

Executive Summary



Adapted from the December 2020 Predictive Analytics exam

Your actuarial consulting firm has been hired by a national retail firm to help them understand the factors that affect pedestrian activity. They have noted that their sales are proportional to pedestrian activity near their existing stores. When considering new locations across the U.S. for stores, insight into how weather affects pedestrian activity would be useful. For existing stores, it would be useful to understand how pedestrian activity varies by time of day and day of the week when deciding on which hours to be open.

The data for this study consists of hourly counts of pedestrians that were collected in 2017-2019. The exam data is derived from a public dataset provided by NYC Open Data (<https://opendata.cityofnewyork.us/>).

Some cleaning was performed in advance. The data dictionary at the end of this document describes the available variables.

Your goal is to identify and interpret factors that relate to higher or lower counts of pedestrians.