



The Data Management Strategy & Open Data Barcelona

- ✓ Use data to offer better services and optimize internal processes
- ✓ Internal changes of the city council of Barcelona towards the Data Driven
- ✓ Ethical and responsible data management

Prague, May 30th 2019

Introduction



- Technology is not unbiased and neither is the current economic system surrounding the exploitation of data, which highly emphasizes inequality.
- Big operators have monopoly over data (generated by citizens) as well as its large-scale exploitation.
- Both the sheer size of the resources required and the cost of obtaining and processing data discourages new players (third sector, SMEs). Therefore, we need a new economic model, one that is both diversified and collaborative.

New Data Management Strategy of Barcelona

- Cities face a huge opportunity.
- Barcelona City Council is a great technological player. Today we collect 90% more data than 3 years ago.
- The City Council can lead a change of management and be more efficient, transparent and closer to its resources.
- Today, Barcelona is a pioneering city in the area of data management, but we want to make a qualitative and quantitative leap towards:
 - We want to make Barcelona a more efficient, dynamic, intelligent, and confident ecosystem for its citizens, entrepreneurs and Municipal Government
 - We want to place BCN as a model of democratic data management, with citizens as major players, ensuring their rights and digital sovereignty.

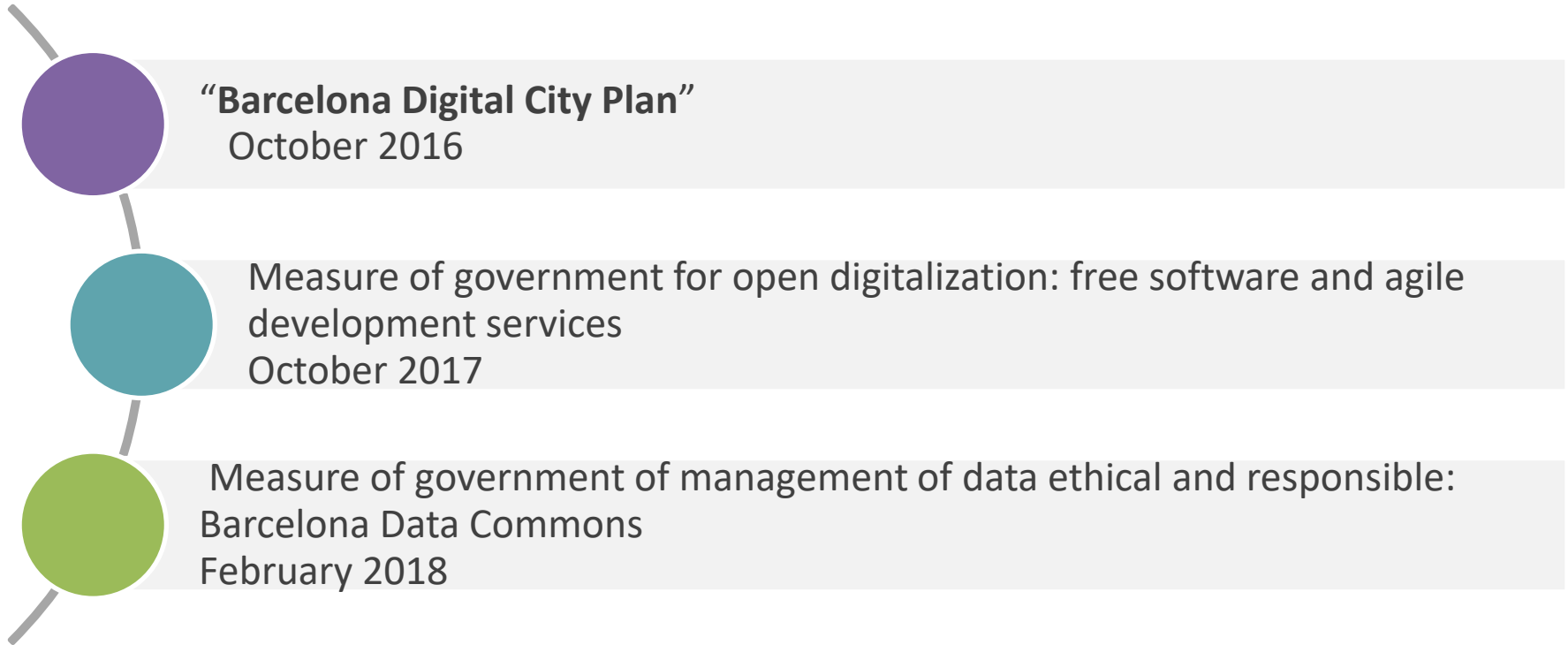


Data as public urban infrastructure

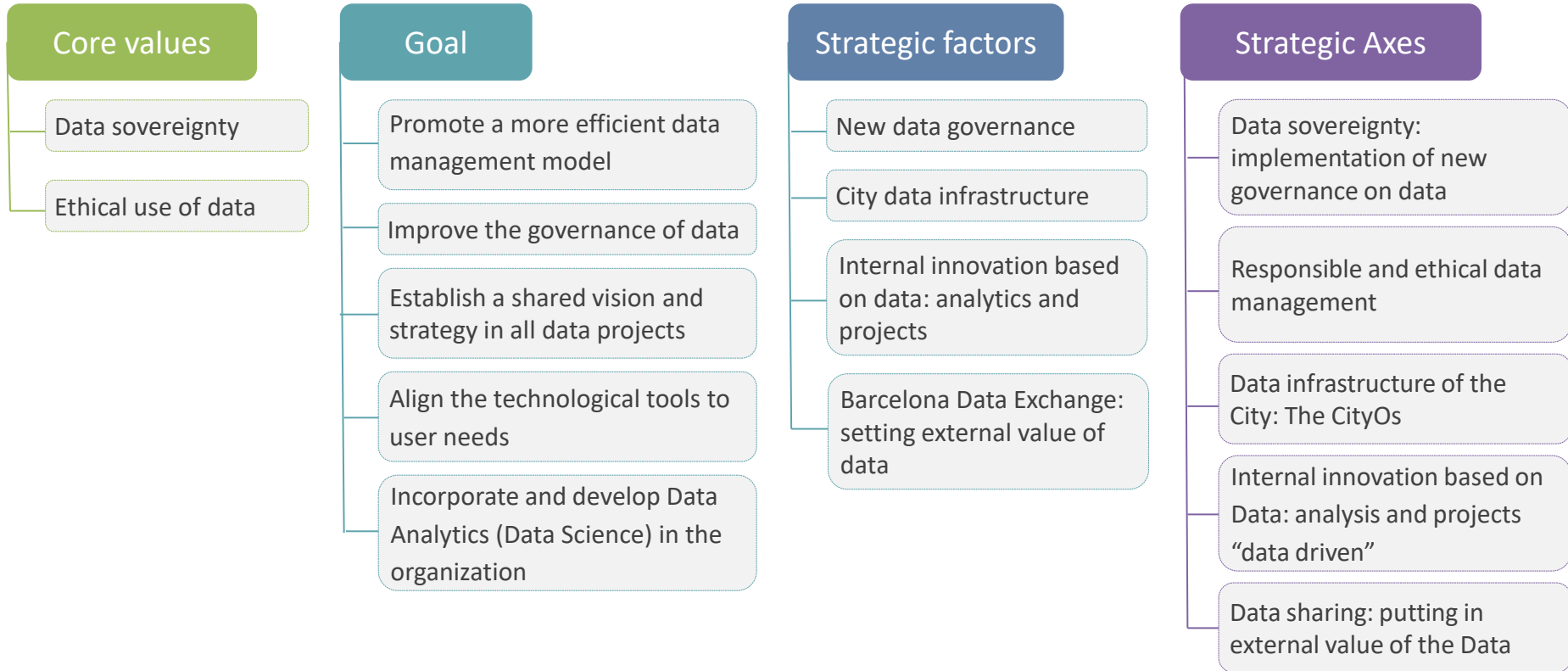


Shared resources focusing on the common good

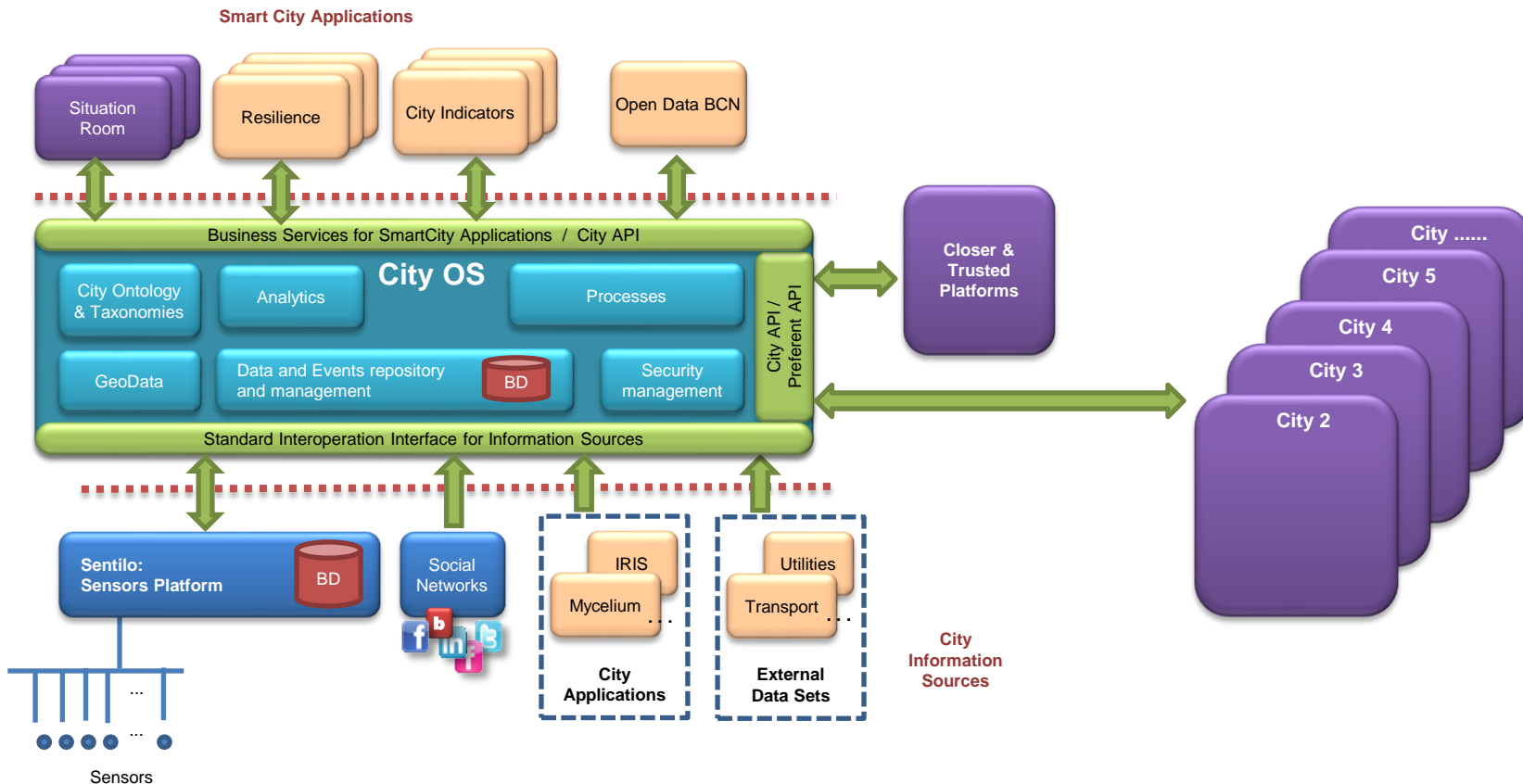
Context - Government Measures



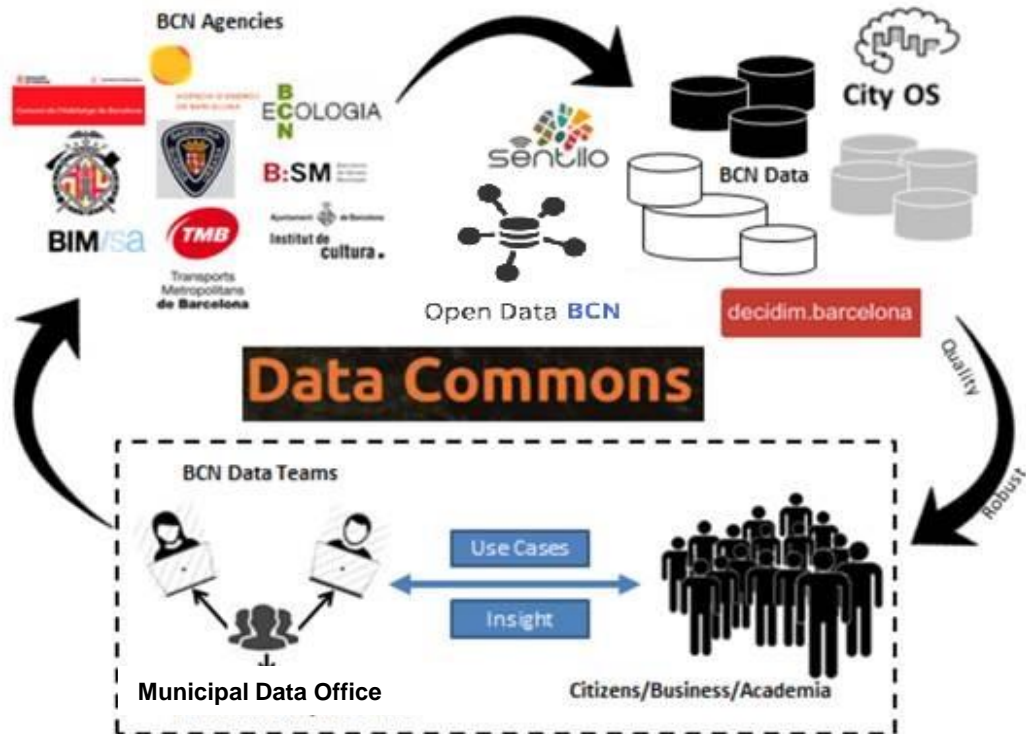
Core Values



City Data Infrastructure: The Data Lake-City OS



Big-Data Strategy



