



## Visualization tool for the Mexico City Open Data Portal



The purpose of this document is to explain the main functionalities of the new visualization tool of the Mexico City Open Data Portal. This tool is composed of interactive charts and maps through which users can generate visualizations and extract personalized information according to the interactions they make on the platform.

The main functionalities of the platform are listed below, as well as a brief explanation of how to use it.

### 1. Top panel to choose visualizations



This panel shows the options available for choosing the type of visualization. These options are:

1. Bar chart
2. Choropleth map
3. Heatmap
4. Dot map



5. Treemap
6. Line chart
7. Scatter plot
8. Table

Each visualization in turn displays different options within the left panel. In addition, the chosen filters, aggregations and variables to be displayed are maintained when moving from one type of visualization to another, as long as the data allows it.<sup>1</sup>

## 2. Left panel

The left panel of the information visualization tool contains most of the functionalities through which the user can interact with the visualizations. In particular, it contains the following:

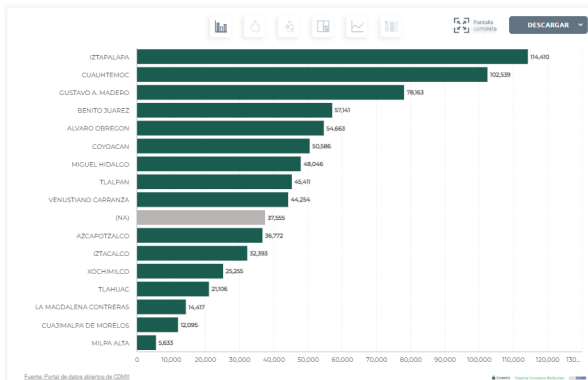
### 2.1. Selection of the variable to be displayed

The screenshot shows a user interface for selecting variables. At the top, there is a dropdown menu titled "Selección de variable a visualizar" with "Alcaldías" selected. Below this, there are two sections: "Desagregar por:" with radio buttons for "Ninguna", "Sexo", "Categoría", and "Competencia"; and "Tipo de unidad" with radio buttons for "Total" and "Porcentaje". A red box highlights the dropdown menu.

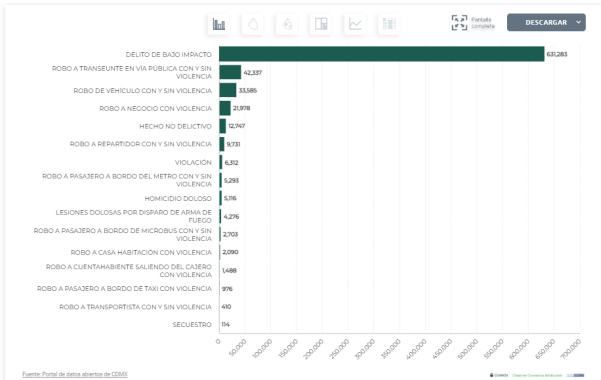
This section shows a display of all the variables that can be displayed in the chart or map in a prioritized manner. An example is shown below with two different variable selections to be displayed:

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<sup>1</sup> That is, when the variables to be displayed are appropriate for both charts being navigated



VARIABLE A VISUALIZAR: **ALCALDÍA**



VARIABLE A VISUALIZAR: **CATEGORÍA**

The visualization always has a default variable, but the user is free to choose any of the options within the display.

## 2.2. Selection of disaggregations

Once the variable to be visualized is chosen, it is possible to disaggregate that variable by another variable of interest to inquire about the relationship between these two characteristics of the data.

