d5Survey

Interactive Dashboard

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THEME: NATIONAL HOUSEHOLD SURVEY 2017

By 2050, the world's urban population is expected to nearly double. Under this projection, the Member States of the United Nations General Assembly decided to reinvigorate the global commitment to sustainable urbanization and to focus on the implementation of a **New Urban Agenda** in **2016**.

Regarding Mexico, this analysis pretends to show some aspects of living conditions of the center area of the country for 2017, one year after the commitment for the New Urban Agenda was made in order to take a look on what was the standing point for this program.

APPROACH

Data Sources

National Household Survey 2017
INEGI

Entity	Number of Households in Sample	Number of Households in Population (Tabulated after expansion factor)	Sample (percentage from total population)
México	1,828	4,587,961	0.04%
Ciudad de México	1,776	2,714,955	0.07%
Puebla	1,697	1,647,266	0.10%
Hidalgo	1,721	793,123	0.22%
Morelos	1,632	559,134	0.29%
Querétaro	1,830	555,579	0.33%
Tlaxcala	1,811	326,530	0.55%
Total	**12,295**	**11,184,548**	**2%**

Analysis is focused on the **Megalopolis** entities which represent **33%** of the total number of households in the country

Focus on spaces features, socio-demographic profile of its occupants as well as the availability of information technology and communications goods and services.

APPROACH

Data Exploratory Analysis

Used **Jupyter Notebooks** and **Python** for:

- Identifying the content of the data sets

- Deciding the best format to visualize and explore the data

- Cleaning data, make the required transformations and verify its quality

Explored **JavaScript libraries** for building the visualizations

FEATURES

Python Flask–powered RESTful API, HTML/CSS and JavaScript with a database in SQLite, deployed on Heroku

Multiple charts that update from the same data using D3.js, Leaflet, Plotly, Dimple.js, Canvas.js and NVD3.js

Includes levels of user-driven interaction through a menu, buttons, checkboxes, dropdowns and links to get the data as a JSON file

Two add-ins where the user can answer a survey and this information is updated in the DB in real time. The user can also create reports from the selected views and send them by e-mail

Dashboard

FINDINGS

- Most of the people who rent their living space go from ages 20 to 50 and starts to decrease from there to 70 and reaches up to 81 years old.

- The average monthly rental cost by stratum from Low to High is $2,580 - $1,871 - $1,023 - $628. The observations concentrate in a range of $41 to $2000 and they comprise only stratums low, medium-low, medium-high. For higher rents and up to $8,000 low stratum does not have any presence.
- The rental costs that are more spread are High stratum living spaces for people aged between 45 and 60.

- The literacy percentages by stratum from Low to High are 74%, 85%, 91% and 92%. The variance between average literacy between entities per stratum is very low and the means are practically equal than those for the entire megalopolis. The exception to this is stratum Low where the average between entities is 79%, 5 points lower than the overall average.

FINDINGS

- The 59 percent of the living spaces, included in the survey, is classified as Medium Low Socioeconomic Stratum.

- For services in living spaces, Cellular phone was the category with the highest number of Yes responses, in all socioeconomic strata.

- In the Low Socioeconomic Stratum, highlights the fact that Pay TV, for most of the states, had the second highest number of Yes responses over the rest of the goods and services (Computer, Fixed-line phone, and Internet).

FINDINGS

- While in the states, a trend is shown where young people under 18 are the ones with the highest percentage of literacy, being the men with the highest rank by very little difference, in Mexico City the tendency of the ranks of Age is very similar for all, with a small increase in those over 55, being the woman with the highest rank by very little difference.

- It is an expected trend, as it is the capital of the country and where the highest paid labor market in the country is concentrated.

- In the surveys of the next few years, it is expected that the trend of children under 18 will begin to popularize the following ranges and that the progress will be maintained, to improve the opportunities of families.

THANK YOU