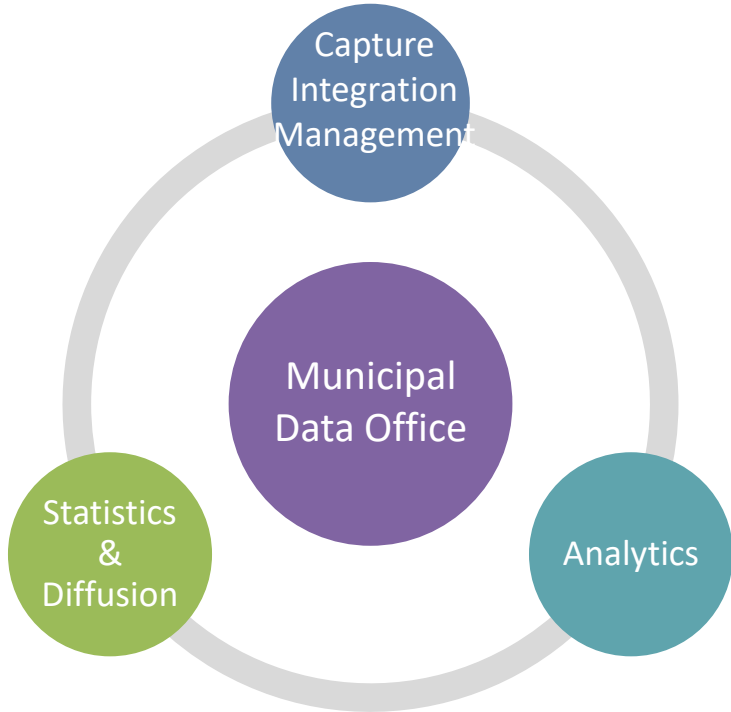


Municipal Data Office

BARCELONA IS THE FIRST SPANISH CITY WITH A MUNICIPAL DATA OFFICE TO SOLVE URBAN CHALLENGES AND IMPROVE PUBLIC SERVICES

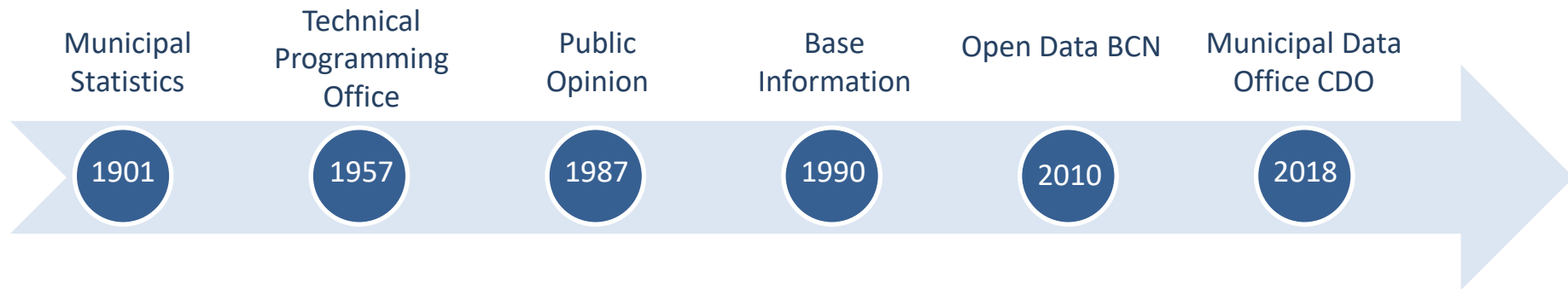
- The mission and objectives of the new Municipal Data Office (OMD), led by its Director "Chief Data Officer" (CDO), provide it with the necessary resources (human, technical and financial) to add value to the data from the City and from citizens.
- Barcelona continues the example led by major American cities such as Chicago, New York City and Boston, all with Chief Data Officers, and more recently other cities in Europe such as Paris or London, by designing a new strategy and vision placing value data as a part of the city's infrastructure.

Municipal Data Office

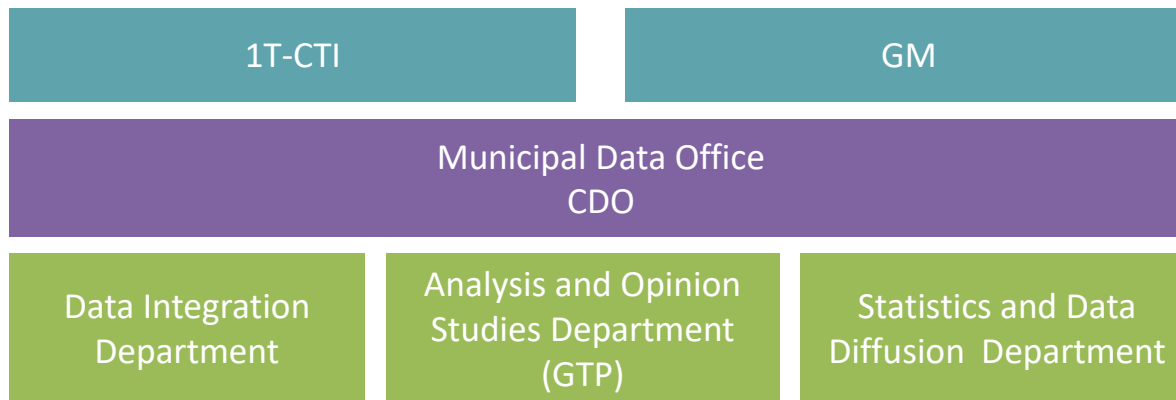


- The Municipal Data Office integrates different areas and departments with responsibility for corporate data.
- It is responsible for the management, quality, governance and operation of data related to the City Council of Barcelona and all associated bodies (public or private) that provide public services.
- It is staffed by some 40 people, a large multidisciplinary team with a set of tasks that allow processing of information in knowledge.

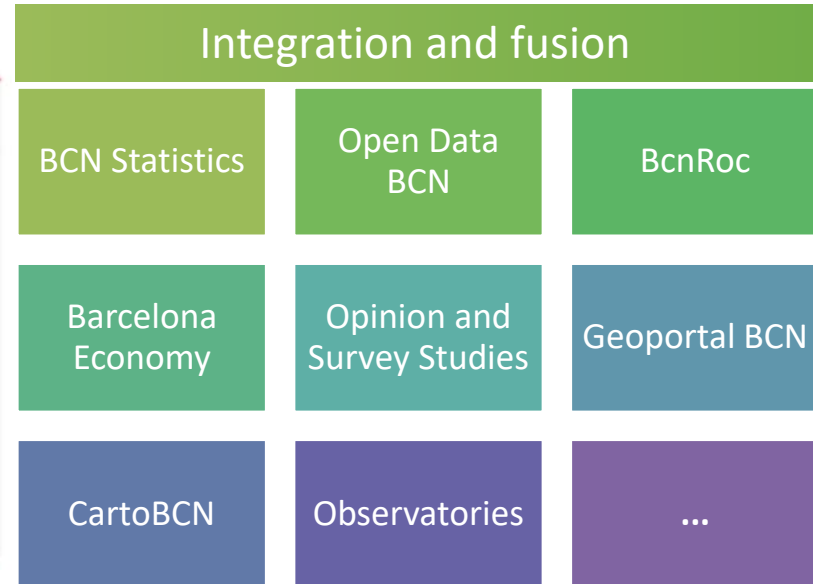
Evolution: from past to future



2018



Some Examples – Barcelona City Council Website



Open Data BCN

Barcelona Digital City Plan (2016-2020)

City's roadmap towards
technological sovereignty

3 main axis:

- City and Government
- Business and social entities
- Citizenship

Municipal Data Office

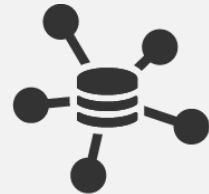
Goal: to improve and
coordinate the ethical and
responsible management of
data

3 lines of work:

- Data collection and storage
- Analytics, machine learning and predictions
- Data sharing and communication