Selección de variable a visualizar

Alcaldías

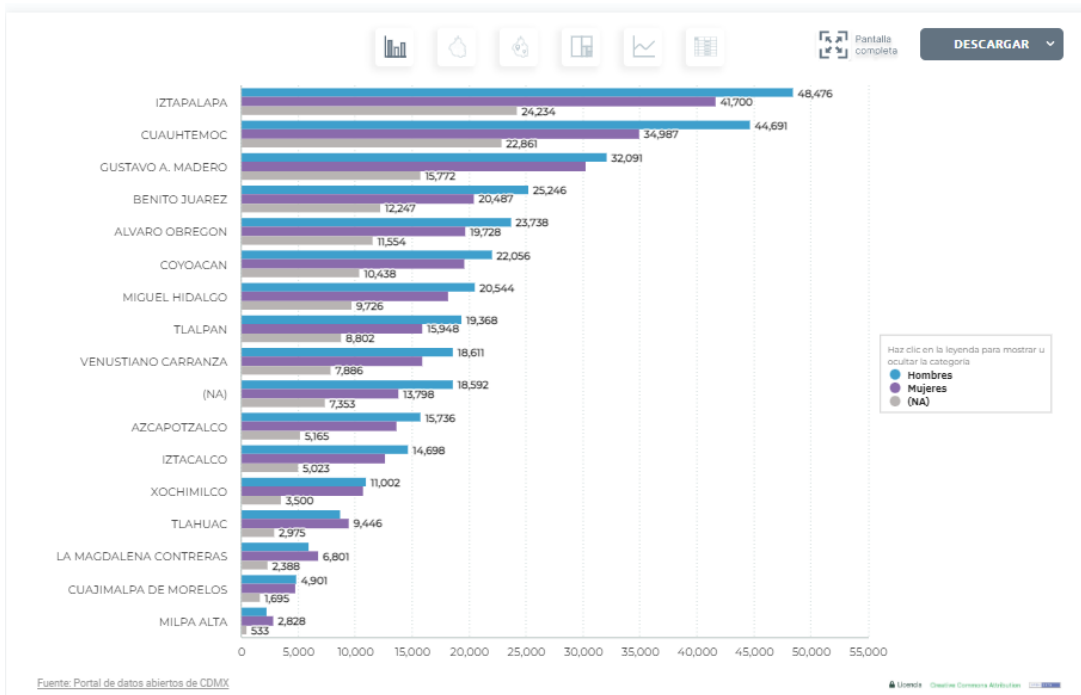
Desagregar por:

- Ninguna
- Sexo
- Categoría
- Competencia

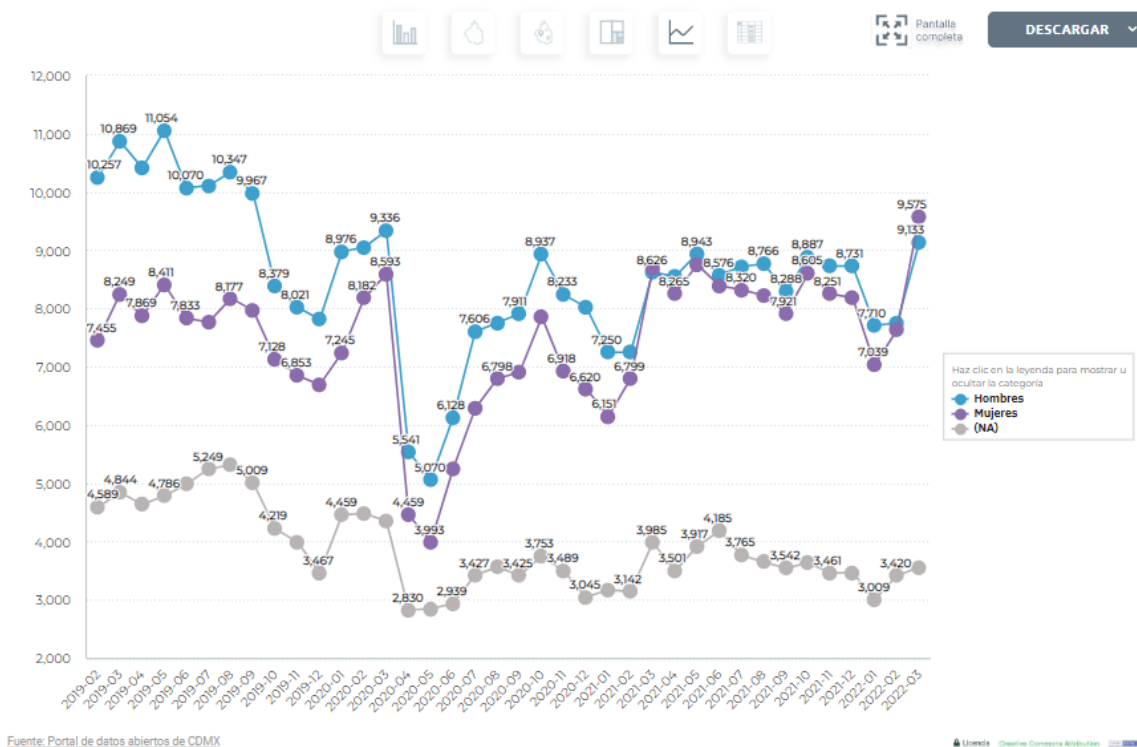
Tipo de unidad

- Total
- Porcentaje

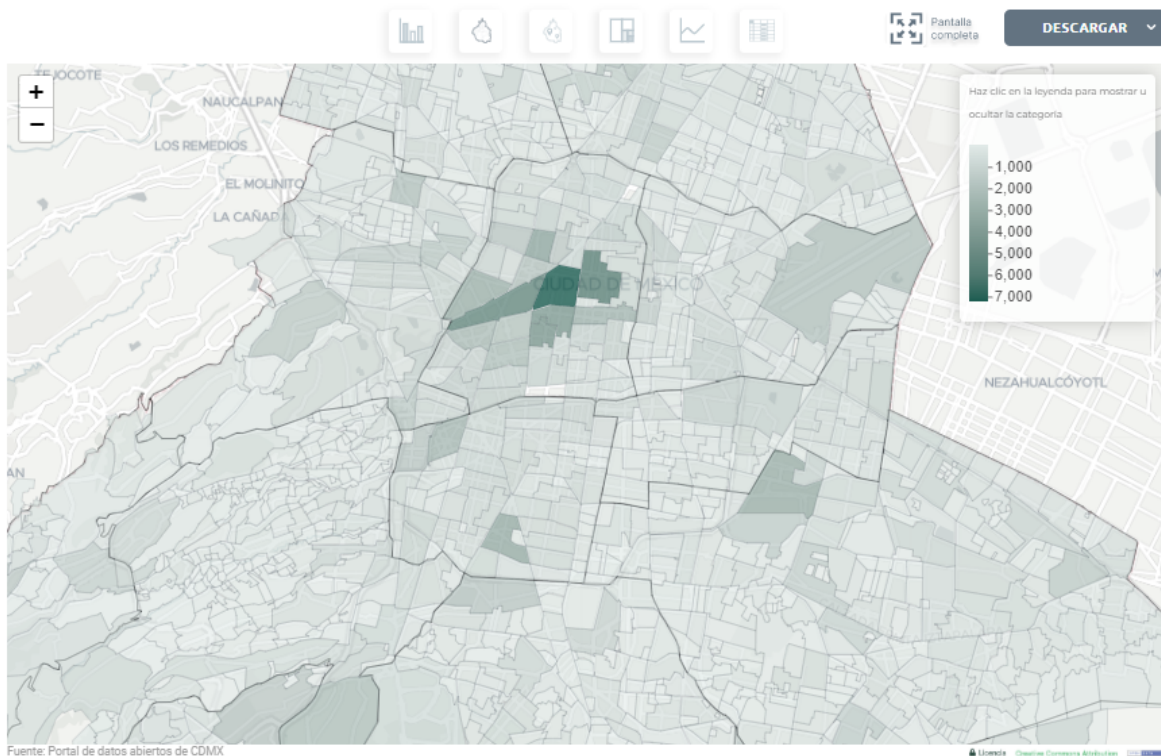
Thus, as shown below, it is possible to observe both the number of observations per category and a level of further disaggregation.



