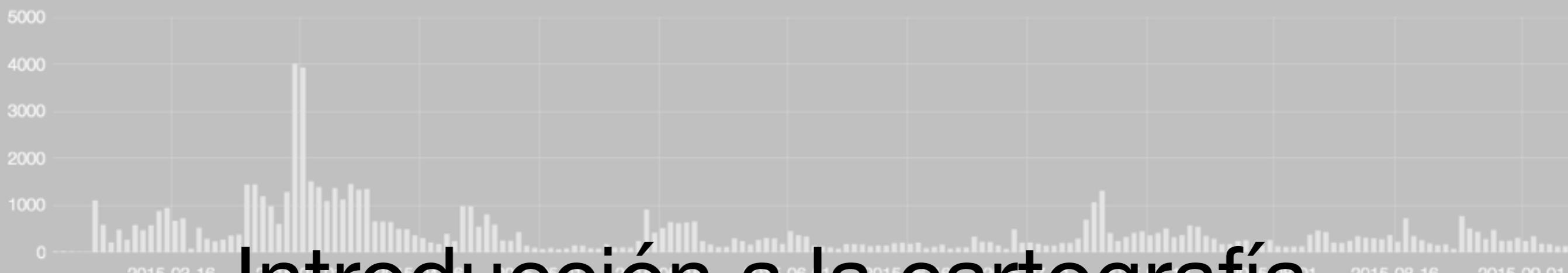


TIMELINE

[View](#) | [Zoom Out](#) | ● * (85516) count per 1d | (85516 hits)



SENTIMENT TIMELINE

[View](#) | [Zoom Out](#) | ● positive (2761) ● negative (12218) count per 1d | (4919 hits)



Óscar Marín Miró
[@outliers_es](https://twitter.com/outliers_es)
www.outliers.es



Contenidos

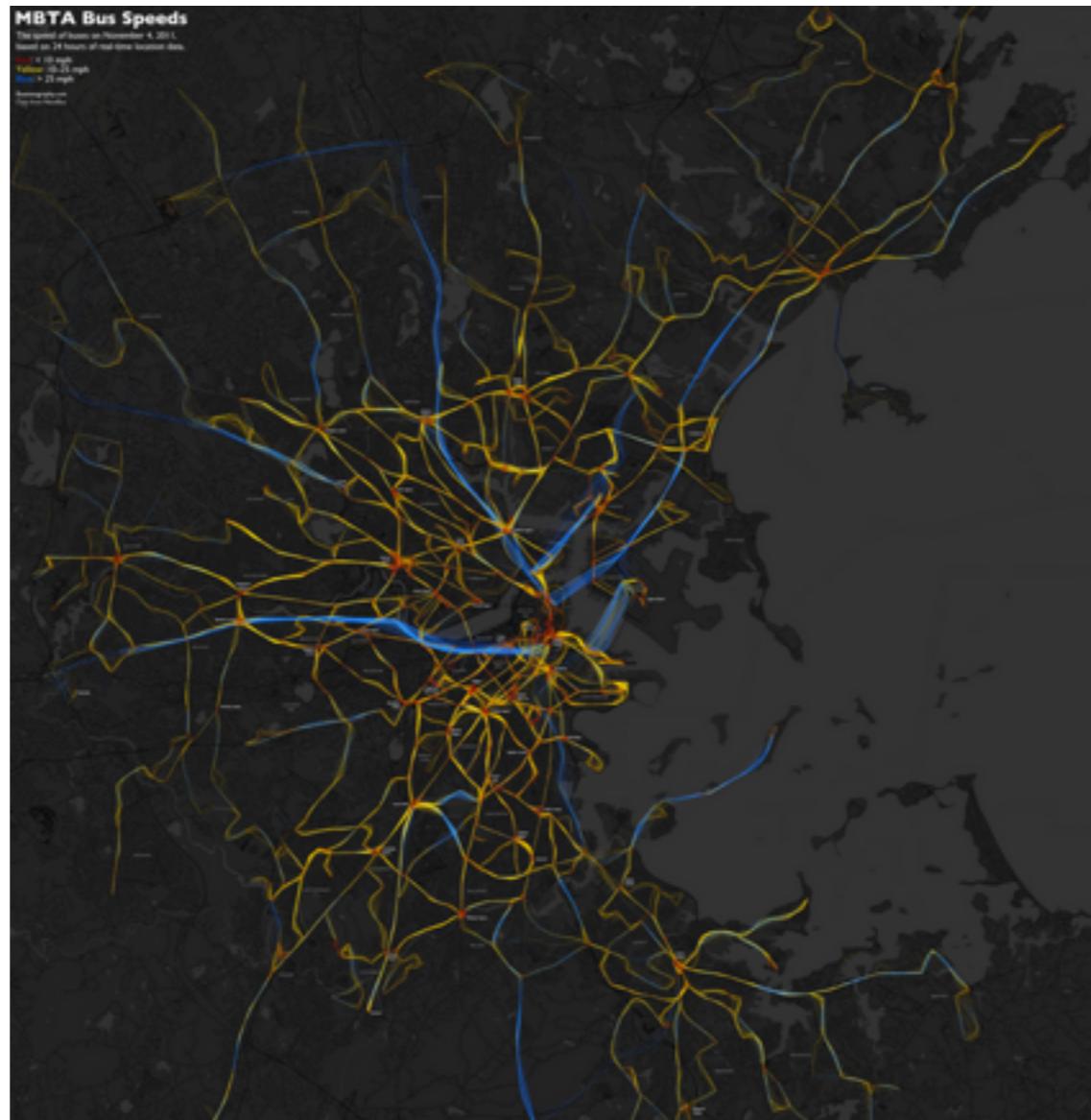
I. Introducción a la cartografía

- ▶ Conceptos
- ▶ Formatos
- ▶ Herramientas

II. Caso práctico con CartoDB: Turismo en Barcelona

III. Mapas dinámicos: expansión de #panamaPapers

Introducción a la Cartografía



<http://bostonography.com/2011/an-mbta-business-day/>

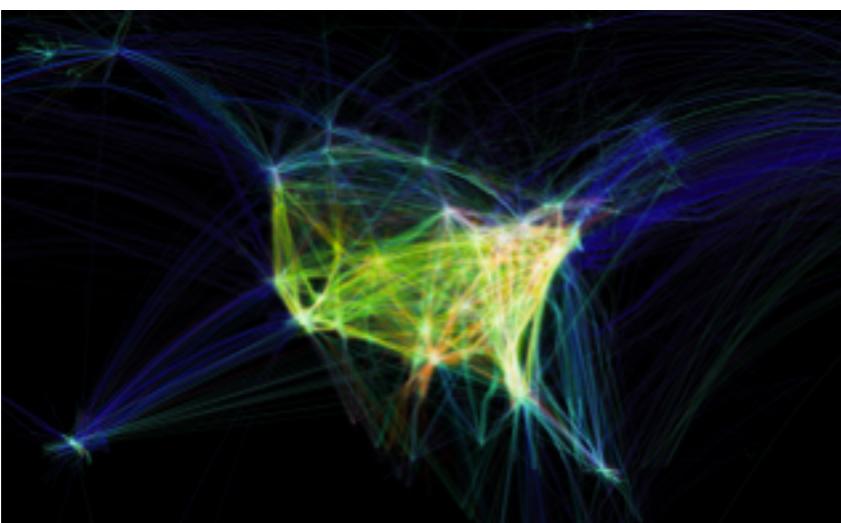
Geometría



Polygon/Multipolygon



Points



Line/Multiline/Paths

Sistemas de coordenadas

WGS84 vs UTM

Latitude and Longitude

Decimal Degrees

Latitude (Degrees): 40.5 Longitude (Degrees): -73.5

Degrees, Minutes, Seconds

Latitude Degrees: Minutes: Seconds:
Longitude Degrees: Minutes: Seconds:

Standard UTM

UTM (meters)

Easting: 627106.5 Northing: 4484124.4 Zone: 18 South of Equator:

WHAT YOUR FAVORITE

MAP PROJECTION SAYS ABOUT YOU

MERCATOR



YOU'RE NOT REALLY INTO MAPS.

VAN DER GRINTEN



YOU'RE NOT A COMPLICATED PERSON. YOU LOVE THE MERCATOR PROJECTION; YOU JUST WISH IT WEREN'T SQUARE. THE EARTH'S NOT A SQUARE, IT'S A CIRCLE. YOU LIKE CIRCLES. TODAY IS GONNA BE A GOOD DAY!

ROBINSON



YOU HAVE A COMFORTABLE PAIR OF RUNNING SHOES THAT YOU WEAR EVERYWHERE. YOU LIKE COFFEE AND ENJOY THE BEATLES. YOU THINK THE ROBINSON IS THE BEST-LOOKING PROJECTION, HANDS DOWN.

WINKEL-TRIPEL



NATIONAL GEOGRAPHIC ADOPTED THE WINKEL-TRIPEL IN 1998, BUT YOU'VE BEEN A WT FAN SINCE LONG BEFORE "Nat Geo" SHOWED UP. YOU'RE WORRIED IT'S GETTING PLAYED OUT, AND ARE THINKING OF SWITCHING TO THE KAVRAYSKY. YOU ONCE LEFT A PARTY IN DISGUST WHEN A GUEST SHOWED UP WEARING SHOES WITH TOES. YOUR FAVORITE MUSICAL GENRE IS "POST-".

Dymaxion



YOU LIKE ISAAC ASIMOV, XML, AND SHOES WITH TOES. YOU THINK THE SEGWAY GOT A BAD RAP. YOU OWN 3D GOOGLES, WHICH YOU USE TO VIEW ROTATING MODELS OF BETTER 3D GOOGLES. YOU TYPE IN DVORAK.

GOODE HOMOLOSINE



THEY SAY MAPPING THE EARTH ON A 2D SURFACE IS LIKE FLATTENING AN ORANGE PEEL, WHICH SEEMS EASY ENOUGH TO YOU. YOU LIKE EASY SOLUTIONS. YOU THINK WE WOULDN'T HAVE SO MANY PROBLEMS IF WE JUST ELECT NORMAL PEOPLE TO CONGRESS INSTEAD OF POLITICIANS. YOU THINK AIRLINES SHOULD JUST BUY FOOD FROM THE RESTAURANTS NEAR THE GATES AND SERVE THAT ON BOARD. YOU CHANGE YOUR CAR'S OIL, BUT SECRETLY WONDER IF YOU REALLY NEED TO.