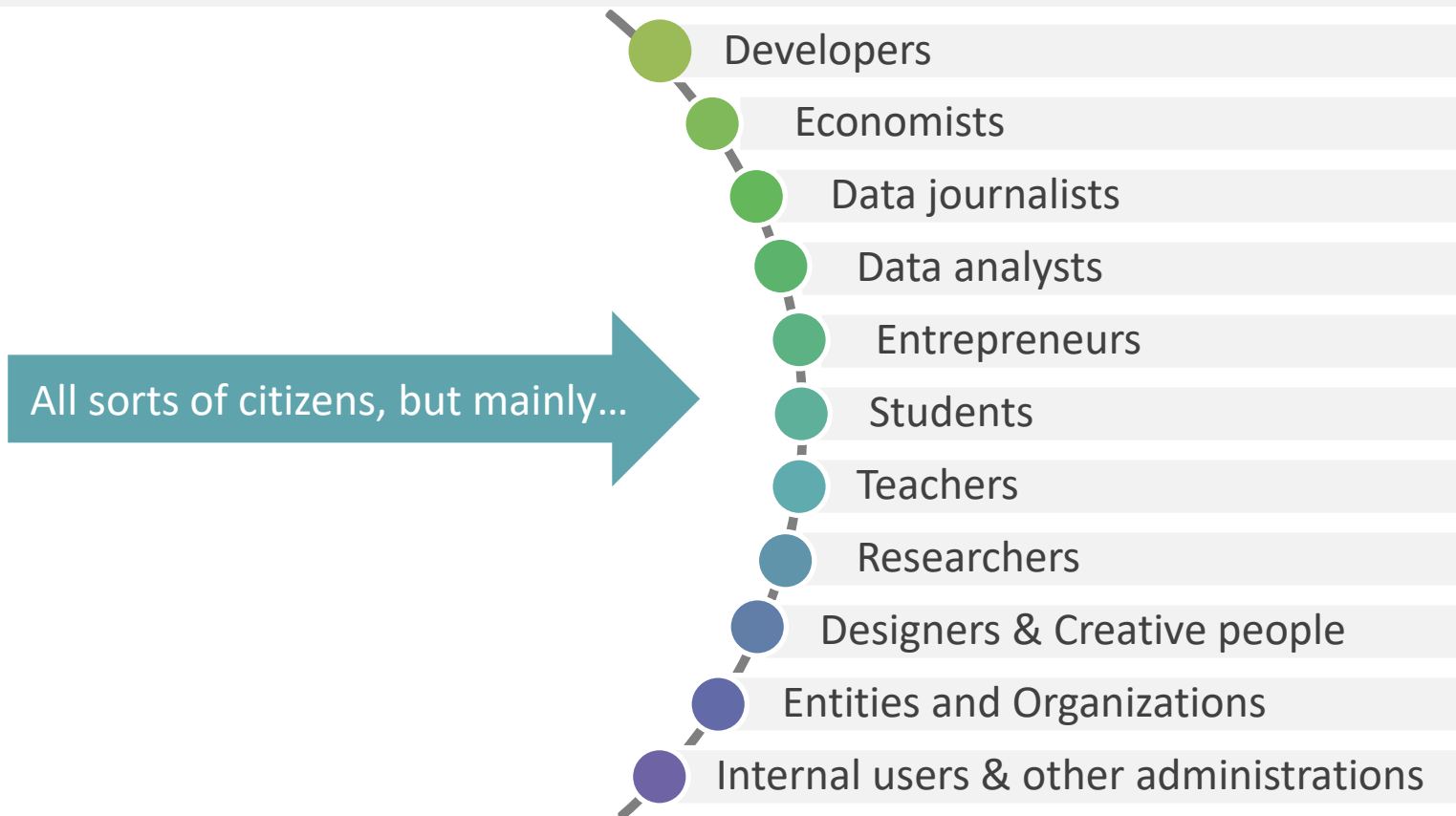
Open Data BCN

Service of the City of
Barcelona that releases
municipal management data
in open and standard formats,
through a website providing
and facilitating user access and
usability.



Open Data **BCN**

Who uses our data?



Open Data BCN: 2016-2020 Roadmap - Benefits

Open Data BCN was launched in March 2011

Roadmap

- 1- 2011-2015
- 2- 2016-2020

Drafted jointly by Barcelona City Council and IESE (International business school)

Benefits

2011-2015 Roadmap focus

Improving citizen
services

Generation of
business activities



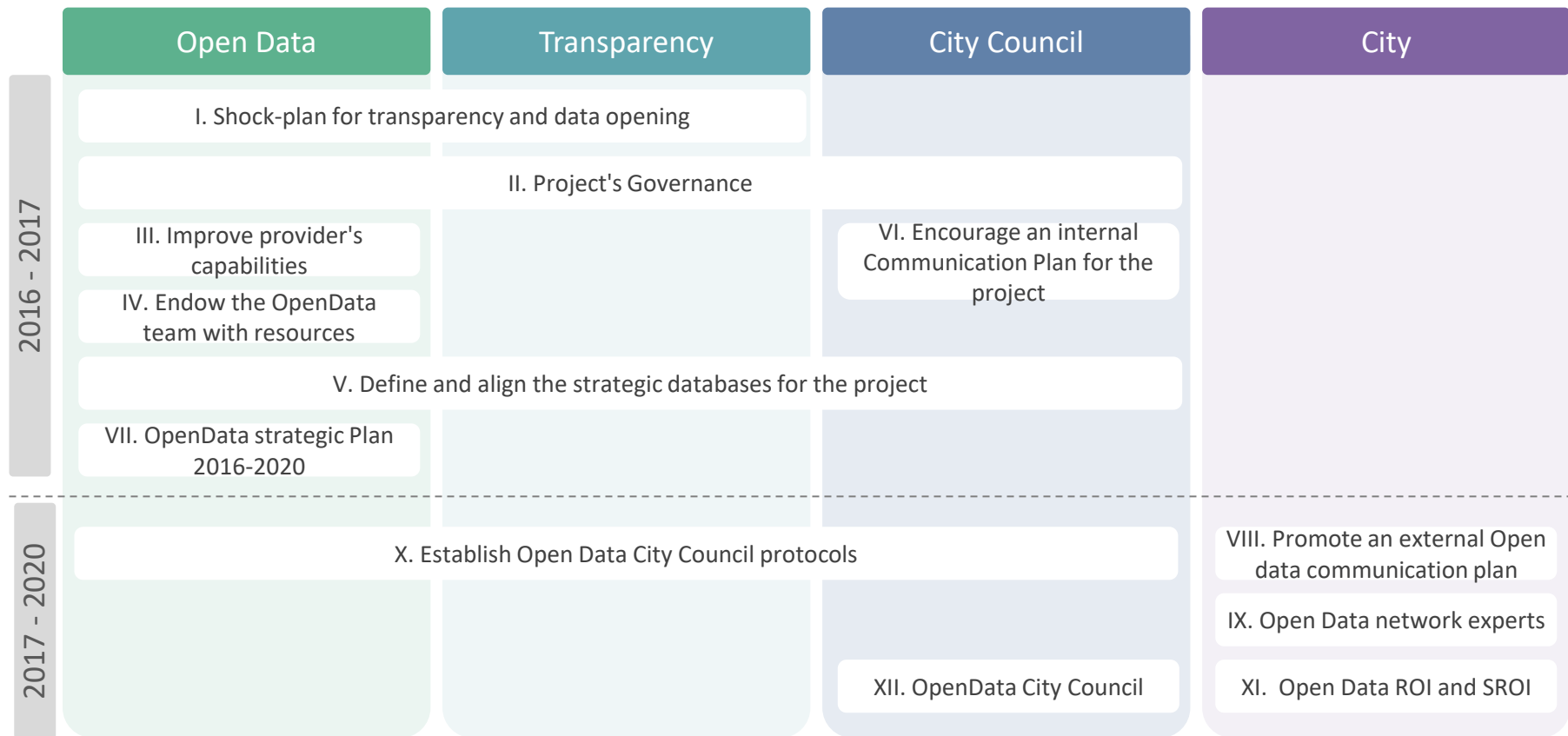
2016-2020 Roadmap focus

Transparency

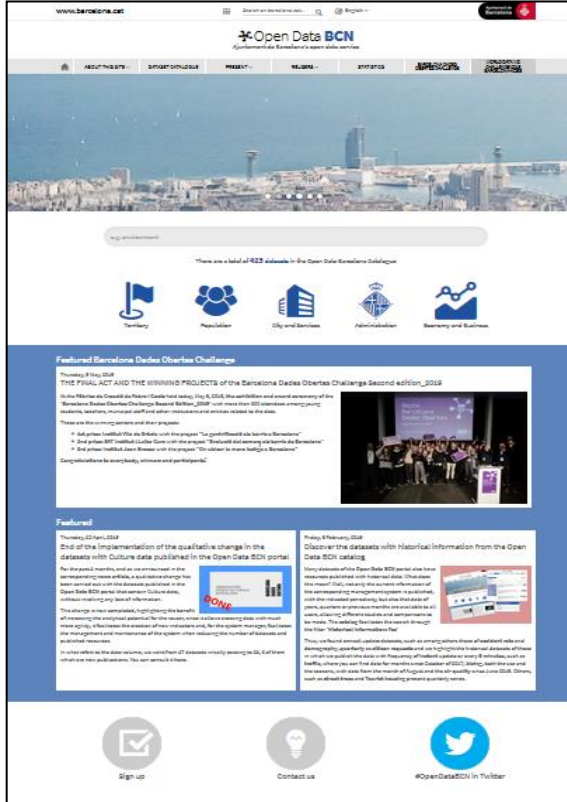
Improving internal
efficiency

Generating activities
with social impact

2016-2020 Roadmap



Open Data BCN: Portal Home



User double vision:
Basic & Expert



Open Data BCN: Portal Features


New Portal

Launched
February 2017

Technical

CKAN + Drupal
(Open Source)

Open Data BCN: GitHub

www.barcelona.cat Search on barcelona.cat... English 

Open Data BCN
Ajuntament de Barcelona's open data service

[Home](#) | [ABOUT THIS SITE](#) | [DATASET CATALOGUE](#) | [PRESENT](#) | [REUSERS](#) | [STATISTICS](#) | [BARCELONA DADES OBERTES CHALLENGE](#) | [WORLD DATA VIZ CHALLENGE 2018 BARCELONA-KOBE](#)

Home / Present / Portal News / Open Data BCN participates in the GITHUB of the Ajuntament de Barcelona

Open Data BCN participates in the GITHUB of the Ajuntament de Barcelona

The Open Data BCN service publishes open code to the Ajuntament de Barcelona's GITHUB. Two CKAN extensions, created by the development team of the Open Data BCN service, have been published: [odatabcn](#) and [federagobes](#).

The [odatabcn](#) includes open source with customization in the catalogue's layout and new functionalities such as: customization of the menu and the list of datasets, calculus of the number of downloads by resource and downloading of the catalogue in CSV format, among others.

The [federagobes](#), on the other hand, generates an RDF document with the Open Data BCN catalogue according to the [Technical normative of Interoperability of the information's resources](#) to federate the datasets to the portals: [datos.gob.es](#) and the European Data Portal.



There are no comments yet.