This action can also be performed on the line chart:



In the case of the maps, it is possible to observe the disaggregation of the information at neighborhood level.



### 2.3. Unit of measurement and date format selection

The user can choose the unit of measure of the displayed information. In particular, it is possible to observe the total count within the chosen categories or the percentage that this count represents with respect to the total.

Also, for the line charts the user can choose whether to display the time series by year, month or day.

**Selección de variable a visualizar**

Histórico CDMX

**Tipo de unidad**

Conteo

Porcentaje

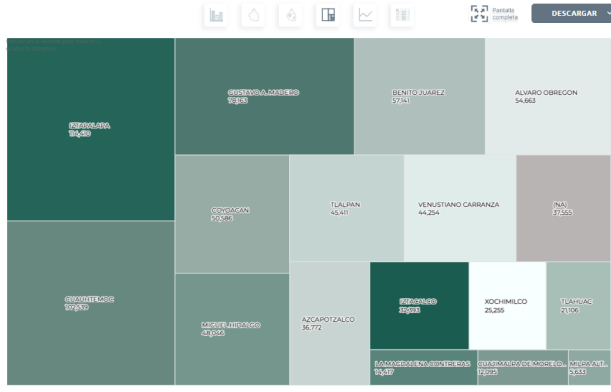
**Formato fechas**

Año

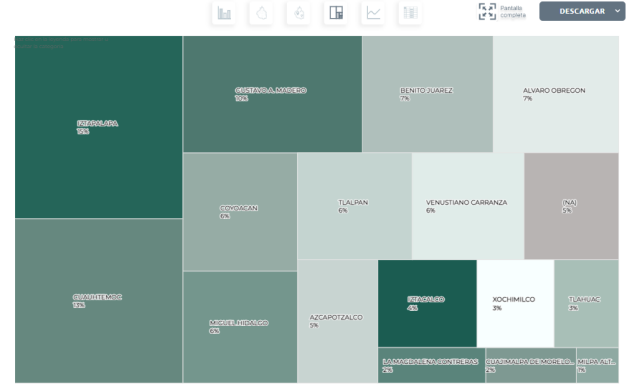
Año - Mes

Año - Mes - día

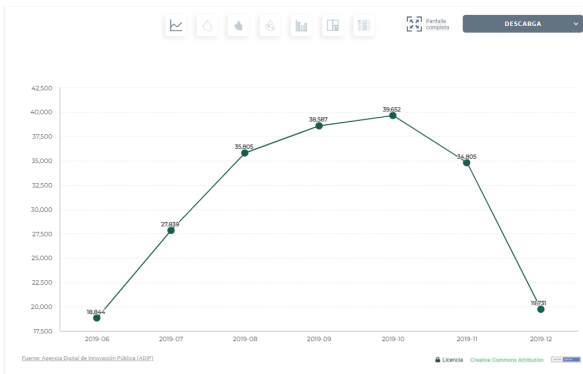
An example with a treemap and a line chart are shown below.



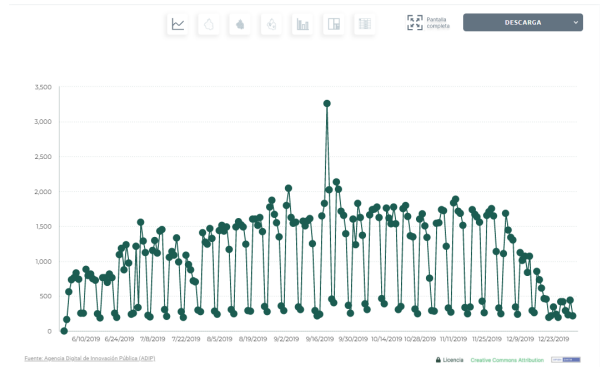
TIPO DE UNIDAD: **TOTAL**



TIPO DE UNIDAD: **PORCENTAJE**



FORMATO DE FECHAS: **MES**



FORMATO DE FECHAS: **DÍA**

## 2.4. Filters

The filters section allows the user to trim the information based on the value of one or more variables.



