IB Urban Environment Case Studies

Comparative analysis between New York and Mexico City

By: Jorge Narezo, María Guillén

Stage One

1. Land Use Models

Mexico City‘s land use model- Latin American city. The CBD in in the city’s downtown, shows the transition of the old elite away from the CBD to the outskirts of the city in which they usually live in closed gates residential areas. In these areas there is a large range of services and shops. In Mexico City the pattern is followed to a certain extent. There is a social dispersion all around the city, there are not set areas which have a specific residential status or economic function. The working areas vary a lot and there is not a clear relation between where do they do work and what do they work in. The primary and secondary sector activities are developed in the outskirts of the city, in the zone of conservation and in the case for the secondary sector in the factory zone in the northern part of the city (Azcapotzalco, Gustavo A. Madero).

The tertiary sector is developed in Santa Fe, Reforma and Del Valle, which are high class residential zones which have an extensive range of services, office buildings, restaurants and shops which are concentrated in these spots.

New York’s land use model- New York’s model is not clearly defined; there has been a lot of controversy in the decision on which model is it. New York started as a Burgess model, then it transformed into a Hoyt model. Manhattan was the CBD and since it was a port, most immigrants came to Manhattan first. Later on, the immigrants moved to other boroughs like Brooklyn and Queens, where new communities were formed according to the ethnic origins of the new population. Currently, New York City is considered to have a post-modern land use model.

1. Preliminary summary

We chose New York and Mexico City because they are at different levels of development; one belongs to an MEDC and the other to an LEDC. In the past decades, New York City has gone through the process of deindustrialization, in Mexico City there is a wide range of factories, although the primary economic activities are in the tertiary sector. New York’s population is very cosmopolitan, about 50% of the people living in the different boroughs are immigrants from all over the world. In the case of Mexico City the migration is mostly from rural to urban; there is a very low rate of international immigration. The conditions in which the population lives in are quite different, because Mexico City has a high number of squatter homes all across the city, even in the richest parts. On the other hand, in New York this is practically inexistent or very rare to find. The informal employment sector is quite larger in Mexico City than in New York. In Ney York’s City heart, Manhattan there was a clearer pattern for housing and income. In a certain way, even though both cities are chaotic there is a certain order and structure which makes patterns easier to be found in New York. Mexico City, due to several factors is chaotic in every sense and generalizations cannot be made easily because the city has expanded in an incongruent way.

Both cities have several similarities, for instance: They are two of the most densely populated cities in the world; Mexico City and New York are economic capitals for their respective countries, they are in the top 10 richest cities worldwide. New York has five boroughs, and each of them has specific characteristics which makes them quite different from each other. From the ethnic origin of the people that live there, the architecture and design, to the economic functions and activities that are carried out. Mexico City has different delegations in which housing contrast can be seen within the same space due to lack of urban planning and design. This leads to both cities having huge disparities, urban stress and contrast. Mexico City and New York are very chaotic, overpopulated and both produce outstanding levels of output. Further on, we shall study the sustainability of each.

1. Annotated maps

Manhattan Is the Central Business District (CBD) of the city. It has the highest income rate, due to having annual incomes which exceed $100, 00 per capita. It is the most expensive part of the city in terms of residential areas, shopping centers and services.

Attracts thousands of tourists and immigrants per annum, being one of the most densely populated districts.

The tertiary and quaternary sectors are predominant among the workers of Manhattan.

Queens and Brooklyn are middle class residential zones. They have the largest population both exceeding two million inhabitants.

They are districts with a very high cultural and ethnic diversity among its population, which works in the tertiary sector providing services.

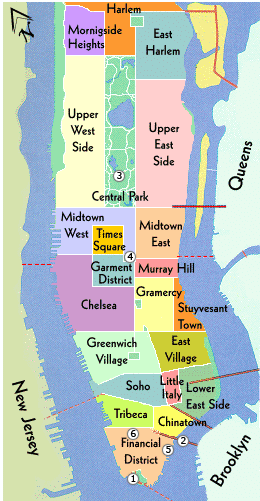
Different means of transport: Subway routes, commuter train system, bus lines and several Expressways.

It is the most suburban borough, highly residential; it is the only one with a Non-Hispanic majority, and accounts for only 468,000 people of the total population.

10% of the population was below the poverty line, including senior citizens and underage people from 18 to 19.

It is the most auto centric borough.

GoodFellas and The Godfather took place here, high immigration rate of Italians.