Add new comment

[Log in](#) or [register](#) to post comments



Open Data BCN: Catalogue

May 2019

425 datasets

- 1192 including historical series
- 2067 including 27 different formats

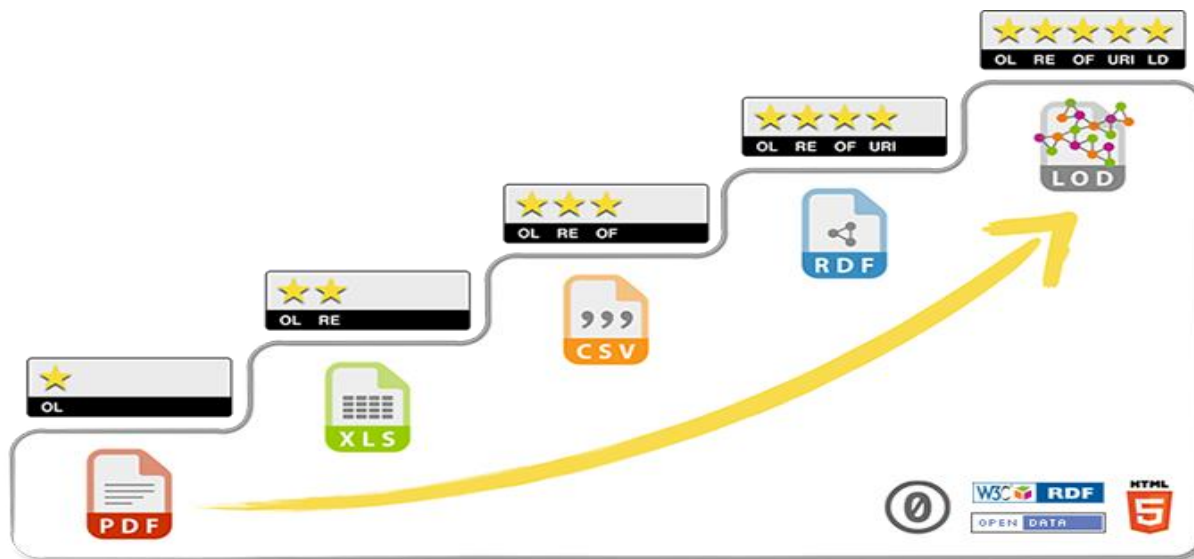
>= 180 datasets published since the launch of the new portal

Open Data BCN Portal – Topic/Subtopic

<i>Datasets by topic-subtopic</i>					
Topic / Subtopic	Nº Datasets	%	Topic / Subtopic	Nº Datasets	%
Administration	77	18,1%	Territory	113	26,6%
Engagement	7	1,6%	Housing	57	13,4%
Human Resources	6	1,4%	Town Planning and Infrastructures	56	13,2%
Legislation and Justice	7	1,6%	City and Services	113	26,6%
Public Sector	57	13,4%	Culture and Leisure	31	7,3%
Economy and Business	15	3,5%	Environment	19	4,5%
Employment	5	1,2%	Security	6	1,4%
Science and Technology	2	0,5%	Sport	2	0,5%
Trade	8	1,9%	Tourism	3	0,7%
Population	107	25,2%	Transport	51	12,0%
Demography	84	19,8%	Participation	1	0,2%
Education	1	0,2%			
Society and Welfare	22	5,2%			
		Total	425		

Open Data BCN: Portal – Data Quality Level – Tim Berners Lee

Over 98.82% datasets \geq 3★



Open Data BCN: Portal - Catalogue

- Topic subtopic
- Formats
- Tags
- Licenses
- Update frequency
- Geolocation
- Historical information
- CKAN API available



The screenshot shows the Open Data BCN portal interface. At the top, there is a navigation bar with the logo and the text "Open Data BCN Barcelona's City Hall Open Data Service". Below the navigation bar, there are several tabs: "ABOUT THIS SITE", "DATASET CATALOGUE" (selected), "PRESENT", "REUSERS", "STATISTICS", "BARCELONA DADES OBERTES CHALLENGE", and "WORLD DATAVIZ CHALLENGE 2018 BARCELONA KOBE".

The main content area is titled "Home / Datasets". On the left, there is a sidebar with a list of filters: "Themes" (11), "Territory" (11), "Urban environment" (2), "Tags" (+), "Formats" (+), "Licenses" (+), "Geolocation" (+), "Update frequency" (+), "Historical information" (+), and "CKAN API available" (+). On the right, there is a search bar with the text "mobility" and a search icon. Below the search bar, it says "13 datasets found for 'mobility'" and "Order by: Publication Date (DESC)".

The search results are displayed in a list format. Each result includes a title, a brief description, and a "Territory" button. The first result is "Typology of the traffic light regulation elements in the infrastructure netwo..." with a description: "Typology of the traffic light regulation elements in the infrastructure network of the city of Barcelona". It also includes "Update frequency: Weekly" and "Historical information: No". The second result is "Inventory of the traffic light regulation elements in the infrastructure netwo..." with a description: "Inventory of the traffic light regulation elements in the infrastructure network of the city of Barcelona. The elements without neighbourhood and district information belong to...". It also includes "Update frequency: Weekly" and "Historical information: No". The third result is "Typology of the reserved parking spots in the infrastructure network of the c..." with a description: "Typology of the reserved parking spots in the infrastructure network of the city of Barcelona". It also includes "Update frequency: Weekly" and "Historical information: No".

Open Data BCN: Portal - Previsualització



Barcelona's City Hall Open Data Service

[Home](#) / [City and Services](#) / [Participation](#) / [Incidents, complaints, ...](#) / 2019 Peticions ciutadanes[Manage](#)

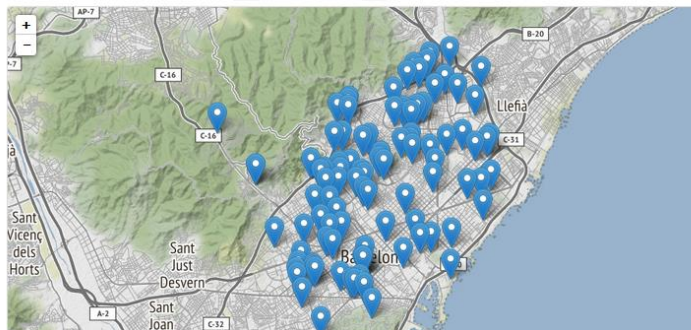
2019 Peticions ciutadanes

[Download](#)

Incidències, queixes, suggeriments, consultes i agraïments gestionats per l'Ajuntament de Barcelona durant l'any 2019.

Dataset: Incidents, complaints, suggestions, inquiries and gratuities managed by the Barcelona City Council

Explorador de dades

[Embed](#)

Latitude / Longitude fields
 GeoJSON field

Latitude field
LATTUD


Longitude field
LONGITUD


Auto zoom to features
 Cluster markers

Filters


Portal - Protocol


Identification Prioritization


Identification: DataSets to open 


Prioritization: Determine order of incorporation or by **Programmed Publication (pending)** 


Resource conceptualization

Identification of the data source 


Field that will constitute the resource 


Application of the requirements of the “**Guia publicació de datasets a Open Data BCN’**” 

Formats: Open data quality level 


Update frequency 


Resource generation


File generation 


Process of publication generation (automatic, direct URL, guide...) 






Website diffusion Maintenance Publicity

Website Publication
First time signing up in the Backoffice 

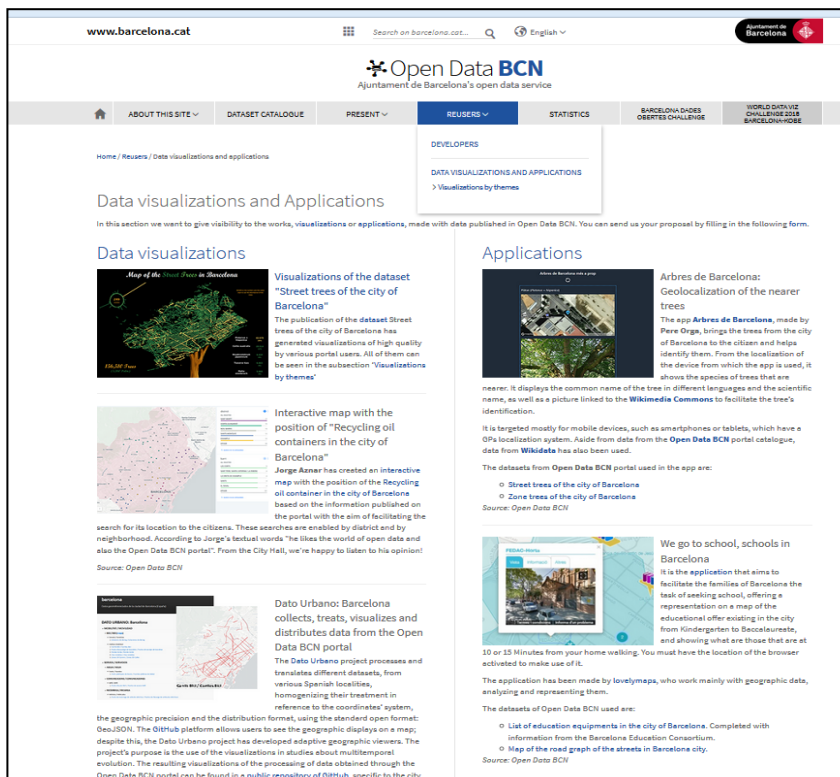
Publication in the Portal 

BackOffice Maintenance 

Publicity 

-  OMD
-  City Hall Diffusion
-  Municipal Departments
-  Citizens
-  Enterprises and Interest group

Open Data BCN: Portal - Reusers



The screenshot shows the Open Data BCN website interface. At the top, there is a search bar and navigation menu. The main content area is titled 'Data visualizations and Applications' and is divided into two columns. The left column features three items: a 3D map of street trees, an interactive map of recycling oil containers, and a data visualization for 'Dato Urbano'. The right column features two items: 'Arbres de Barcelona: Geolocalization of the nearer trees' and 'We go to school, schools in Barcelona'. Each item includes a small image and a brief description of the data visualization or application.

Data visualizations and Applications

In this section we want to give visibility to the works, visualizations or applications, made with data published in Open Data BCN. You can send us your proposal by filling in the following form.

Data visualizations

Visualizations of the dataset "Street trees of the city of Barcelona"

The publication of the dataset Street trees of the city of Barcelona has generated visualizations of high quality by various portal users. All of them can be seen in the subsection "Visualizations by themes"

Interactive map with the position of "Recycling oil containers in the city of Barcelona"

Jorge Aznar has created an interactive map with the position of the Recycling oil container in the city of Barcelona based on the information published on the portal with the aim of facilitating the search for its location to the citizens. These exercises are exhibited by district and by neighborhood. According to Jorge's textual words "he likes the world of open data and also the Open Data BCN portal". From the City Hall, we're happy to listen to his opinion!

Source: Open Data BCN

Dato Urbano: Barcelona collects, treats, visualizes and distributes data from the Open Data BCN portal

The Dato Urbano project processes and translates different datasets, from various Spanish localities, homogenizing their treatment in reference to the coordinates' system, the geographic precision and the distribution format, using the standard open format: GeoJSON. The OditHub platform allows users to see the geographic displays on a map; despite this, the Dato Urbano project has developed adaptive geographic viewers. The project's purpose is the use of the visualizations in studies about multitemporal evolution. The resulting visualizations of the processing of data obtained through the Open Data BCN portal can be found in a public repository of OditHub, specific to the city

Applications

Arbres de Barcelona: Geolocalization of the nearer trees

The app **Arbres de Barcelona**, made by **Pere Orga**, brings the trees from the city of Barcelona to the citizen and helps identify them. From the localization of the device from which the app is used, it shows the species of trees that are nearer: It displays the common name of the tree in different languages and the scientific name, as well as a picture linked to the **Wikimedia Commons** to facilitate the tree's identification.