HOBЫ-DYER



YOU WANT TO AVOID CULTURAL IMPERIALISM, BUT YOU'VE HEARD BAD THINGS ABOUT GALL-PETERS. YOU'RE CONFLICT-AVERSE AND BUY ORGANIC. YOU USE A RECENTLY-INVENTED SET OF GENDER-NEUTRAL PRONOUNS AND THINK THAT WHAT THE WORLD NEEDS IS A REVOLUTION IN CONSCIOUSNESS.

PLATE CARRÉE
(EQURECTANGULAR)



YOU THINK THIS ONE IS FINE. YOU LIKE HOW X AND Y MAP TO LATITUDE AND LONGITUDE. THE OTHER PROJECTIONS OVERCOMPLICATE THINGS. YOU WANT ME TO STOP ASKING ABOUT MAPS SO YOU CAN ENJOY DINNER.

WATERMAN BUTTERFLY



A GLOBE!



YES, YOU'RE VERY CLEVER.

PEIRCE QUINCUNCIAL



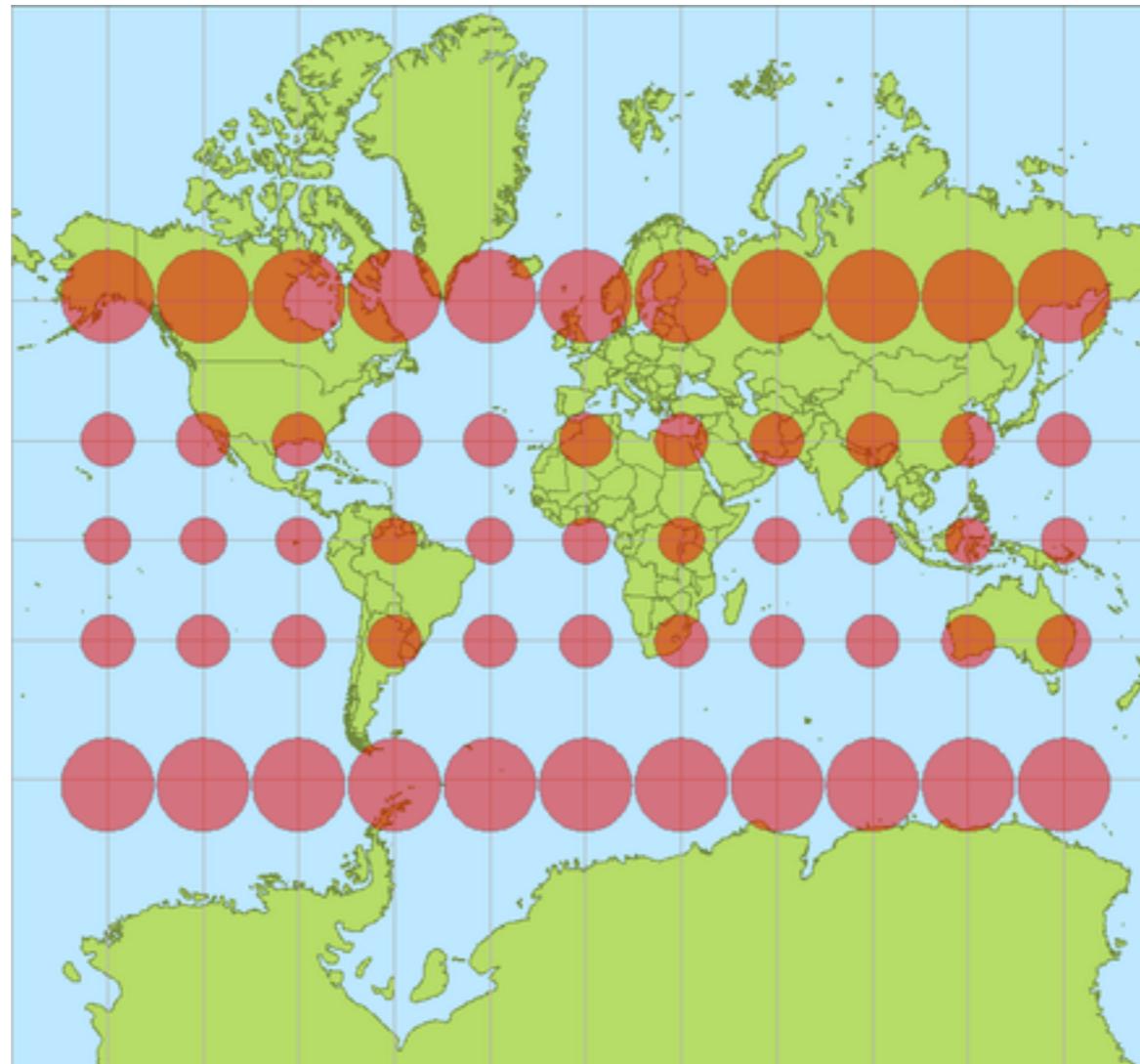
YOU THINK THAT WHEN WE LOOK AT A MAP, WHAT WE REALLY SEE IS OURSELVES. AFTER YOU FIRST SAW INCEPTION, YOU SAT SILENT IN THE THEATER FOR SIX HOURS. IT FREAKS YOU OUT TO REALIZE THAT EVERYONE AROUND YOU HAS A SKELETON INSIDE THEM. YOU HAVE REALLY LOOKED AT YOUR HANDS.

GALL-PETERS



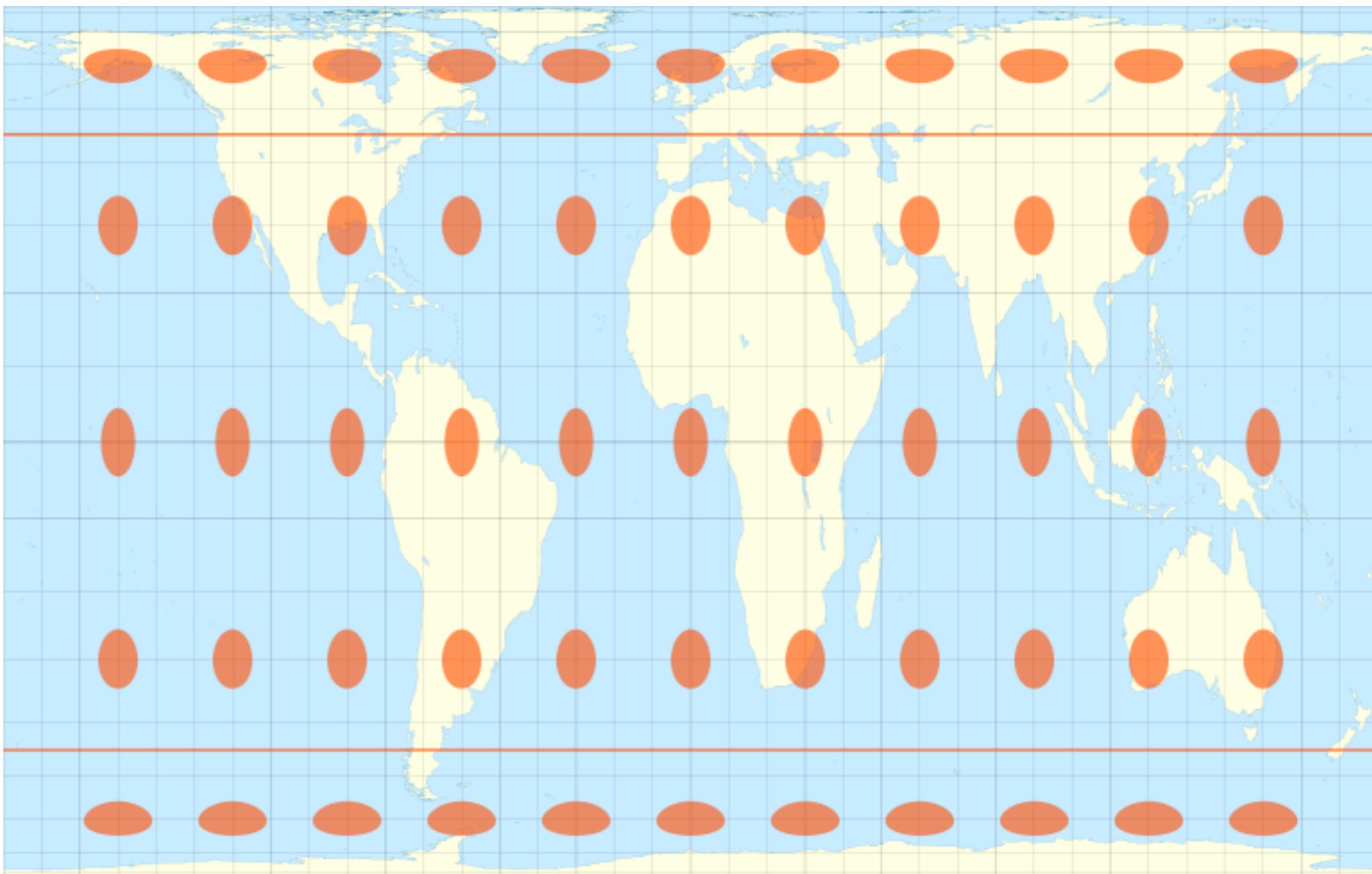
I HATE YOU.