Fecha denuncia

Inicio del rango

2018-12-18

Final del rango

2022-03-31

Alcaldía

Todas (780439) ✕

Sexo

Todas (780439) ✕

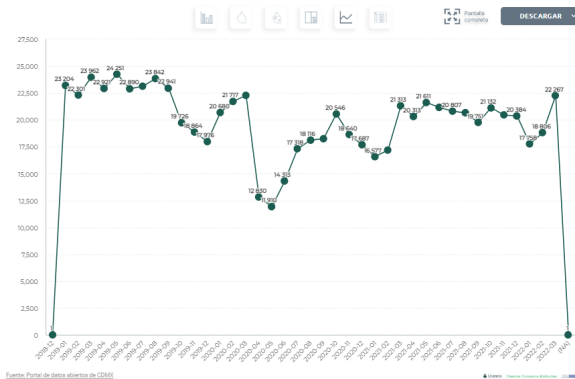
Delito

Todas (780439) ✕

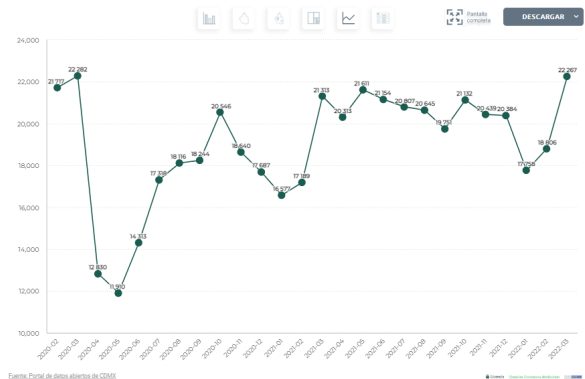
Calidad jurídica

Todas (780439) ✕

In this way it is possible to reduce the time range of the line chart by filtering by date as shown below:

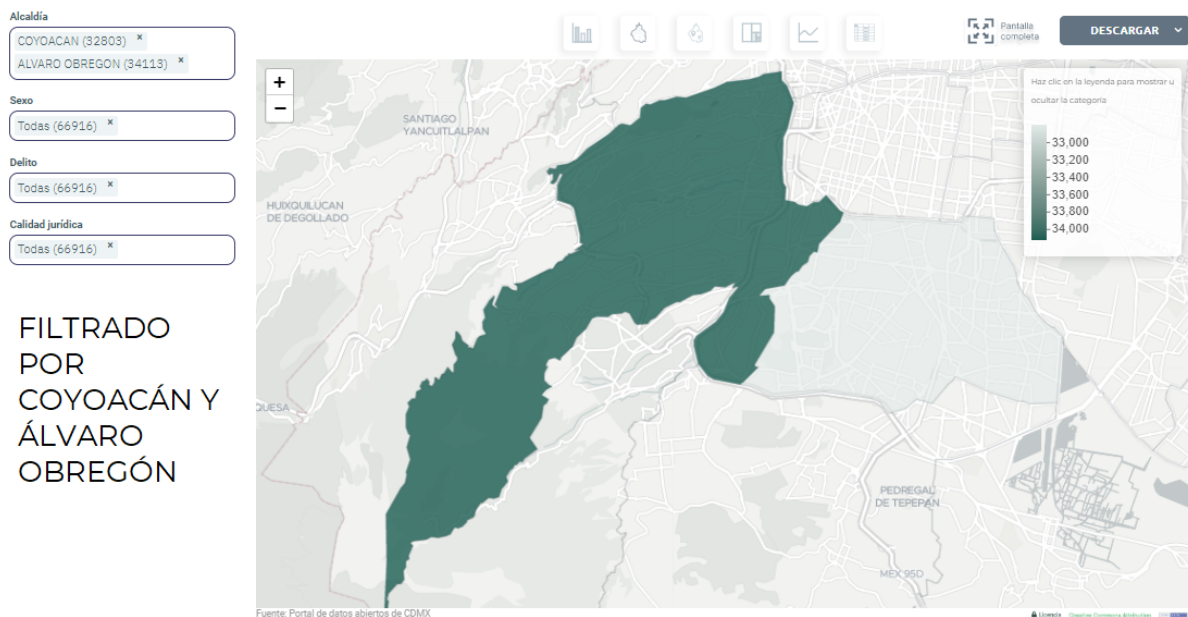


SIN FILTRO DE FECHA



FILTRADO A PARTIR DE ENERO DE 2020

Or it is possible to filter by one or more categories of other variables as shown in the following map:



## 2.5. Aesthetic adjustments

In addition to the functionalities mentioned above, all visualizations have at least one type of aesthetic adjustment. The available aesthetic adjustments are listed below:

1. Choose color palette for visualizations.
2. Sort bars in descending order depending on the value.
3. Stack bars
4. Turn off or turn on categories for disaggregated charts.

## 3. Other features

### 3.1. Full Screen

The user will be able to view the generated graphs in "Full Screen" mode with the button located at the top right of the screen.

### 3.2. Download

The user will be able to download the generated visualizations with the download button located on the upper right side of the screen and, while viewing the table, will be able to download the information in CSV format with the respective filters applied.





Pantalla  
completa

DESCARGAR



### 3.3. Description, dictionary and resources

The user has access to observe the description of the information contained in the database that feeds the visualizations, the database's data dictionary (which defines the information contained in each variable) as well as the other available resources related to victim data in investigation files. This information is available through the buttons at the bottom right of the screen.



### 3.4. Applied filters

The user will be able to see the filters applied in the upper part of the left panel and will be able to delete the filters applied there.

#### Filtros aplicados

Eliminar todos los filtros

Zona 2

Delito 2

#### Selección de variable a visualizar

Alcaldías

### 3.5. Table options

The table has paging, the option to select the number of rows to be displayed at a time, as well as a keyword or key value search engine within the tabular data.



Mostrar  registros

Buscar:

Pantalla completa

DESCARGAR

idCarpeta	Año_inicio	Mes_inicio	FechaInicio	Delito	Categoria	Sexo	Edad	TipoPersona	Cali
8324430	2019	Enero	2019-01-04	PRODUCCIÓN, IMPRESIÓN, ENAJENACIÓN, DISTRIBUCIÓN, ALTERACIÓN O FALSIFICACIÓN DE TÍTULOS AL PORTADOR, DOCUMENTOS DE CRÉDITO PÚBLICOS O VALES DE CANJE	DELITO DE BAJO IMPACTO	Mujeres	38	FISICA	VIC DEN
8324442	2019	Enero	2019-01-04	PRODUCCIÓN, IMPRESIÓN, ENAJENACIÓN, DISTRIBUCIÓN, ALTERACIÓN O FALSIFICACIÓN DE TÍTULOS AL PORTADOR, DOCUMENTOS DE CRÉDITO PÚBLICOS O VALES DE CANJE	DELITO DE BAJO IMPACTO	Mujeres	42	FISICA	OFE
8324676	2019	Enero	2019-01-04	ROBO A NEGOCIO	DELITO DE				

Mostrando registros del 1 al 100 de un total de 73,763 registros  
Fuente: Portal de datos abiertos de CDMX

Anterior

2
3
4
5
...
738
Siguiente