It is targeted mostly for mobile devices, such as smartphones or tablets, which have a GPS localization system. Aided from data from the **Open Data BCN** portal catalogue, data from **Wikidata** has also been used.

The datasets from **Open Data BCN** portal used in the app are:

- Street trees of the city of Barcelona
- Zone trees of the city of Barcelona

Source: Open Data BCN

We go to school, schools in Barcelona

It is the application that aims to facilitate the families of Barcelona the task of seeking school, offering a representation on a map of the educational offer existing in the city from Kindergarten to Baccalaureate, and showing what are those that are at 10 or 15 Minutes from your home walking. You must have the location of the browser activated to make use of it.

The application has been made by **lovelymaps**, who work mainly with geographic data, analyzing and representing them.

The datasets of Open Data BCN used are:

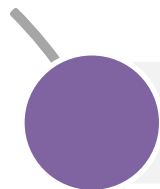
- List of education equipments in the city of Barcelona. Completed with information from the Barcelona Education Consortium.
- Map of the road graph of the streets in Barcelona city.

Source: Open Data BCN

Portal – Reusers – Developers-API's

The APIs are interfaces that specify how the different components of computer programs should interact.

- We can distinguish three types of APIs available in the Open Data BCN portal



Catalogue Management

This API is used to consult and manage the catalogue information, such as datasets, resources, labels, etc...



Query APIs on CSV resources

Allows you to check and filter the information contained within a specific CSV



APIs owned by the City Council

These are APIs enabled by information sources and tailor-made

Portal – Reusers – Developers – API's – Catalogue Management

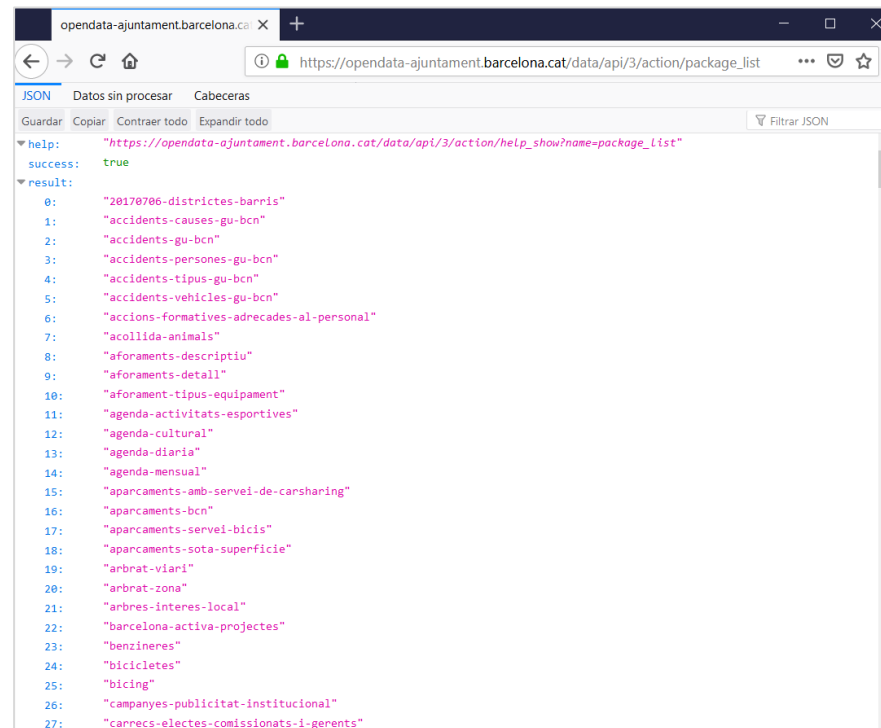
This API may have an interest for citizens to know what information is available on the Open Data BCN portal and the datasets that are being added.

This is the API offered by the CKAN technology to manage the catalogue of datasets.

- ❑ They are public methods.
- ❑ This API is available through the URL, by adding the name of the method that we would like to access.

<https://opendata-ajuntament.barcelona.cat/data/api/action/>

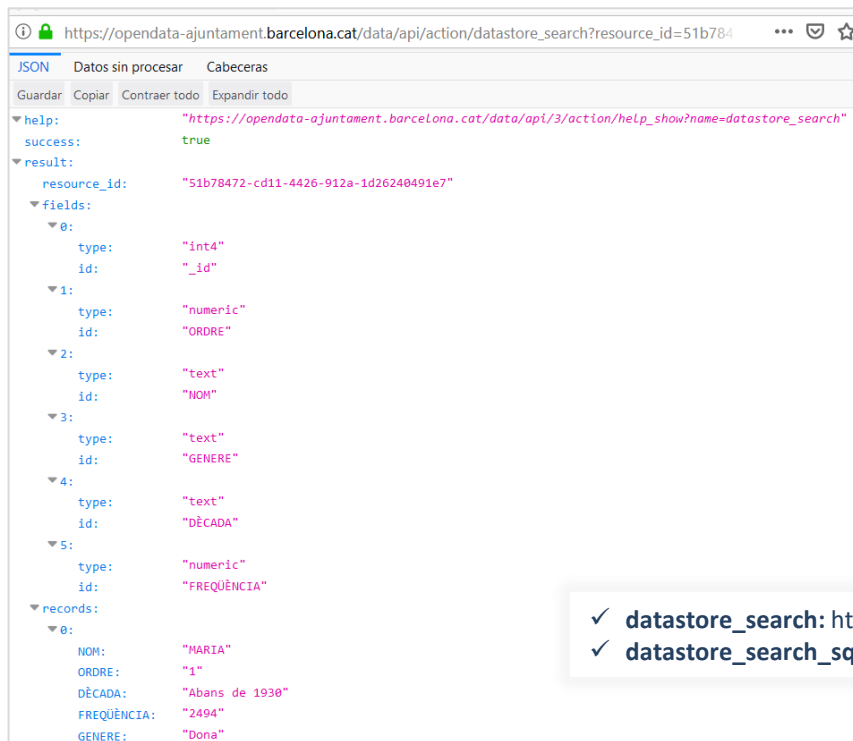
- ❑ Examples of these methods are the following:
 - ✓ **current_package_list_with_resources**: returns the list of current datasets and their resources
 - ✓ **package_search**: performs a search within the dataset catalogue
 - ✓ **resource_show**: returns the metadata of a resource



```
opendata-ajuntament.barcelona.ca X +
https://opendata-ajuntament.barcelona.cat/data/api/3/action/package_list
JSON Datos sin procesar Cabeceras
Guardar Copiar Contraer todo Expandir todo Filtrar JSON
help: "https://opendata-ajuntament.barcelona.cat/data/api/3/action/help_show?name=package_list"
success: true
result:
0: "20170706-districtes-barris"
1: "accidents-causes-gu-bcn"
2: "accidents-gu-bcn"
3: "accidents-persones-gu-bcn"
4: "accidents-tipus-gu-bcn"
5: "accidents-vehicles-gu-bcn"
6: "accions-formatives-adreces-al-personal"
7: "acollida-animals"
8: "aforaments-descriptiu"
9: "aforaments-detall"
10: "aforament-tipus-equipament"
11: "agenda-activitats-esportives"
12: "agenda-cultural"
13: "agenda-diaria"
14: "agenda-mensual"
15: "aparcaments-amb-servei-de-carsharing"
16: "aparcaments-bcn"
17: "aparcaments-servei-bicis"
18: "aparcaments-sota-superficie"
19: "arbrat-viari"
20: "arbrat-zona"
21: "arbres-interes-local"
22: "barcelona-activa-projectes"
23: "benzineres"
24: "bicicletes"
25: "bicing"
26: "campanyes-publicitat-institucional"
27: "carracs-electes-comissionats-i-gerents"
```

Portal – Reusers – Developers – API’s – Query APIs on CSV resources

These interfaces allow you to act on a specific CSV resource. The resource must be uploaded to the Open Data BCN portal with a suitable format and coding. The API of the datastore allows us to make queries directly on these tables.



```
https://opendata-ajuntament.barcelona.cat/data/api/action/datastore_search?resource_id=51b78472-cd11-4426-912a-1d26240491e7

JSON  Datos sin procesar  Cabeceras

Guardar Copiar Contraer todo Expandir todo

{
  "help": "https://opendata-ajuntament.barcelona.cat/data/api/3/action/help_show?name=datastore_search",
  "success": true,
  "result": {
    "resource_id": "51b78472-cd11-4426-912a-1d26240491e7",
    "fields": [
      {
        "type": "int4",
        "id": "_id"
      },
      {
        "type": "numeric",
        "id": "ORDRE"
      },
      {
        "type": "text",
        "id": "NOM"
      },
      {
        "type": "text",
        "id": "GENERE"
      },
      {
        "type": "text",
        "id": "DÈCADA"
      },
      {
        "type": "numeric",
        "id": "FREQUÈNCIA"
      }
    ],
    "records": [
      {
        "NOM": "MARIA",
        "ORDRE": "1",
        "DÈCADA": "Abans de 1930",
        "FREQUÈNCIA": "2494",
        "GENERE": "Dona"
      }
    ]
  }
}
```

The CKAN API available filter allows selecting datasets with this interface enabled.

- ❑ Currently there are about 1,000 resources in the Open Data BCN catalogue that can be consulted with this API.
- ❑ There are only two common endpoints for that allow you to search within the resource based on the search criteria or by making a SQL query:

- ✓ **datastore_search:** https://opendata-ajuntament.barcelona.cat/data/api/action/datastore_search
- ✓ **datastore_search_sql:** https://opendata-ajuntament.barcelona.cat/data/api/action/datastore_search_sql

Portal – Reusers – Developers – API's – Owned by the City Council

These APIs are linked from the Open Data BCN portal but they are not maintained or validated from the same team that manages the portal. In the portal they are treated as one more resource, as if it were a link to a CSV or RDF file.