Indicadores Tissot: Mercator



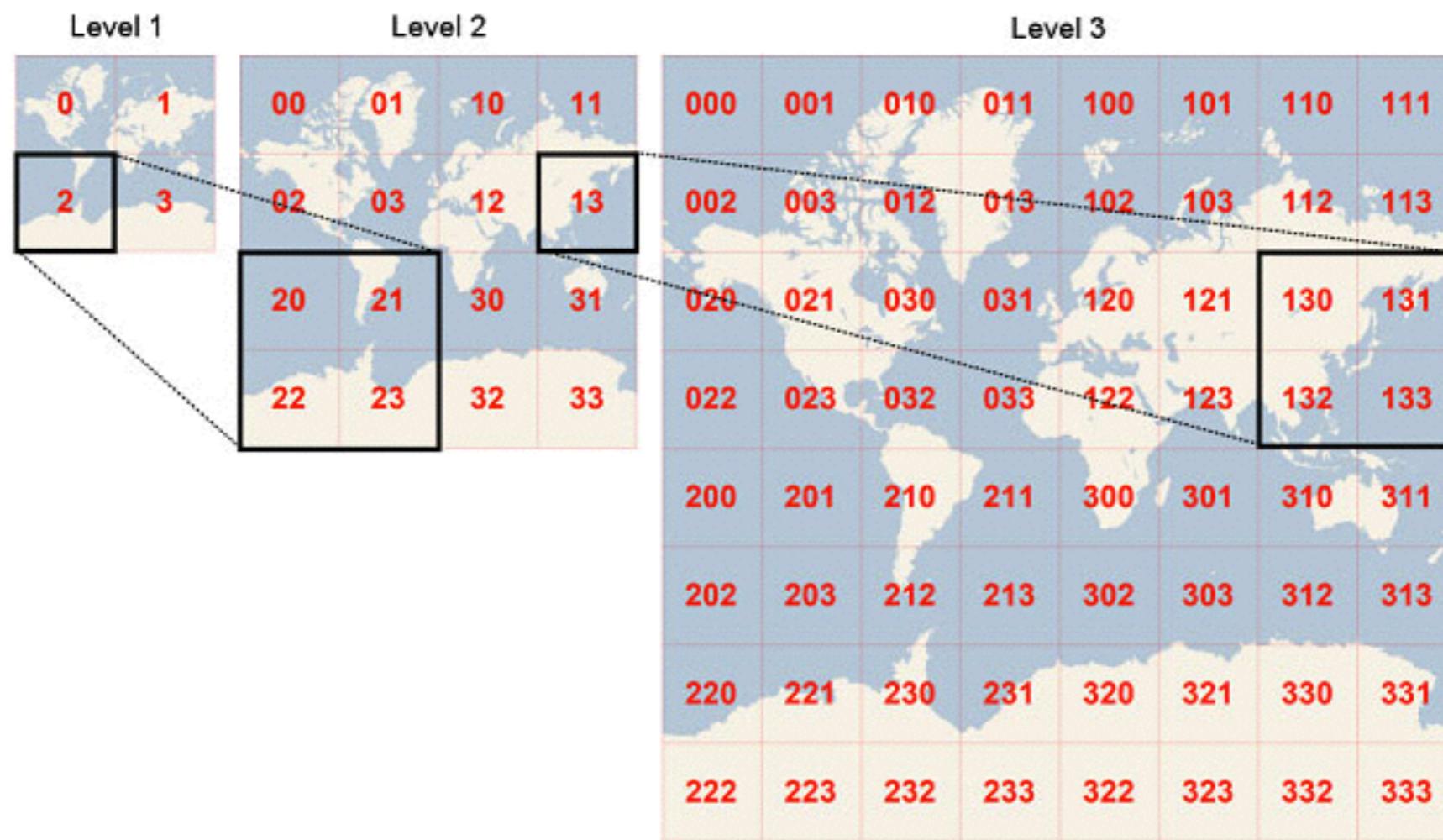
https://en.wikipedia.org/wiki/Map_projection#/media/File:Tissot_mercator.png

Indicadores Tissot: Gall Peters



https://en.wikipedia.org/wiki/File:Tissot_indicatrix_world_map_Gall-Peters_equal-area_proj.svg

Tiles



Formatos: ESRI Shapefile

- **.shp** — shape format; the feature geometry itself
- **.shx** — shape index format; a positional index of the feature geometry to allow seeking forwards and backwards quickly
- **.dbf** — attribute format; columnar attributes for each shape, in **dBase IV** format