[](http://en.wikipedia.org/wiki/File:Restaurant.jpg)[](http://upload.wikimedia.org/wikipedia/commons/3/34/KatzGentrificationLES.JPG)[](http://upload.wikimedia.org/wikipedia/en/6/67/Jan_008.jpg)[](http://upload.wikimedia.org/wikipedia/commons/0/0e/Tompkins_Square_Park_Central_Knoll.jpg)

A closer look on Manhattan

There are several neighborhoods in New York City; we thought it would be interesting to see the ones located in Manhattan.

The Financial District often referred as Wall Street is the zone where there is a higher concentration of white collar jobs; it is not a residential zone although in the past few years some residential zones along the Hudson River have been reclaimed. Many of the multinational financial institutions, insurance companies have their headquarters here.

Greenwhich Village and the Lower East Side are neighborhoods with the highest ethnic diversity. Lower East Side and East Village were originally Jewish and Polish neighborhoods, further on other ethnic groups have moved to these zones adding major diversity to the zone. It was interesting for us seeing how ethnic groups have transited historically through different neighborhoods.

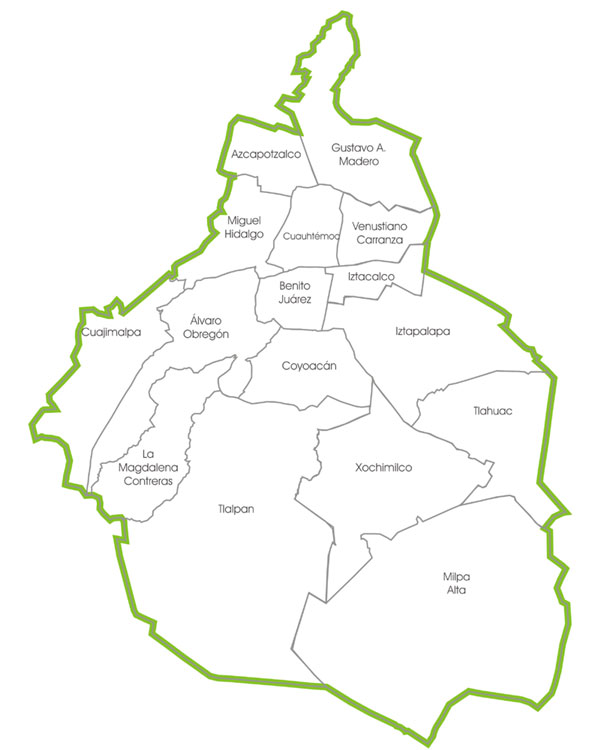
Although it is very uncommon to see squatter homes in New York City, certain zones like East Village and Lower East Side have a small amount of squats. It is estimated that in the 1990s, there were between 500 and 1,000 squatters occupying buildings on Manhattan's [Lower East Side](http://en.wikipedia.org/wiki/Lower_East_Side).

The Upper East Side is one of the wealthiest neighborhoods in Manhattan; it has the highest pricing per square in the United States. It has the highest percentage of White citizens in Manhattan and it is the only neighborhood in which Republicans constitute more than 20% of the electorate. [](javascript:void(0))

The delegations of the city which are found in the outskirts, in the north part of the city have a lot of industry and factories. This is due to its proximity with Estado de México and Puebla.

These are the poorest delegations of the city. Iztapalapa has the largest population for a delegation in the city (1,830,000). The housing quality is quite low, characterized by squatter homes and low-cost residential made with inadequate materials. These delegations show how the city expanded chaotically in the last decades. Often the families build the houses themselves lacking authorization from the government.



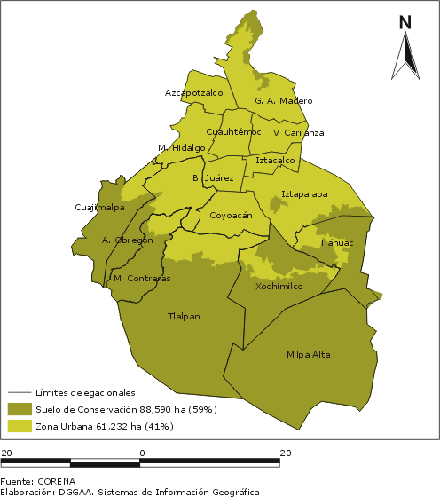


Polanco, Santa Fe, San Angel, Reforma, La Condesa, Las Lomas de Chapultepec, Pedregal are the zones with high class residential in the city. More people working on tertiary and quaternary sector. (Service, business, high-tech industry) Nonetheless a considerable amount of the population works on the informal sector. High quality housing mostly.