Informació de la promoció interna de l'Ajuntament de Barcelona

INFORMACIÓ DE PROVISIÓ I PROMOCIÓ DE L'AJUNTAMENT DE BARCELONA

URL de la crida (en funció del idioma i del tipus de convocatòria)

GET <https://apidata.barcelona.cat/opendata/provisio-promocio/concurs/ca>

GET <https://apidata.barcelona.cat/opendata/provisio-promocio/concurs/es>

GET <https://apidata.barcelona.cat/opendata/provisio-promocio/lliure-designacio/ca>

GET <https://apidata.barcelona.cat/opendata/provisio-promocio/lliure-designacio/es>

GET <https://apidata.barcelona.cat/opendata/provisio-promocio/mobilitat-horitzontal/ca>

GET <https://apidata.barcelona.cat/opendata/provisio-promocio/mobilitat-horitzontal/es>

GET <https://apidata.barcelona.cat/opendata/provisio-promocio/promocio-interna-especial/ca>

GET <https://apidata.barcelona.cat/opendata/provisio-promocio/promocio-interna-especial/es>

Per a poder fer la crida, cal que sigui HTTPS

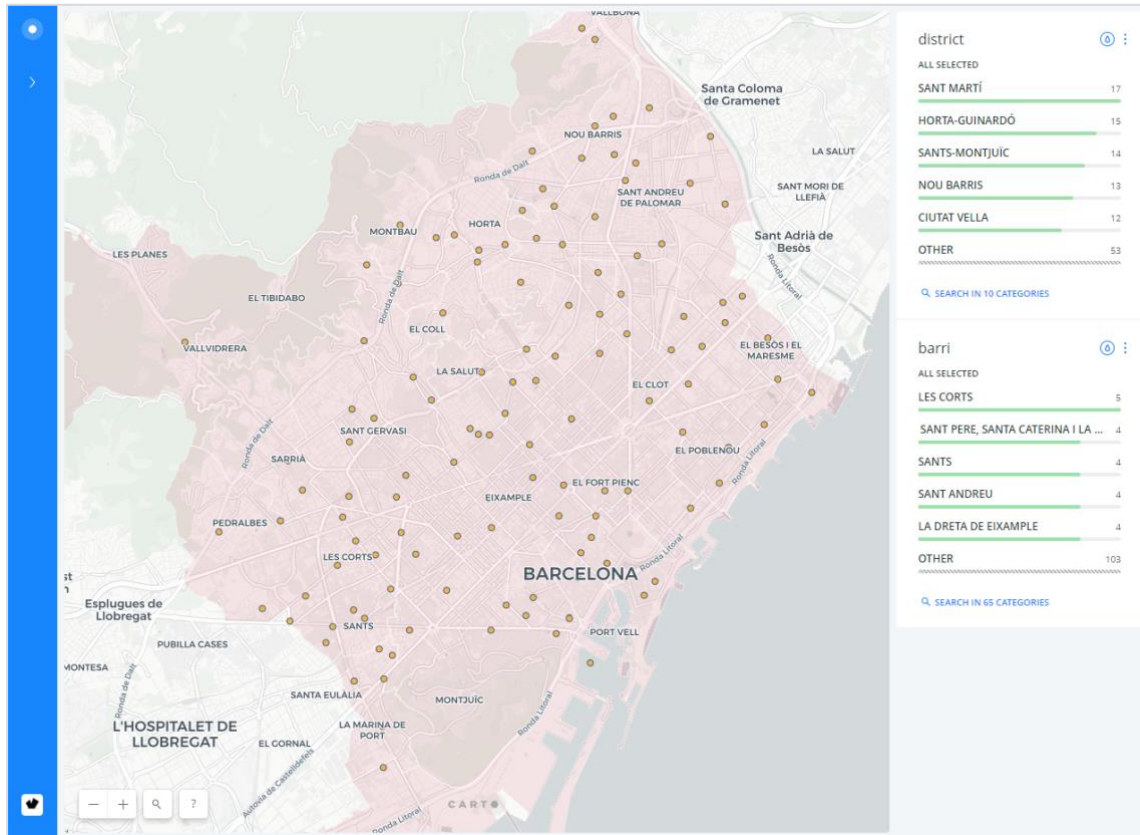
The own APIs are those provided by the teams that manage the sources of information.

- ❑ Currently, the following API resources are offered in the Open Data BCN catalogue:
 - ✓ Public offering of the Barcelona City Council
 - ✓ Provision and promotion of the City of Barcelona staff
 - ✓ 34 Geoservices WMS and WMTS of the City Council Spatial Data Infrastructure

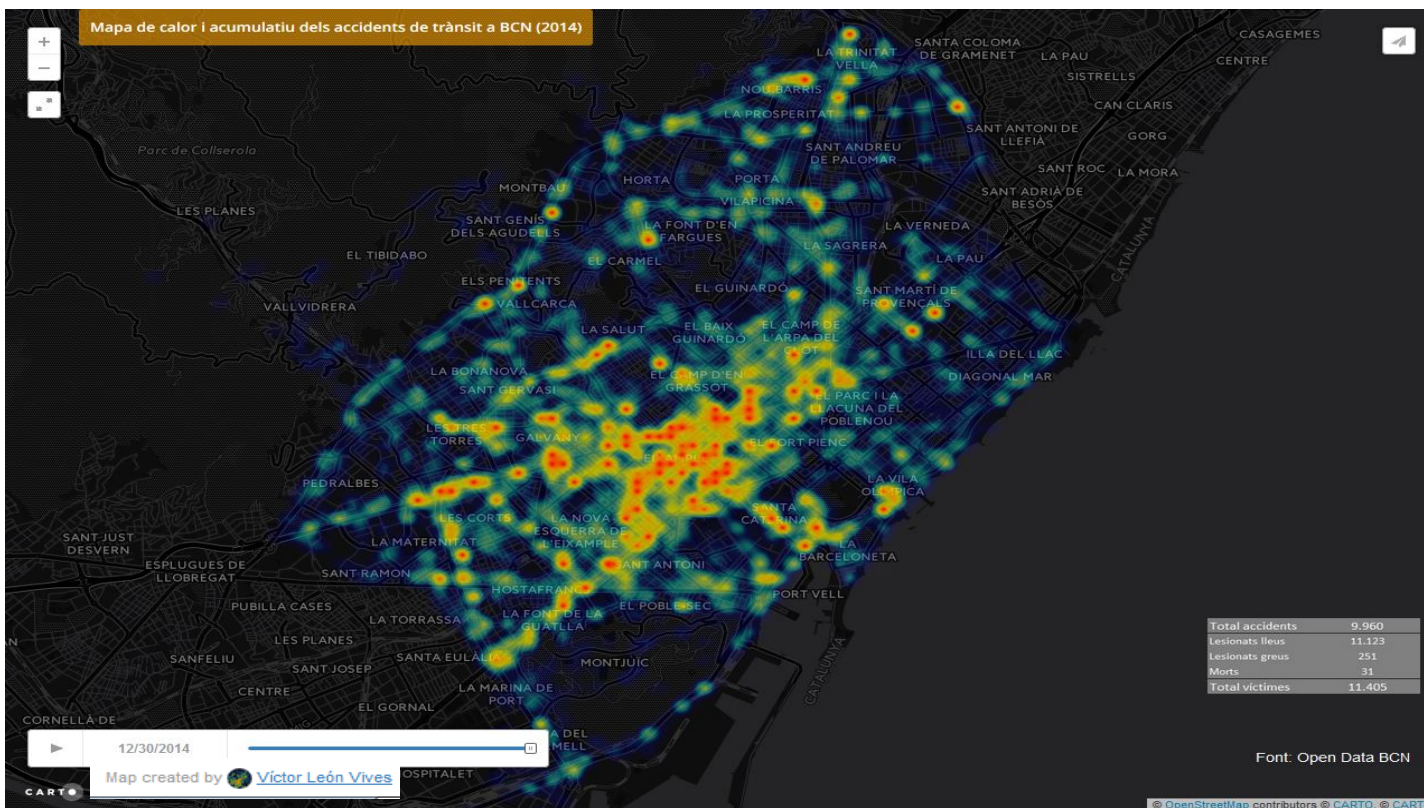
Portal - Users – Data Visualizations and Applications – Street Trees



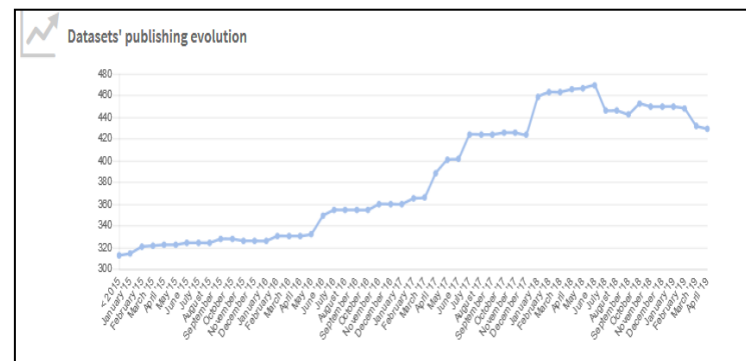
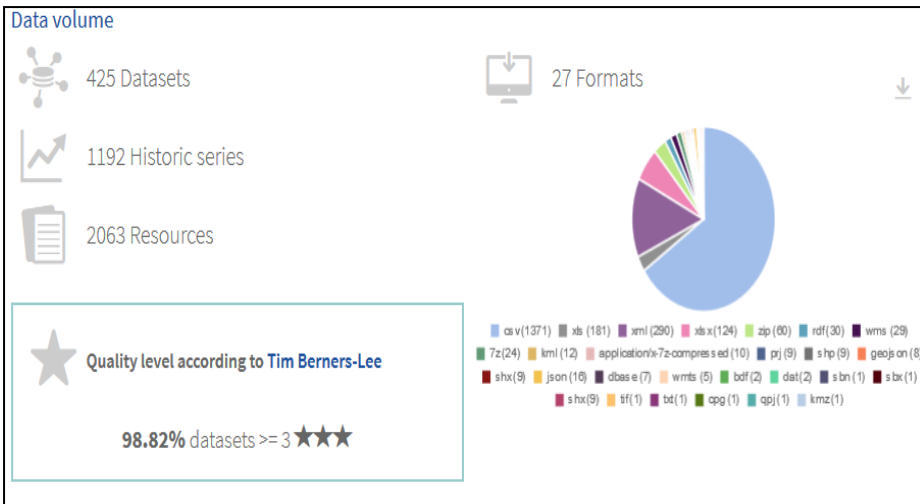
Portal - Users – Data Visualizations and Applications – Oil recycling containers



Portal - Users – Data Visualizations and Applications – Traffic Accidents



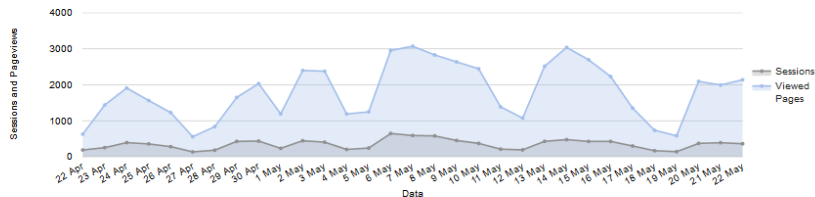
Open Data BCN: Portal - Statistics



Portal – Monthly Statistics

Monthly portal activity

Data belongs to the last 30 days. More information on the Analytics documentation.



