure delays and cancelations** with each of the following flight facets:

On Cancelled flights - Note that all cancelled flights are those with an NA for `arr_time` (arrival time) in the `flights` table.

- a) weather
- b) time of day, day of week, and time of year, and any other aspect of time
- c) airport destination
- d) characteristics of the plane

Use **concise**, clear text to explain nice-looking plots, tables, and models in support your analysis. The text of your paper (not including plots and tables) should not exceed two pages.

At the end of your paper, I expect to have a clear idea of under what conditions I should expect takeoff delays and cancellations at New York City airports in 2013.