## Introduction

As part of the Mexican Valley Metropolitan Zone, Mexico City is the 9<sup>th</sup> biggest urban agglomeration across the world, and the most populous city in North America. It has almost 8.9 million people living in a land area of 1,485 m<sup>2</sup> with a density of 6,000/km<sup>2</sup>, this density reveals the city's biggest problem which is the lack of residence for new inhabitants.

Construction companies have been developing new housing buildings across the city, but the demand is still growing, in order to check for new constructions lands, it is important to know which neighborhoods have a bigger number of preestablished venues and which don't. For those neighborhoods that have bigger number of preestablished venues, companies only need to construct residential building; and for those that don't, companies are looking for constructing multifunctional complexes that includes residential apartments, office section and mall. In order to help companies and government deciding where to establish new buildings it is important to know all neighborhood areas background; one approximation could be using data science to cluster the neighborhoods into 3 different categories.