Sessions	Unique pages	Viewed Pages	% New sessions	Bounce Rate
10,795	40,685	56,069	62,34%	41,83%

Sessions



- Català
- Castellà
- Anglès



- Spain
- United States
- Ecuador
- Italy
- France

▲ 1/4 ▼



- desktop
- mobile
- tablet

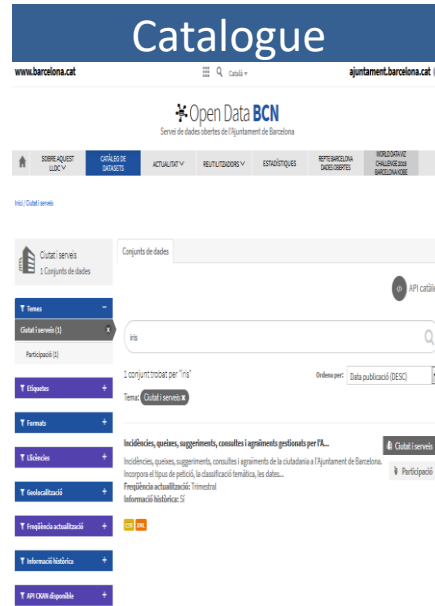


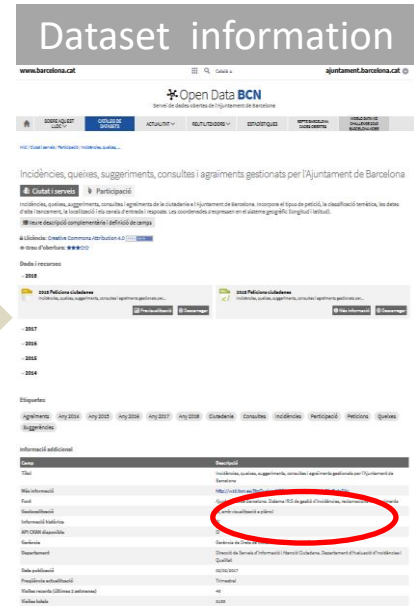
Figures since February 2017

Sessions	>= 213.100
Number of pages	>= 1.190.000
Tweets	>= 500 from @BCN_DIGITAL (Not own twitter) #opendatabcn
User requests	>=170
User's registered	More than 260 users
Linkedin	More than 750 users

Portal – Circular Reference







Link to source



Communication



Communication

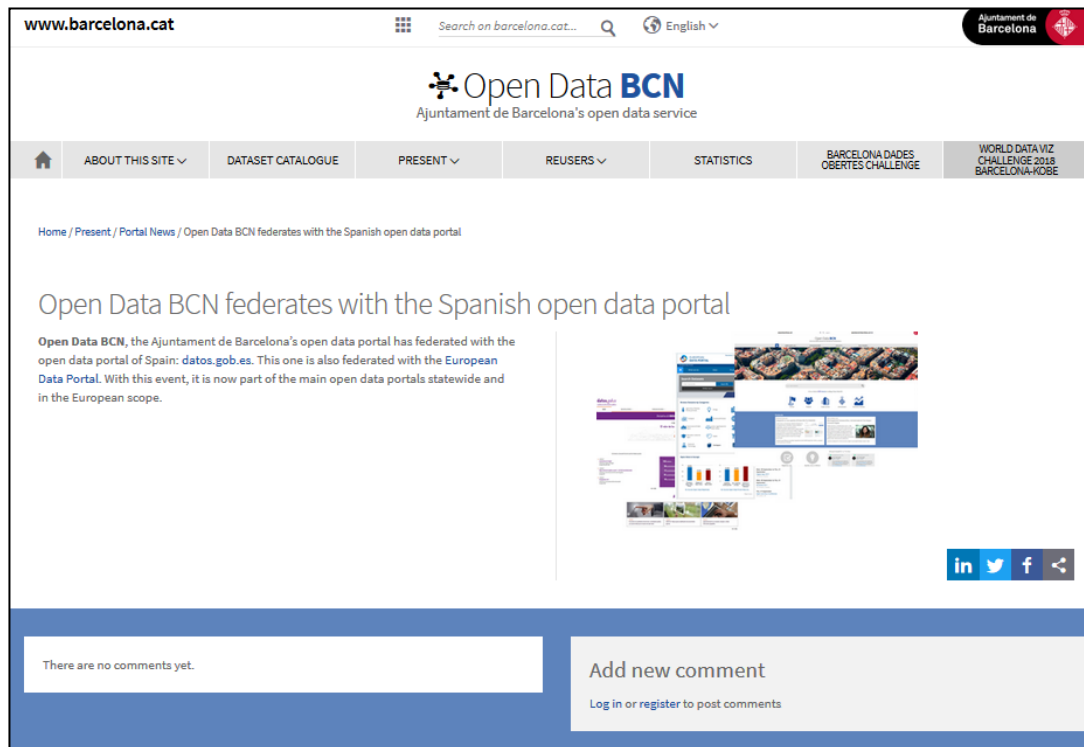
External

- Presentations for delegations: Japan, Seoul, Peru, China, United States..
- University/ Research Centers : UPF, UPC,UOC, BSC,...
- Analytics Departments : SEAT,..
- European projects: EUROCITIES, H2020, ...
- Other Open Data Events: Congress, Conferences, Hackathons, Open Data Day, Data Viz...

Internal

- Training sessions on how to implement the project. More than 120 civil servants directly related to data.
- Training sessions for different departments
- Open Data BCN in the “Ongoing training of Barcelona City Council”

Federation



The screenshot shows the website www.barcelona.cat with a search bar and language selector. The main header features the "Open Data BCN" logo and the text "Ajuntament de Barcelona's open data service". A navigation menu includes links for "ABOUT THIS SITE", "DATASET CATALOGUE", "PRESENT", "REUSERS", "STATISTICS", "BARCELONA DADES OBERTES CHALLENGE", and "WORLD DATA VIZ CHALLENGE 2018 BARCELONA-KOBE".

The article content includes a breadcrumb trail: [Home](#) / [Present](#) / [Portal News](#) / Open Data BCN federates with the Spanish open data portal.

Open Data BCN federates with the Spanish open data portal

Open Data BCN, the Ajuntament de Barcelona's open data portal has federated with the open data portal of Spain: datos.gob.es. This one is also federated with the [European Data Portal](#). With this event, it is now part of the main open data portals statewide and in the European scope.

The article features an image of the datos.gob.es website interface, showing various data visualizations and search options.

Social media sharing icons for LinkedIn, Twitter, Facebook, and a general share icon are located below the image.

At the bottom of the page, there is a comment section with the text "There are no comments yet." and a "Add new comment" button. Below the button, it says "Log in or register to post comments".