<http://en.wikipedia.org/wiki/Shapefile>

Formatos: GeoJSON

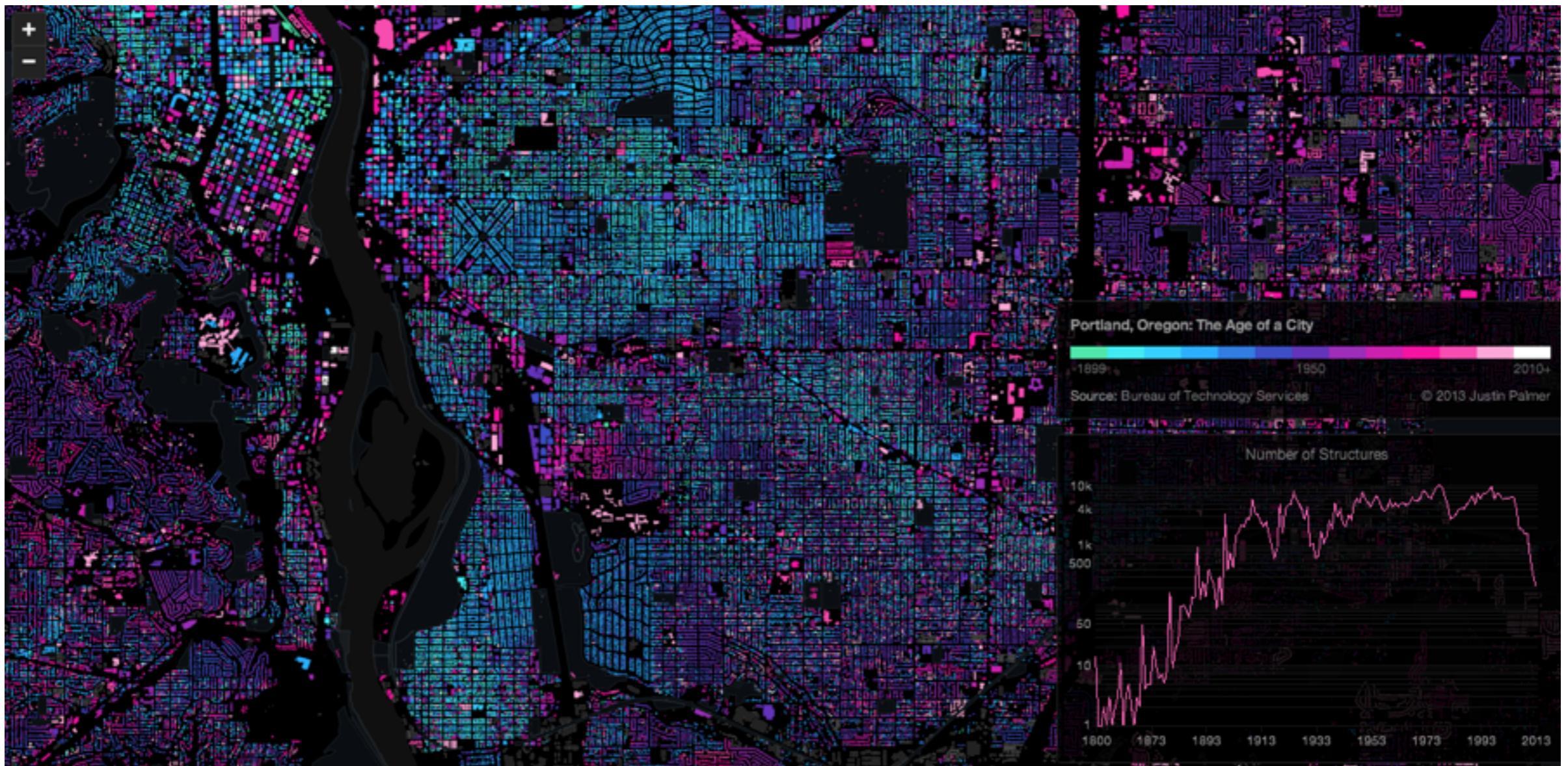
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      }  
    },  
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        ]  
      },  
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      }  
    }  
  ]  
}
```

Geocoding

- De “Carrer rocafort, 234, Barcelona” a [41.385632,2.145442]
- Manual con Google Maps
- Con Open Refine llamando al API de Google Maps
- Con Google Fusion Tables
- Con CartoDB
- Programando: <http://blog.programmableweb.com/2012/06/21/7-free-geocoding-apis-google-bing-yahoo-and-mapquest/>

<http://en.wikipedia.org/wiki/Geocoding>

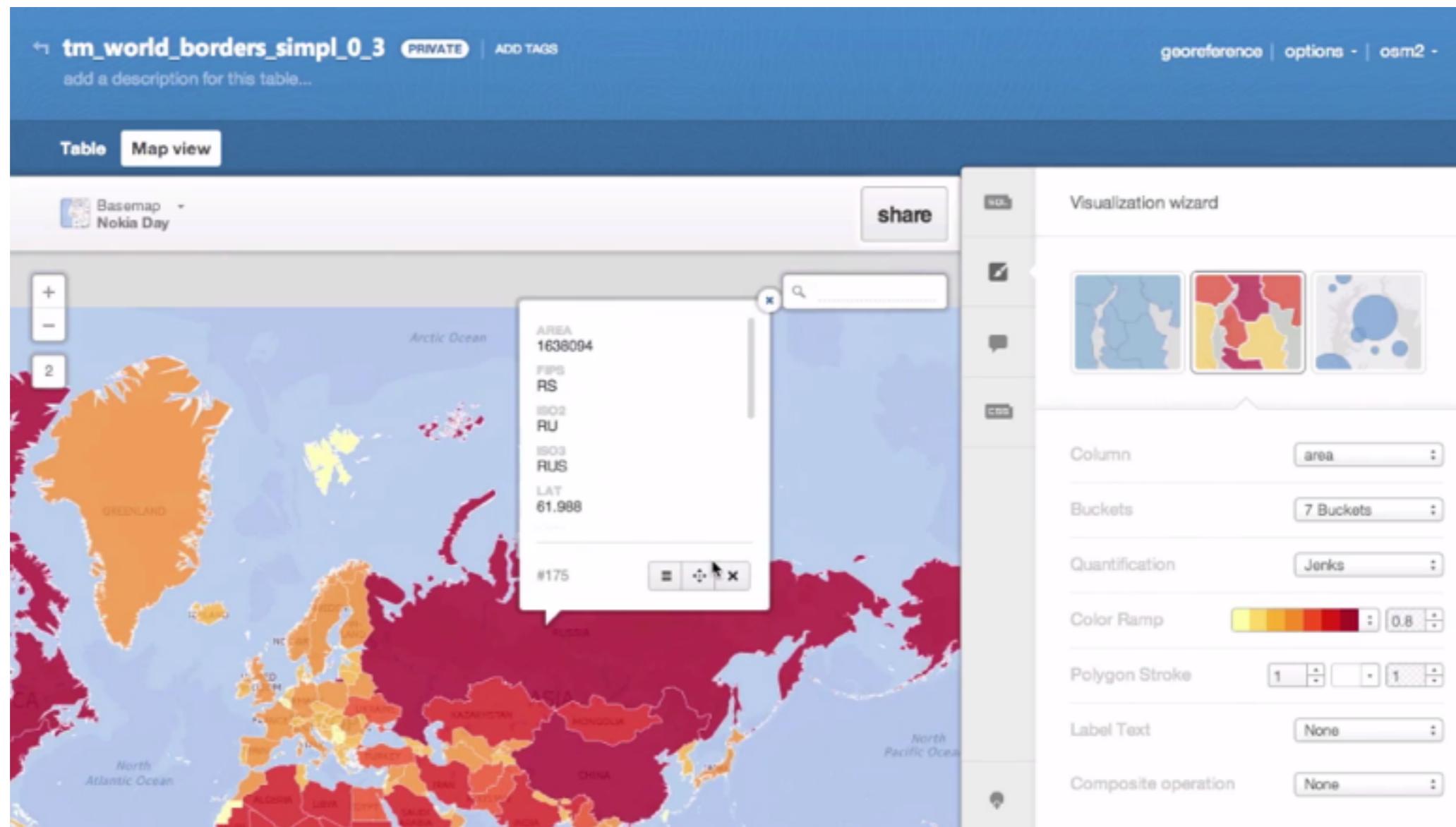
Herramientas: TileMill



<http://labratrevenge.com/pdx>

<https://www.mapbox.com/tilemill/>

Herramientas: CartoDB



<http://cartodb.com/>

Herramientas: Mapbox

Mapbox

Tour

Showcase

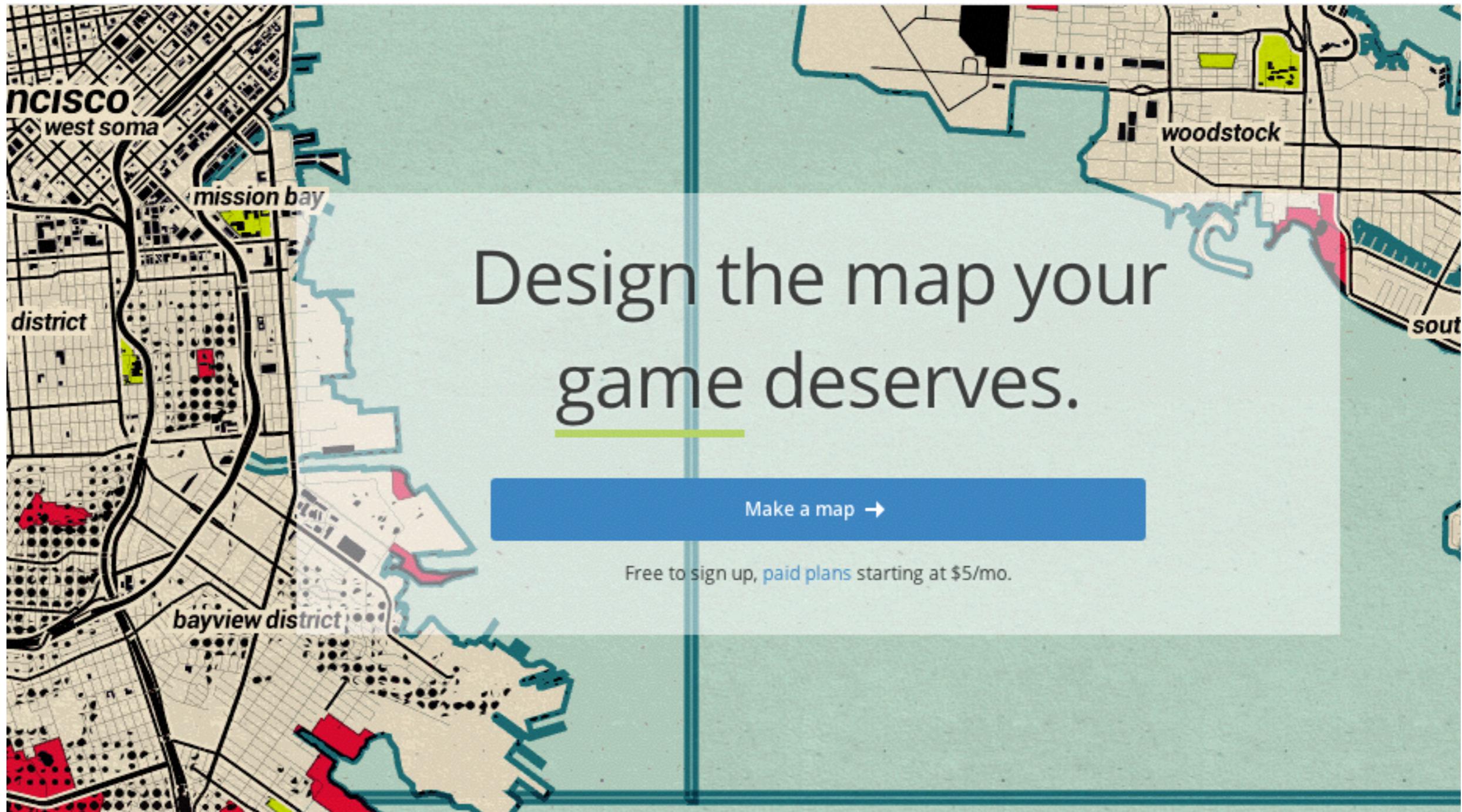
Blog

Plans

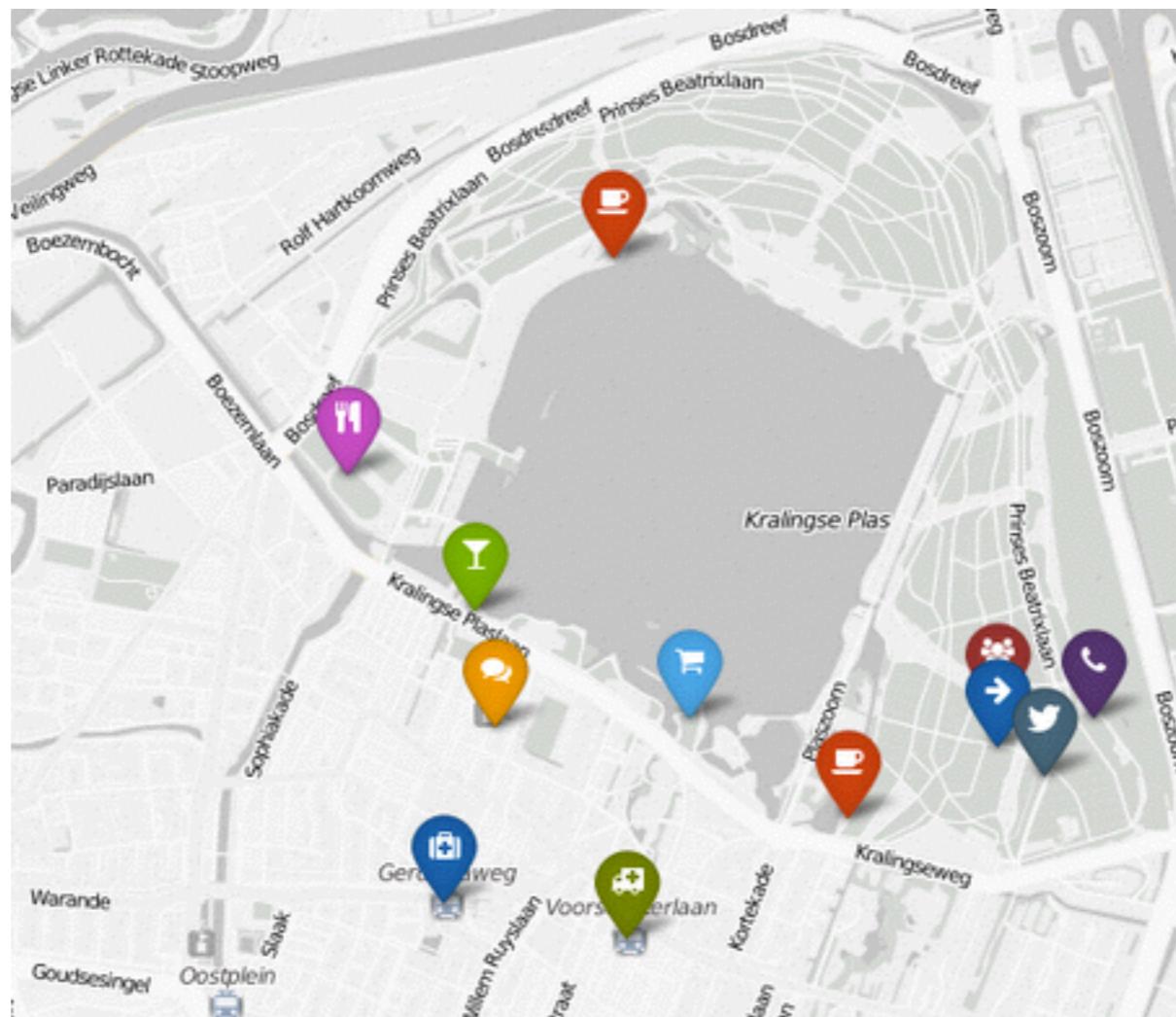
Help

Developers

Sign



Herramientas: Leaflet.js



<http://leafletjs.com/>

Caso práctico con CartoDB

Turismo en Barcelona



Pisos turísticos: Datos oficiales

Guia oficial d'establiments turístics

Camps de cerca:

- Camps
- Hotels
- Turisme rural
- Habitatges d'ús turístic
- Apartaments turístics
- Agències de viatges
- On vols anar

Cerca

Marca turística
Seleccioneu una opció

Comarca
Seleccioneu una opció

Municipi
Seleccioneu una opció

Població
 Zona
Seleccioneu una opció

Categoría
Seleccioneu una opció

Cerca avançada

Nom de l'establiment

Identificador regstral
 (Ex.: ATB-000001)

Carrer

Capacitat Des de Fins a

Símbols  Llegenda ↗

Resultats 1 de 5 de 47270

BARCELONA - Barcelonès

Badalona (Badalona) 

 **Clavells 2 - HUTB-012692**
CP: 08916 - Clavells, 2
T: 639354533
mikelomikelo68@gmail.com



Badalona (Badalona) 

 **HUTB-014612**
CP: 08916 - Afrodita, 14
T: 666914137
fisidro@gmail.com

Badalona (Badalona) 

 **HUTB-012850**
CP: 08913 - Av Alfons XIII, 610
T: 610655673
bartcelona@hotmail.com

http://empresaiocupacio.gencat.cat/es/treb_departament/treb_preguntes_i_respostes/emo_turisme/emo_habitatges/

Pisos turísticos: Datos oficiales

[Inicio](#) | [Departamento](#) | [Ámbitos de actuación](#) | [Trámites](#) | [Actualidad](#) | [Contacto](#)

[Inicio](#) > [Ámbitos de actuación](#) > [Turismo](#) > [Empresas, establecimientos y ...](#) > [Registro de turismo de Cataluña](#)
> Listas de empresas y establecimientos turísticos



Listas de empresas y establecimientos turísticos

- Agencias de viajes  [1,24 MB]

Agencias de viajes presentadas en orden alfabético

- Apartamentos turísticos  [5,02 MB]

Apartamentos turísticos de cada una de les demarcaciones territoriales, ordenados por municipio y dirección

- Viviendas de uso turístico  [13,55 MB]

