Assessment of relation between pedestrian traffic and popular venues, Toronto

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1. Introduction / Business Problem

For a city, in order to control traffic flows and manage availability of public transport options and traffic regulation, it is helpful to be able to analyze and predict the flow of pedestrian traffic throughout a city. If there are hotspots where many people gather, certain precautions may be required in order to ensure public safety and / or manage traffic in other forms.

However, it is also good to know how pedestrian traffic changes with the availability of new venues. If, for example, new restaurants or cafés open in an area, how will the amount of foot-traffic change? It would be beneficial for the municipalities to know this upfront in order to account for increases.

That is the business problem this project is concerned with. For the city of Toronto, the pedestrian foot-traffic at peak hours at popular intersections is assessed, combined with information on close-by venues. A model will be extracted to predict foot-traffic based on the type of venues that are closest to the intersections.

The audience for this report is the department of traffic management of the city of Toronto. The insights aim to make better predictions of pedestrian traffic, thus helping with management issues.