Barcelona Dades Obertes Challenge - Second Edition

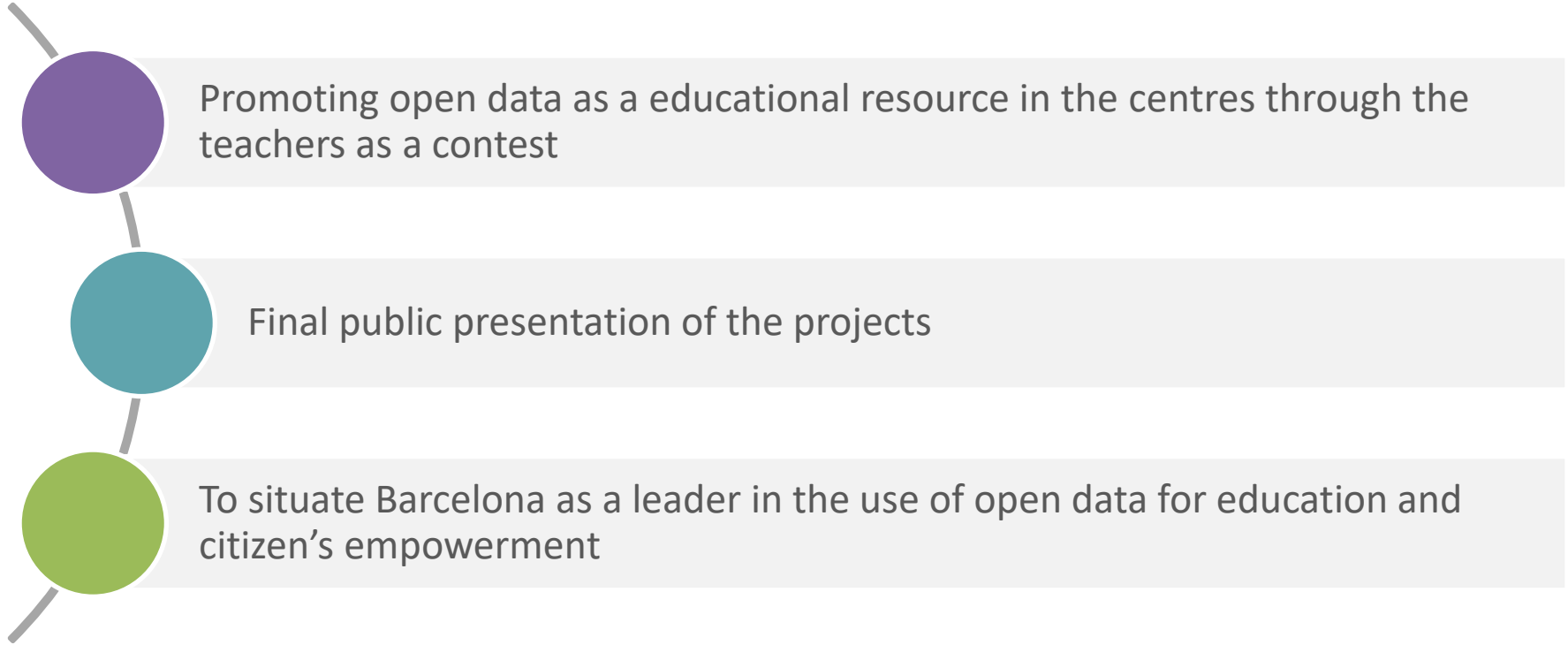




Barcelona Open Data Challenge

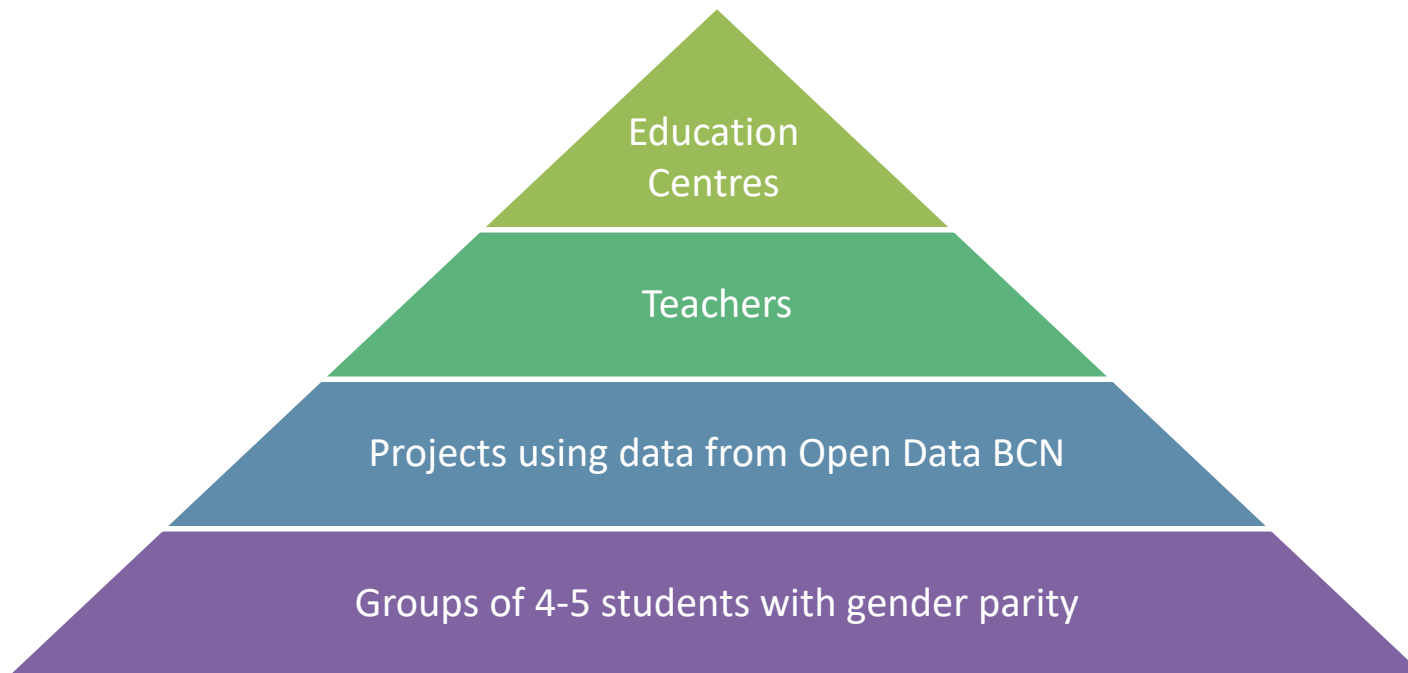
The future reusers are NOW
in school

Open Data BCN: Barcelona Dades Obertes Challenge





Open Data BCN: Barcelona Dades Obertes Challenge– Training Scheme



Open Data BCN: Barcelona Dades Obertes Challenge- Benefits

An initiative with a big
social impact

Barcelona Dades Obertes Challenge – Teacher Training

Workshops

Initial Presentation

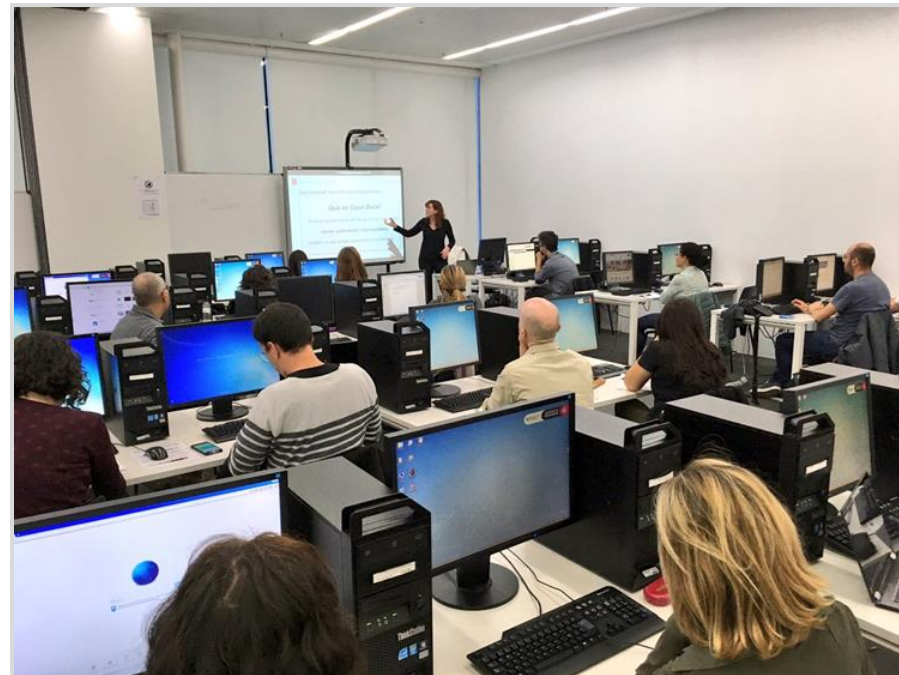
Open Data concepts and Open Data BCN Portal

Second session

Statistics and data analysis

Third session

Infographics.



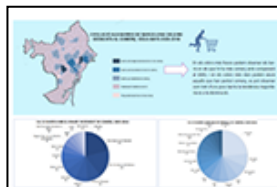
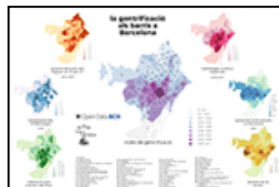
Barcelona Dades Obertes Challenge - Second Edition – Finalists Educational Centres

Second Edition

First Edition

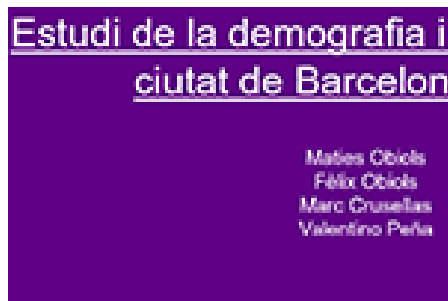
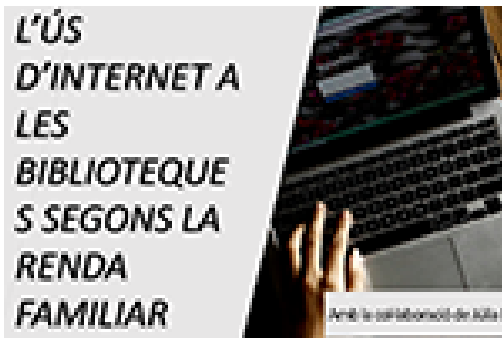


Barcelona Dades Obertes Challenge – Second – 3 Winning Projects



Final Event, 8 May 2019

Barcelona Dades Obertes Challenge – Second Edition – Final Projects



Barcelona Dades Obertes Challenge - Second Edition. Supports



- **Martin Álvarez Espinar. W3C**
- **Antje Kirchner. RTI_International**
- **Esther Huyer. European Data Portal**
- **Taisuke Matsuzaki. Kobe City Council**

Barcelona Dades Obertes Challenge - Second Edition - Diffusion

PARTICIPATION

- June 2018: Festa de la Ciència (Science Festival) (ICUB)
- October 2018: The first international conference on Big Data Meets Survey Science (BigSurv18), UPF-NYU
- November 2018: Smart City World Congress 2018

PRESENTATIONS

- 3 March 2018: OPEN DATA DAY
- 21 March 2018: GOVERN DIGITAL LOCAL 2018 CONGRESS
- November 2018: Congrès Ciutats Educadores. Cascais (Portugal)
- European Data Portal. School session.
- Open data initiative by the Spanish Government: datos.gob.es

Barcelona Dades Obertes Challenge - Second Edition. Diffusion



Info Barcelona

HABITATGE URBANISME I INFRAESTRUCTURES COOPERACIÓ EDUCACIÓ I ESTUDIS DRETS SOCIALS MÉS

Inici > Educació i estudis > Les dades obertes tornen a l'escola

> Veure les notícies al web Educació i estudis

Les dades obertes tornen a l'escola

Després de l'èxit de la primera edició, s'obre una nova convocatòria del Repte Barcelona Dades Obertes, un concurs per fomentar el coneixement i l'ús de les dades entre l'alumnat i el professorat dels centres educatius de la ciutat, estimular el treball en equip i fomentar l'esperit crític i ciutadà analitzant l'entorn i proposant accions de millora en àmbits com la mobilitat, el medi ambient o l'habitatge.

Repte Barcelona Dades Obertes

Segona edició_2019

barcelona.cat/opendata

Ajuntament de Barcelona

Notícies relacionades

CONSUMIDOR

Gran patde de ciutat per la càlida



Adia.cat

CATALUNYA ESPANYA MÓN ARTS TIC ESPORTS VIU BARCELONA ECONOMIES

Barcelona torna a convocar el repte Barcelona Dades Obertes per promoure l'anàlisi i la recerca als instituts

Publicado: 4/9/2018 13:03:43 CET

El concurs s'adreça preferentment als alumnes de 3r i 4t d'ESO i de cicles formatius i els centres interessats podran inscriure's al repte fins el proper 1 d'octubre

ACN

Barcelona.-L'Ajuntament de Barcelona organitzarà per segon any consecutiu el repte Barcelona Dades Obertes, un concurs que té per objectiu promoure l'ús del portal Open Data BCN entre els alumnes de 3r i 4t d'ESO i de cicles formatius i potenciar les seves habilitats per tractar les dades, analitzar el seu entorn i proposar accions de millora. Els guanyadors del concurs i podran visitar centres de recerca, processament i anàlisi de dades i conèixer empreses del sector tecnològic i de la innovació. Les inscripcions es poden realitzar al web del consistori fins l'1 d'octubre de 2018. De moment, nou centres ja s'hi han inscrit. "S'ha dit moltes

Estimar iPhone per la seva flexibilitat

Arriben efectiu de la policia espanyola a Salou i Vila-seca pel dispositiu de la Diada i el primer aniversari de l'1-9

Territori Adia



s://www.lavanguardia.com/local/barcelones-nord/20180904/451620993074/barcelona-torna-a-convocar-el-repte-barcelona-dades-obertes-per-promoure-l-analisi-i-la-recerca-als-instituts

LAVANGUARDIA

Directo Djokovic - Del Potro: sigue la final masculina del US Open 2018

Barcelona torna a convocar el repte Barcelona Dades Obertes per promoure l'anàlisi i la recerca als instituts

Comparte en Facebook Comparte en Twitter

04/09/2018 13:07

ACN Barcelona.-L'Ajuntament de Barcelona organitzarà per segon any consecutiu el repte Barcelona Dades Obertes, un concurs que té per objectiu promoure l'ús del portal Open Data BCN entre els alumnes de 3r i 4t d'ESO i de cicles formatius i potenciar les seves habilitats per tractar les dades, analitzar el seu entorn i proposar accions de millora. Els guanyadors del concurs i podran visitar centres de recerca, processament i anàlisi de dades i conèixer empreses del sector tecnològic i de la innovació. Les inscripcions es poden realitzar al web del consistori fins l'1 d'octubre de 2018. De moment, nou centres ja s'hi han inscrit. "S'ha dit moltes vegades que les

Más noticias

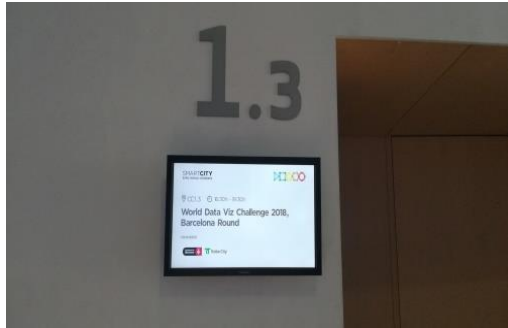
Frància vs Holanda, en directo: UEFA Nations League

US Open final Djokovic vs Del Potro, en directo

Horòscopo diari de hoy, domingo 4 de septiembre

¿Sabes cómo solucionar...

World Data Viz Challenge 2018 Barcelona-Kobe





Barcelona Digital City Plan: Links of interest

Barcelona Digital City Plan

<https://ajuntament.barcelona.cat/digital/en>

Open Data BCN

<https://opendata-ajuntament.barcelona.cat/en/>

Barcelona Dades Obertes Challenge

<https://opendata-ajuntament.barcelona.cat/en/repte-barcelona-dades-obertes>

World Data Viz Challenge 2018 Barcelona-Kobe

<https://opendata-ajuntament.barcelona.cat/en/data-viz-kobe-home>



Thank you!