Viviendas de uso turístico de cada una de les demarcaciones territoriales, ordenadas por municipio y dirección

Pisos turísticos: Datos oficiales

172	HUTB-003650	16		Aguilars, 22, 2n.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08003
173	HUTB-003651	19		Aguilars, 22, 3r.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08003
174	HUTB-003652	18		Aguilars, 22, 4r.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08003
175	HUTB-005060	18		Alaba, 156, sat 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08018
176	HUTB-005317	74		Alberes, 18, bis 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS	antoniosabater		08017
177	HUTB-004668	21		Alcalà de Guadaira, 10, 1r. 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08020
178	HUTB-010693	77		Alcalà de Guadaira, 23, 6è. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08020
179	HUTB-003658	24		Alcanar, 22, bis 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08003
180	HUTB-008239	62		Alcolea, 19, 1r. 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08014
181	HUTB-008543	62		Alcolea, 19, 2n. 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08014
182	HUTB-010694	72		Alcúdia, 28-30, 1r. 3a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08016
183	HUTB-005858	75		Aldana, 12, 2n. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08015
184	HUTB-003659	50		Aldana, 3, 2n. 5a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08015
185	HUTB-005944	93		Aldana, 9, 8è. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08015
186	HUTB-005061	21		Aides, 16, bis 1.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08023
187	HUTB-011978	00		Alfons El Magnànim, 71, 10è. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08019
188	HUTB-012869	18		Alfons El Magnànim, 77B, 7è. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08019
189	HUTB-012870	66		Alfons El Magnànim, 77B, 7è. 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08019
190	HUTB-006861	82		Aiguera, 36, bis	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08032
191	HUTB-011979	44		Ali-Bel, 12, pral 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
192	HUTB-009572	64		Ali-Bel, 22, 3r. 3a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
193	HUTB-009574	66		Ali-Bel, 27, pral 1B	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
194	HUTB-003666	72		Ali-Bel, 29, 1r. 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
195	HUTB-003663	75		Ali-Bel, 29, 2n. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
196	HUTB-003661	69		Ali-Bel, 29, 2n. 3a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
197	HUTB-003667	02		Ali-Bel, 29, 2n. 4a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
198	HUTB-003662	68		Ali-Bel, 29, 3r. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
199	HUTB-003664	70		Ali-Bel, 29, 3r. 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
