

CASE STUDY 002 [R] Philadelphia Crime Rates



Difficulty Level: 3 of 3

Disclaimer: SuperDataScience has no affiliation with the Philadelphia Police Department. While the dataset is real, the scenario is made up for educational purposes.

You are a Data Analyst working for the Philadelphia police department. The department is trying to find any helpful trends in Crime rates to assist them in planning their work for 2017.

You have been supplied a dataset with crimes committed and recorded in the region for the period of 2006-2015. This is a large dataset with over 2,000,000 rows (excel will not be able to handle it).

The department wants to know and see visualizations for the following:

- 1. Overall trend in crimes for the whole period of time in the dataset. The granularity should be at the Day level.
- 2. Which are the most and the least dangerous hours in Philadelphia?
- 3. Is there any seasonality in the crime rate?
- 4. What are the top 10 crimes crime types?
- 5. Which police HQ is in the most need of strengthening?

Good luck! The safety of Philadelphia's citizens depends on you.

Difficulty note: this is a difficult assignment. Do not be surprised that there will be lots of nuances we have not covered off in the courses. But just like in Real Life – there will be things training has not prepared you for and you will need to do research to find how to solve the problems at hand. If you get stuck, check the clues file.