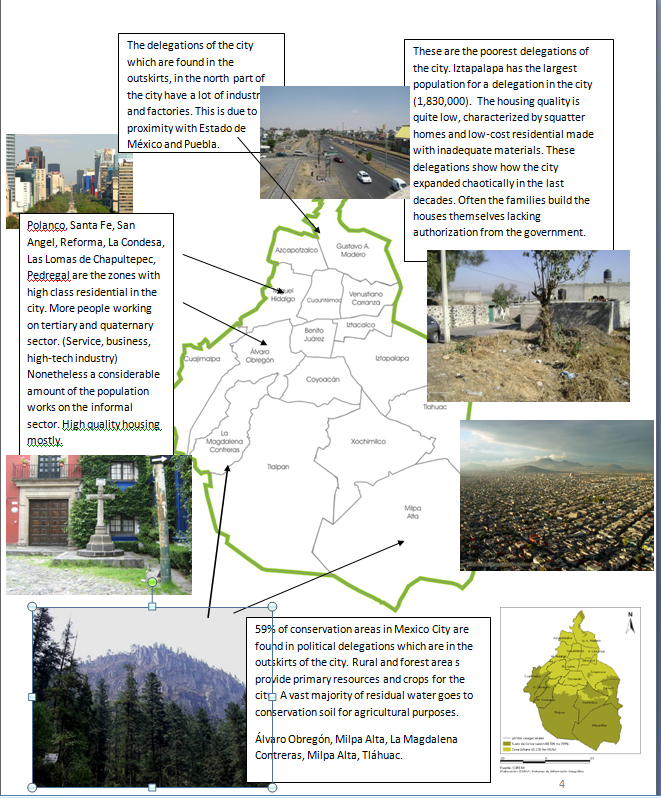






59% of conservation areas in Mexico City are found in political delegations which are in the outskirts of the city. Rural and forest area s provide primary resources and crops for the city. A vast majority of residual water goes to conservation soil for agricultural purposes.

Álvaro Obregón, Milpa Alta, La Magdalena Contreras, Milpa Alta, Tláhuac.



Stage two

Urban Stress -Water

Due to political and historical reasons, Mexico is a very centralized country. More than 20% of its population is concentrated in the capital and the metropolitan area. Mexico City constitutes 38% of the national GDP. The city has grown considerably in the past fifty years, therefore the service requirements have grown accordingly.

Large projects of hydraulic infrastructure have been developed in order to provide water to the Valley of Mexico. Our water supply comes from two hydrological systems: The Cutzamala and Lerma, and from aquifers in different parts of the city. Despite the large investments realized, many parts of the city have an insufficient and inefficient water service.

Mexico City faces tremendous challenges concerning water. Since it was built on a closed basin, the city has sunk ten meters in the past sixty years, due to groundwater related land subsidence. It is now necessary to extract water from the aquifer at a greater depth, reducing the quality of the resource and worsening the problem. Systems of deep drainage had to be built in order to prevent the city from flooding, and getting rid of residual and pluvial water. Originally, the pluvial water was discharged in the lakes of the Valley, until these were taken up by urban space.

We studied several documents; one of them was an interview to Dr. Blanca Jímenez, an expert on the matter who has done research for the past thirty years. In her opinion the only option that will be left for Mexico City is to eventually drink treated wastewater. She is not very optimistic about this. There are only two places in the world where wastewater is handled directly, i.e., treated wastewater is introduced to a treatment plant and injected once more into the network, for example this takes place in Windhoek, Namibia. Although health issues have not been presented, this is due to the fact that this process is done under circumstances of strict control.[[1]](#footnote-1) This could not be the case of Mexico City because there is no control or regulations for industrial waste into the sewage. We read fragments of the Program for Sustainable Water Management in Mexico City published in 2007. All the experts that participate express their concern for the preservation of soil which has not become urban. Soil conservation is one of the main strategies in order to mitigate the problem. Due to the fact that in the last two decades several high cost residential units were built in the downtown part of the city the value of the land raised considerably forcing all of those who could not afford it to move to the outskirts of the city. These has led to an invasion, an expansion of the urban stain, according to most of the papers we read, there should be a proposal from part of the government in order to discuss population growth in Mexico City and to develop housing policies to protect soil with high environmental value. Reuse water could be destined in its majority to agriculture.

In conclusion, it is impossible to keep growing at the pace we’re doing so without having to reach extreme measures like drinking wastewater which is treated directly without having control of industrial discharge in our sewage. This could lead to huge sanitation and health issues in Mexico City. The Federal Government has proposed to privatize the management of drinking water in order to improve the quality of treated wastewater. There has been a lot of discussion about this, some agree that would make water management more efficient, but others believe that before doing so it is important that the government understands its implications and finds the best way to find a solution, doing research and planning before taking any major decisions.

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    [↑](#footnote-ref-1)