200	HUTB-003668	74		Ali-Bel, 29, 5è. 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08018
201	HUTB-003665	93		Ali-Bel, 29, 4tè 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
202	HUTB-007933	08		Ali-Bel, 37, 1r. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08010
203	HUTB-009578	70		Ali-Bel, 38, ent 4a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08013
204	HUTB-008554	90		Ali-Bel, 38, ent 4a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08013
205	HUTB-009001	30		Ali-Bel, 57, 2n. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08013
206	HUTB-009580	07		Ali-Bel, 57, 2n. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08013
207	HUTB-004553	26		Ali-Bel, 57, 3r. 4a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08013
208	HUTB-007934	03		Aliga, 28, 1r. 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08014
209	HUTB-007936	05		Aliga, 28, 2n. 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08014
210	HUTB-007937	11		Aliga, 28, 2n. 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08014
211	HUTB-007938	07		Aliga, 28, 4tè	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08014
212	HUTB-007939	17		Aliga, 28, pral 1a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08014
213	HUTB-007935	05		Aliga, 28, pral 2a.	Barcelona	Barcelonès	BARCELONA	HAB. ÚS			08014

Alojamientos BCN: Datos oficiales

Listado de equipamientos de alojamiento de la ciudad de Barcelona



Descripción	Equipamientos de la tipología Alojamiento que hay en la ciudad de Barcelona: albergues, apartamentos, címpings, hoteles, pensiones, residencias de estudiantes y otros.
Temas	Turismo
Etiquetas	Equipamientos alojamiento
Creado	25/03/2011
Tipo de actualización	Mensual
Enlace	Mas información
Fuente	Ajuntament de Barcelona
Licencia	CC BY 3.0: Se permite cualquier explotación de la obra, incluyendo una finalidad comercial, así como la creación de obras derivadas, la distribución de las cuales también está permitida sin ninguna restricción.



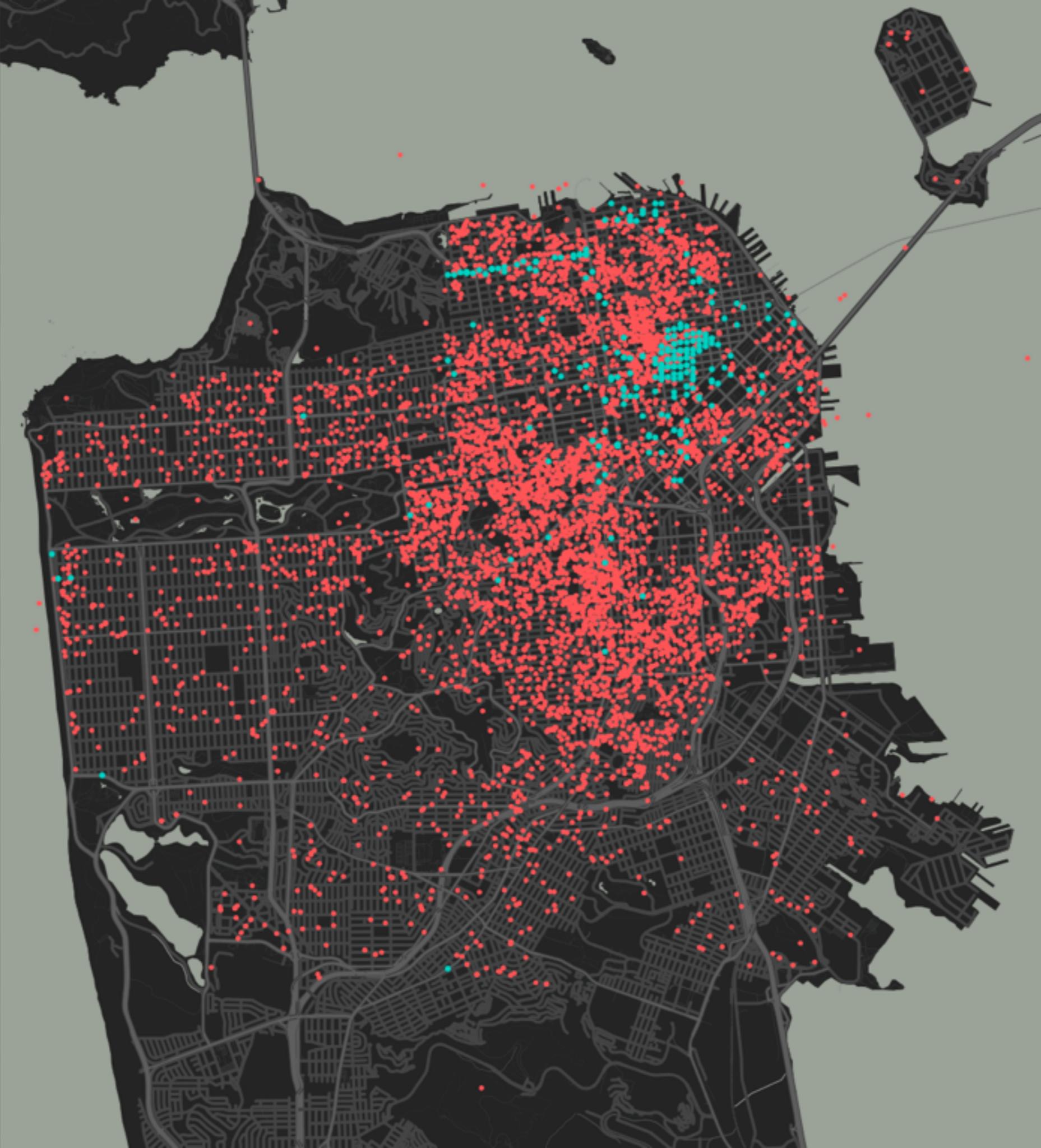
Atributos

Datos

[ZIP](#) [\[Abrir\]](#)

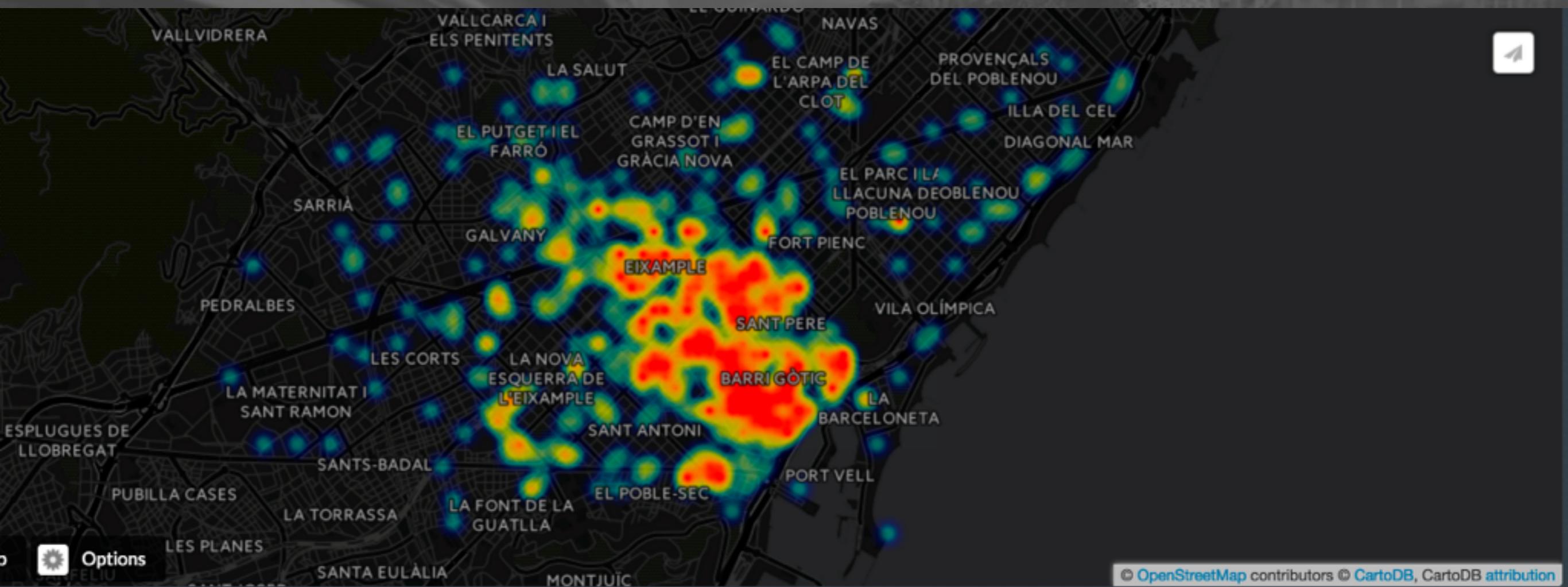
Comparte



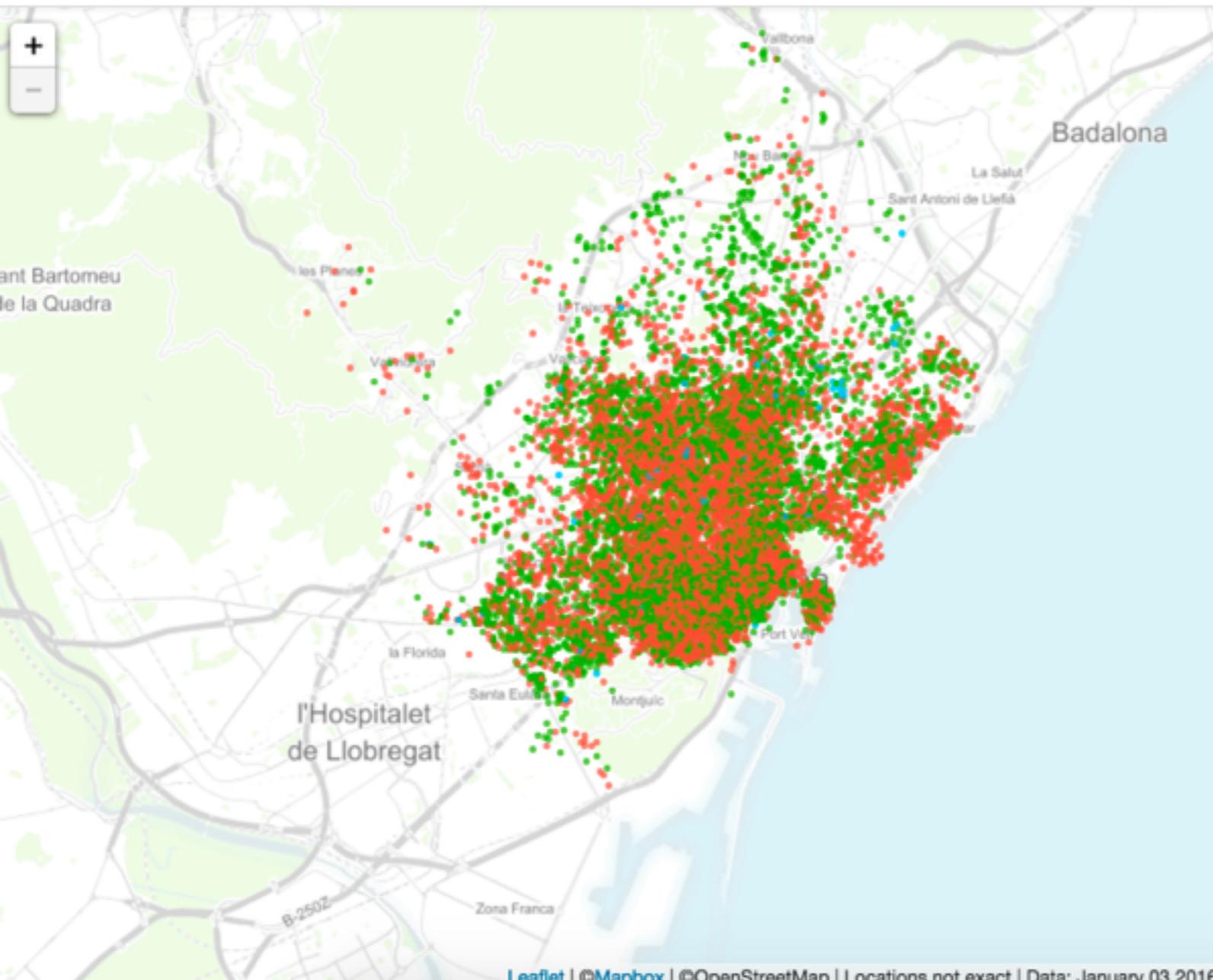


Primera visualización

Alojamientos oficiales







Barcelona

Filter by:

14,855

out of 14,855 listings (100%)

[About Airbnb in Barcelona](#)

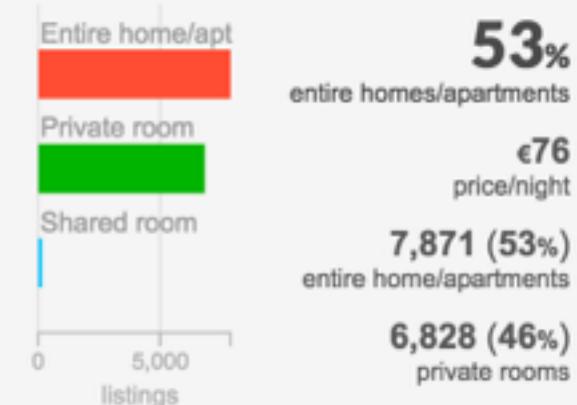
How is Airbnb really being used in and affecting your neighbourhoods?

Room Type

 Only entire homes/apartments

Airbnb hosts can list entire homes/apartments, private or shared rooms.

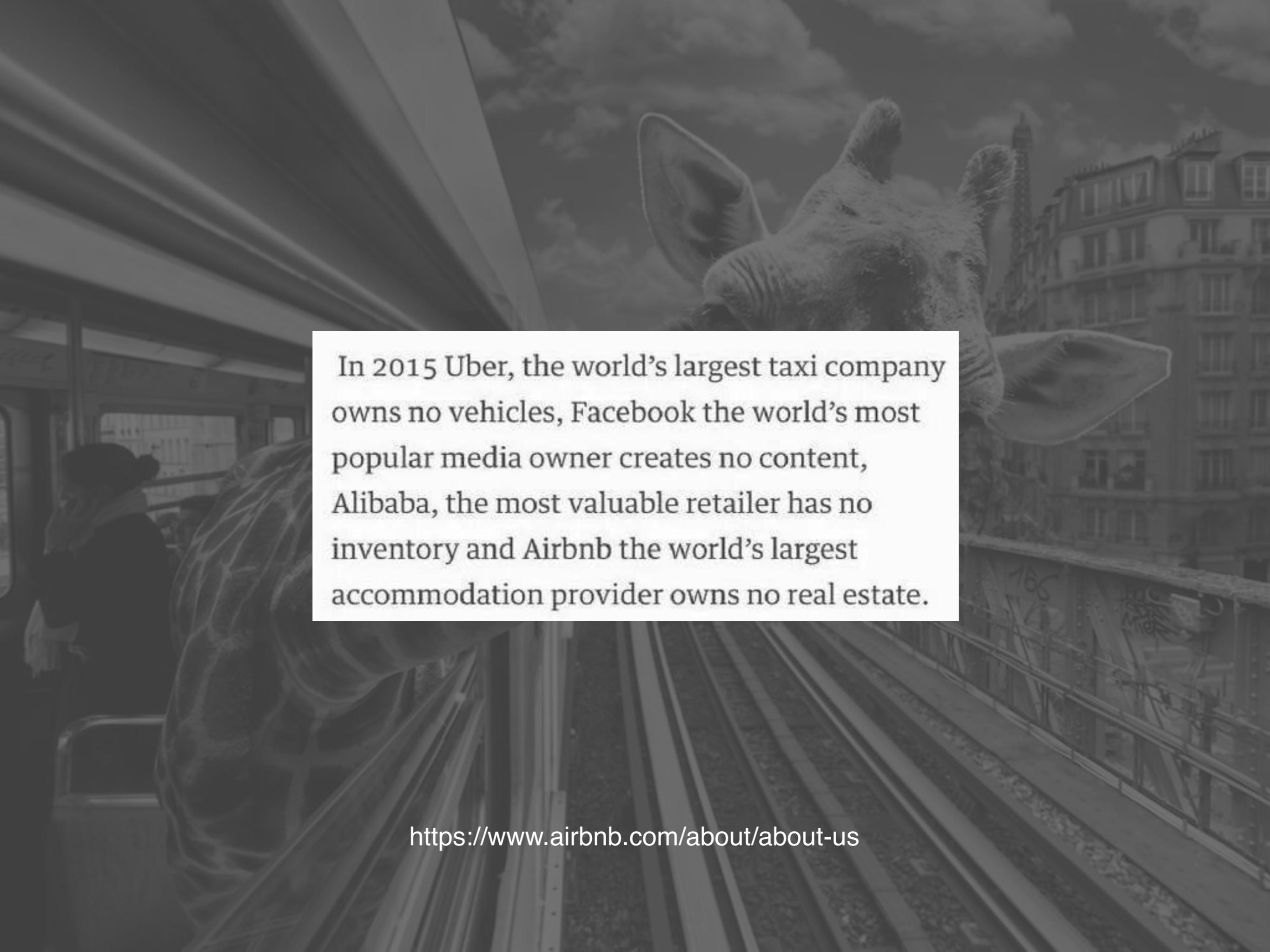
Depending on the room type, [availability](#), and [activity](#), an airbnb listing could be more like a hotel, disruptive for neighbours, taking away housing, and [illegal](#).



How is Airbnb really being used in and affecting the neighbourhoods of your city?

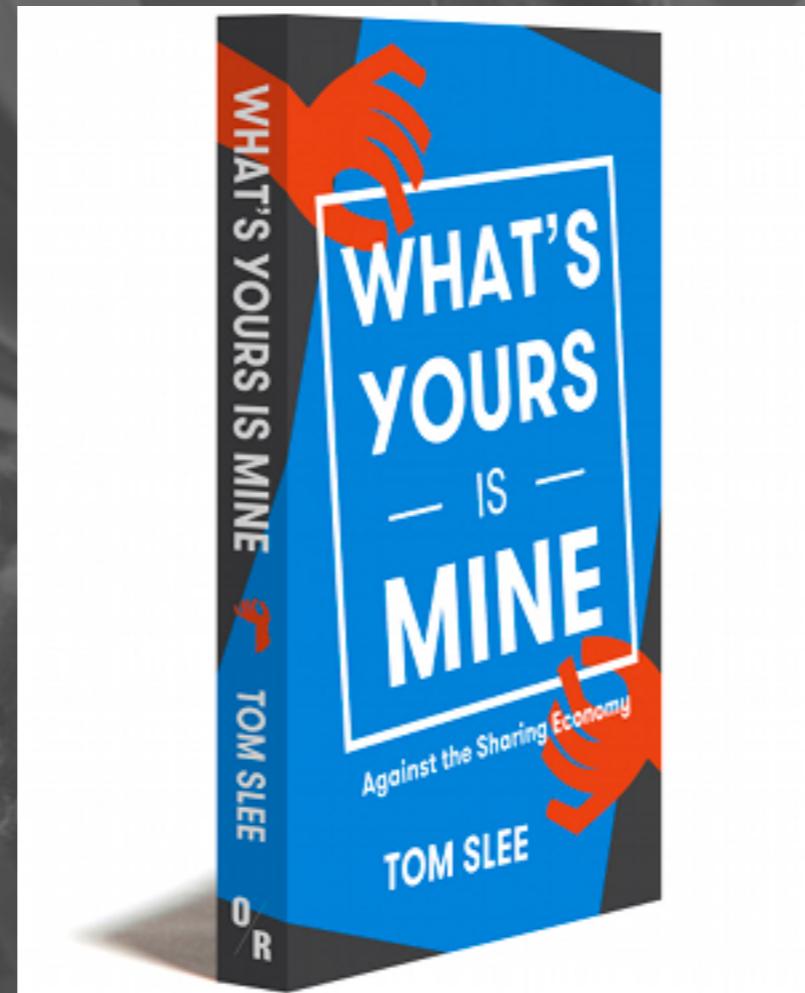
Airbnb claims to be part of the "sharing economy" and disrupting the hotel industry. However, data shows that the majority of Airbnb listings in most cities are entire homes, many of which are rented all year round - disrupting housing and communities.

Browse the data for your city below, and see for yourself.



In 2015 Uber, the world's largest taxi company owns no vehicles, Facebook the world's most popular media owner creates no content, Alibaba, the most valuable retailer has no inventory and Airbnb the world's largest accommodation provider owns no real estate.

<https://www.airbnb.com/about/about-us>



<http://www.orbooks.com/catalog/whats-yours-is-mine-by-tom-slee/>

<http://tomslee.net/>

<https://github.com/tomslee/airbnbny>

<http://tomslee.net/airbnb-data>

InsideAirbnb: Modelo

- Tres tipos de ‘listings’:
 - Casa entera (‘Entire home/apt’)
 - Habitación privada (‘Private room’)
 - Habitación compartida (‘Shared room’)
- Dos tipos de uso:
 - Comercial:
 - Casa entera de alta disponibilidad (>90 días/año)
 - Habitación de alta actividad (>90 días/año)
 - ‘Casual’: El resto
 - Otras irregularidades: Número de ‘listings’ por ‘host’
 - La disponibilidad se calcula con el calendario del ‘listing’
 - La actividad se infiere a partir del número de ‘reviews’

Table 16: Lower Impact Scenario: Estimate of Short-term Rental Housing Units in San Francisco, by Type of Host, 2014

Type of Host/Listing	Threshold Number of Days Unit Rented	Est'd # of Units as of December 2014	Percentage of Total Units
Casual: Entire unit	90 days or under	2,726	45%
Casual: Private room	88 days or under	1,565	26%
Casual: shared room	88 days or under	226	4%
<i>Total casual:</i>		4,517	74%
Commercial: Entire unit	over 90 days	925	15%
Commercial: Private room	over 88 days	631	10%
Commercial: Shared room	over 88 days	40	1%
<i>Total commercial:</i>		1,596	26%
TOTAL UNITS		6,113	100%

Source: Webscrape of Airbnb website prepared by Murray Cox, December 2014; Budget and Legislative Analyst Utilization Model

InsideAirbnb: Modelo

Inside Airbnb's "San Francisco Model" uses a modified methodology as follows:

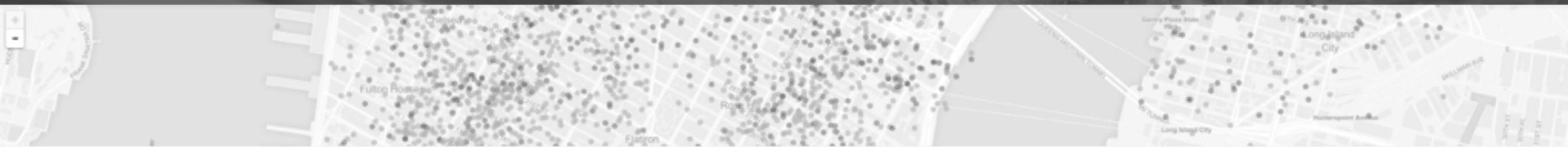
- A Review Rate of 50% is used to convert reviews to estimated bookings.
 - Alex Marqusee uses a review rate of 72%, however this is attributed to an unreliable source: Airbnb's CEO and co-founder Brian Chesky.
 - The Budget and Legislative Analyst's Office (page 49) also use a value 72% for their review rate, and in addition, introduce a higher impact model using a review rate of 30.5% - based on comparing public data of reviews to the The New York Attorney General's report on Airbnb released in October 2014.
 - Inside Airbnb analysis found that using a review rate 30.5% is more fact based, however probably not conservative enough, given that the Budget and Legislative Analyst's Office did not take into account missing reviews because of deleted listings. A review rate of 72% is unverifiable - therefore 50% was chosen as it sits almost exactly between 72% and 30.5%.
- An average length of stay is configured for each city, and this, multiplied by the estimated bookings for each listing over a period gives the occupancy rate
 - Where statements have been made about the average length of stay of Airbnb guests for a city, this was used.
 - For example, [Airbnb reported 5.5 nights](#) as the average length of stay for guests using Airbnb in San Francisco.
 - Where no public statements were made about average stays, a value of **3 nights per booking** was used.
 - If a listing has a **higher minimum nights** value than the average length of stay, the minimum nights value was used instead.
- The occupancy rate was capped at 70% - a relatively high, but reasonable number for a highly occupied "hotel".
 - This controls for situations where an Airbnb host might change their minimum nights during the high season, without the review data having a chance to catch up; or for a listing with a very high review rate.
 - It also ensures that the occupancy model remains conservative.
- Number of nights booked or available per year for the high availability and frequently rented metrics and filters were generally aligned with a city's short term rental laws designed to protect residential housing.

<http://insideairbnb.com/about.html#the-occupancy-model>

<http://commissions.sfplanning.org/cpcpackets/2014-001033PCA.pdf>

<http://www.sfbos.org/Modules>ShowDocument.aspx?documentid=52601>

InsideAirbnb: ¡Datos!



Get the Data

The data behind the Inside Airbnb site is sourced from publicly available information from the Airbnb site.

The data has been analyzed, cleansed and aggregated where appropriate to facilitate public discussion. Read more [disclaimers here](#).



If you would like to do further analysis or produce alternate visualisations of the data, it is available below under a [Creative Commons CC0 1.0 Universal \(CC0 1.0\) "Public Domain Dedication"](#) license.

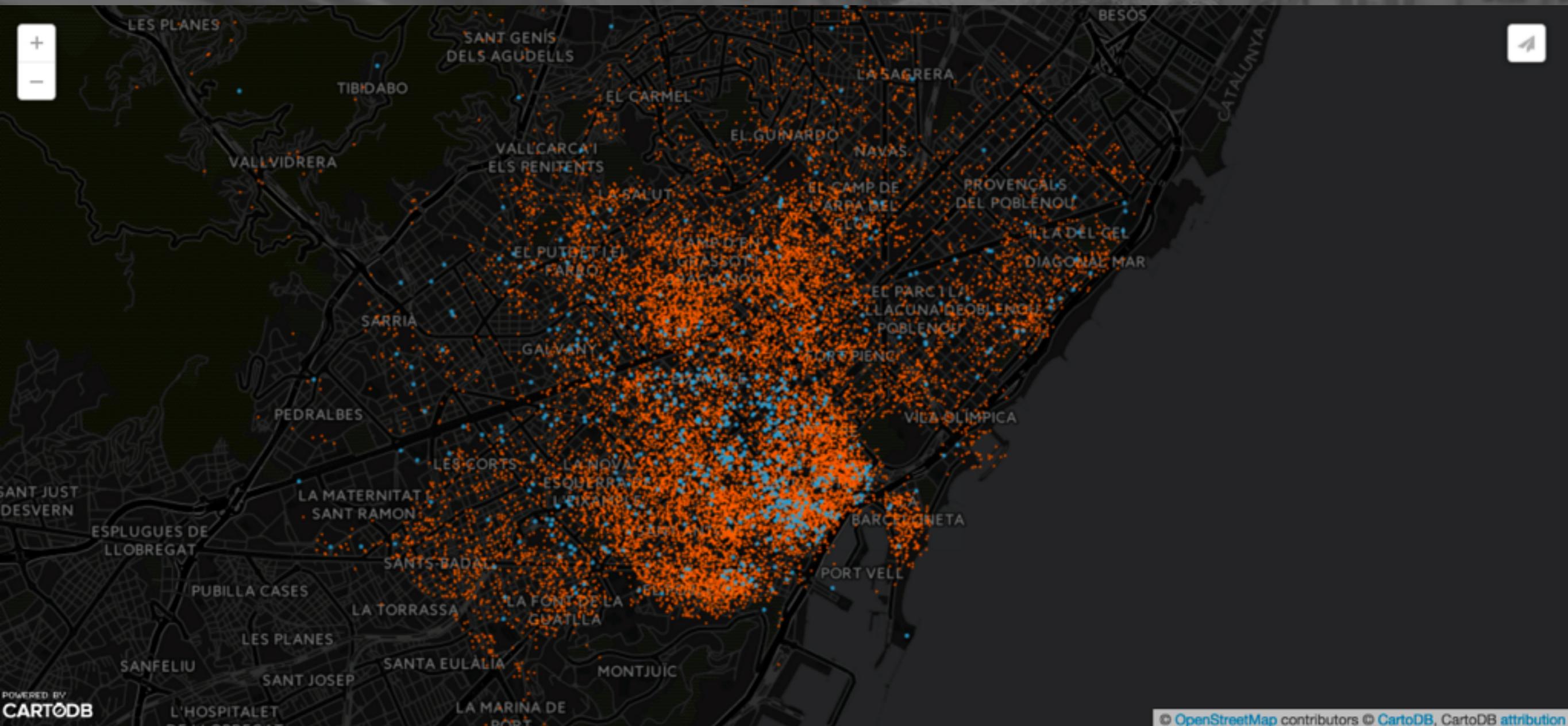
Amsterdam, North Holland, The Netherlands

See [Amsterdam data visually here](#).

<http://insideairbnb.com/get-the-data.html>

<http://data.insideairbnb.com/spain/catalonia/barcelona/2016-01-03/data/listings.csv.gz>

Segunda visualización Airbnb + oficiales



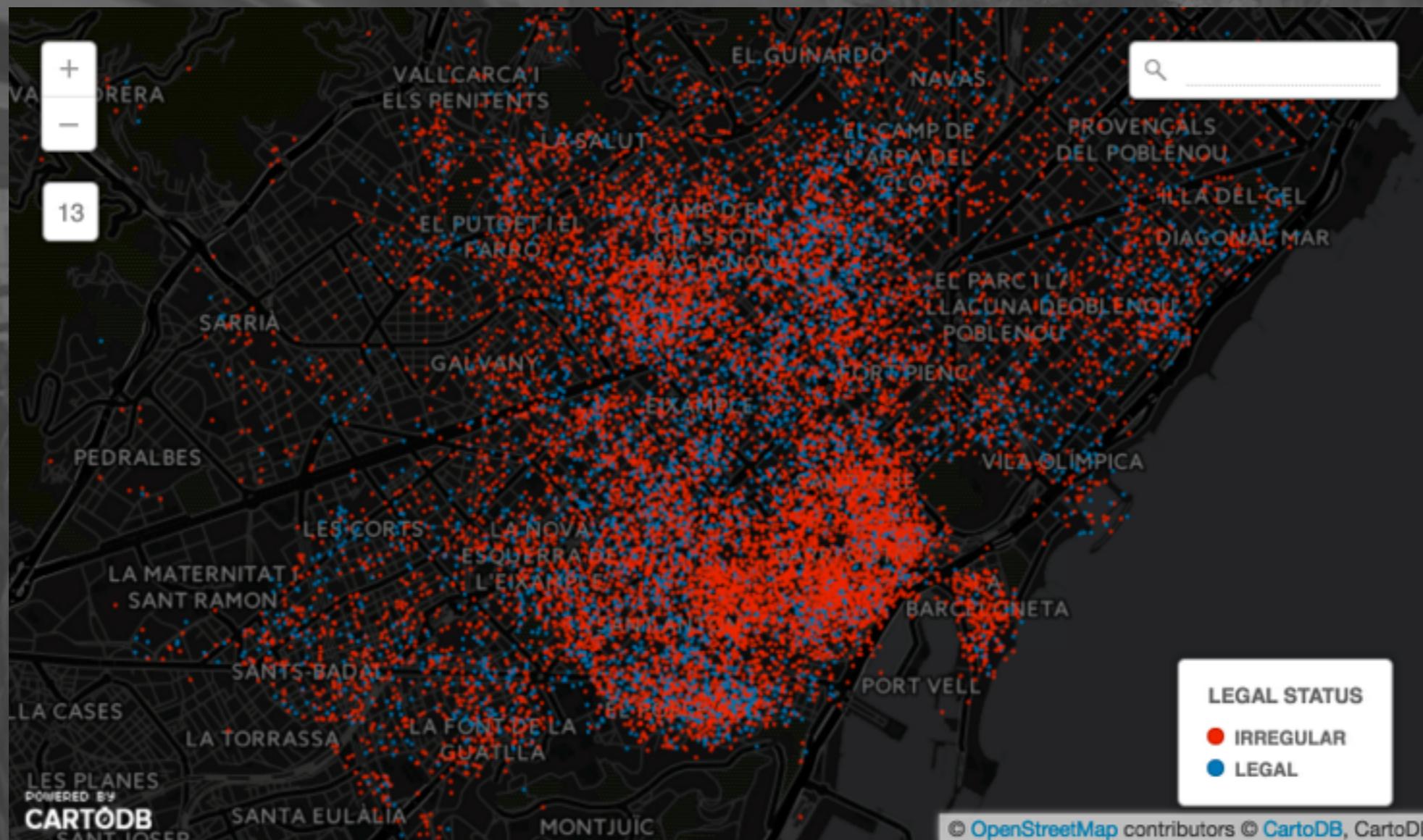
1_alojamientos_oficiales.json

2_airbnb_data.xls

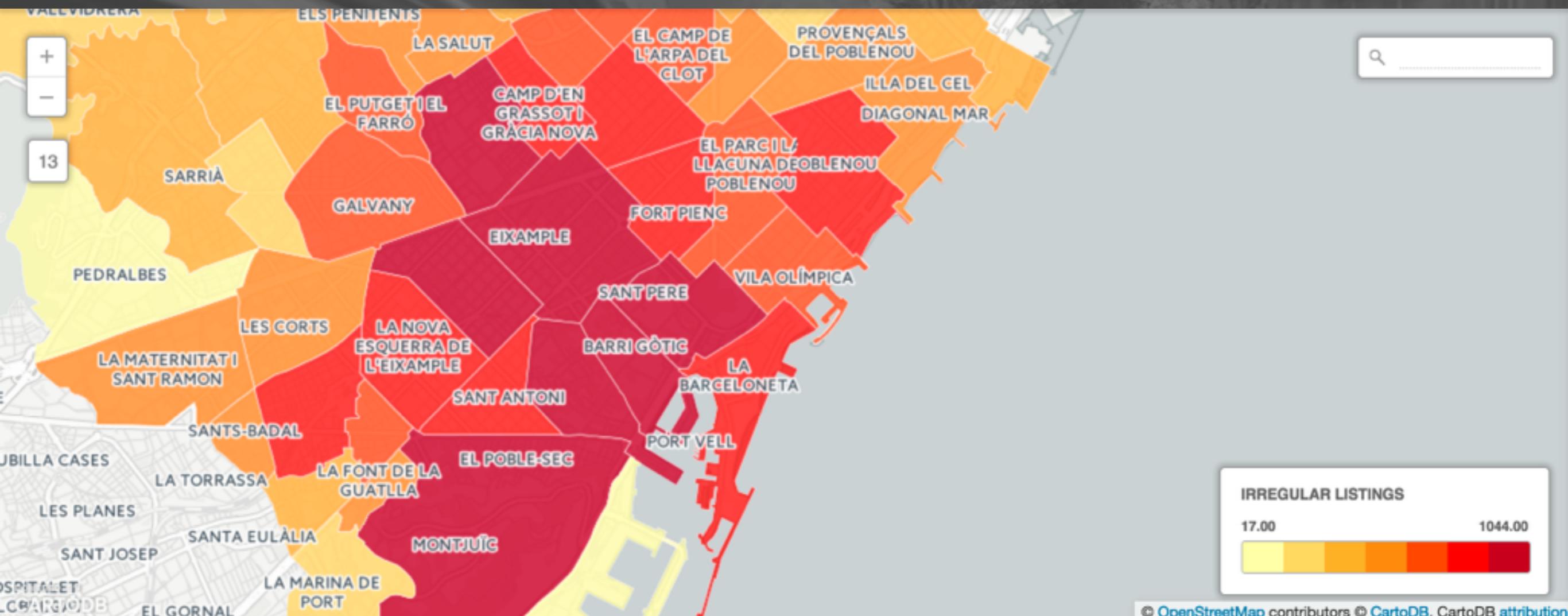
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Tercera visualización

Exploración Airbnb



Cuarta visualización Airbnb por barrios



3-barrios_bcn.json

4-airbnbn_por_barrio.xls

Quinta visualización ‘Torque’ y fuentes de #panamaPapers

