Spanish Cadastre, a valuable registry

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4th April 2019

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Cadastre: Public Registry of real estate

An **official register** from the Ministry of Finances with **authoritative data**

Complete and **updated**:
Covers all territory: Urban, rustic and special real estate
Obligatory inscription of all property: by **citizens** and **public administrations**

Multiple uses and **available** to **everybody** through multiple channels, **free** of charge

Public function

Financing: basis of the property tax
Census and social aids
Protection of Rights
Planning and Management of public policies:

Urban planning, land use
Networks of services and supplies
Agrarian,
Environmental, Energy performance
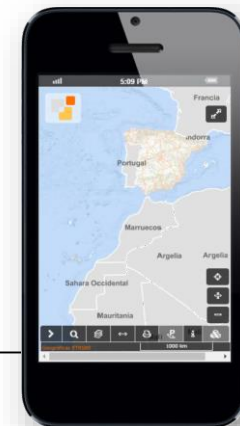Risk maps, civil protection, emergencies
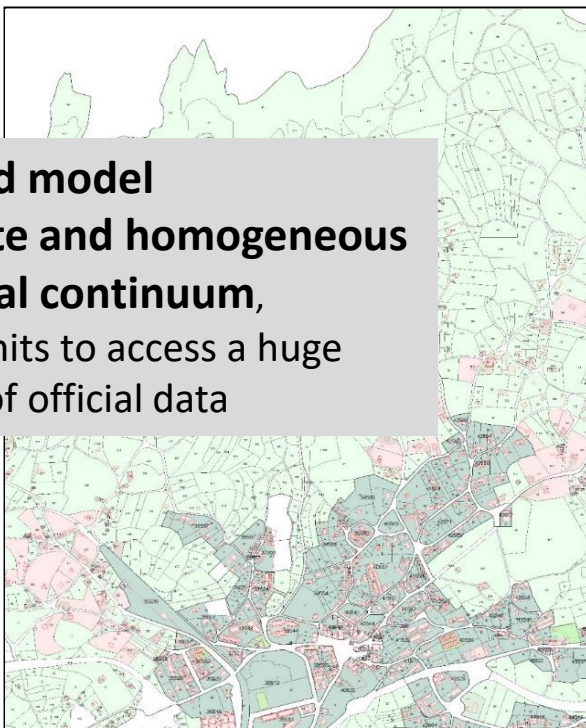Linking or support of statistical data
others

Very much used by private companies and citizens

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Main task of the Spanish Cadastre is
to describe each real estate object
and to assign a value to it.

Descriptive data of each real estate object on continuous cartography
Manages information of 78 millions properties

Standard model
Complete and homogeneous
territorial continuum,
that permits to access a huge
amount of official data

- *Real Estate Identification data:*
  - » *cadastral reference, province, municipality, addresses or location.*

- *Juridical data of real estate:*
  - » *Titleholders' name and national identity number, addresses of titleholders and the notification address, date of acquisition and rights data….*
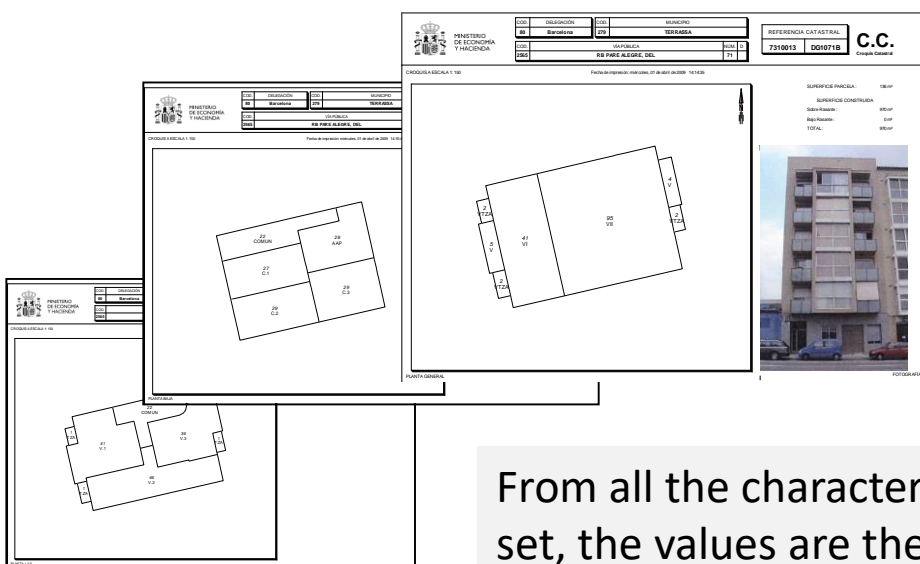
- *Physical data of real estate:*
  - » *land area, representation of the Buildings (even with the description of every floor) buildings area, class of crops, conservation status of the constructions, use (legal and actual one), construction typology, year of construction…..*

Economic data of the real estates:
value of land, value of construction and cadastral value, criteria and valuating module, real estate taxable value, exemptions and benefits.

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The **cadastral value** of each property is determined objectively from the data in the Real Estate Cadastre. (Quality, completeness and good updating are of importance)

land surface,

buildings surface,

conservation status of the constructions,

use (legal and actual one),

typology,

year of construction

Urbanism classification

Other characteristics…

All these information available by free to everybody

From all the characteristics that we include in the cadastral data-set, the values are the most valuable; economically and socially

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Cadastral Values: Reference for Spanish Public Administration.

The cadastral value is an administrative value, and it is the basis for or it is taken as a reference in relation to certain actions of the Public Administrations:

From a tax view:
  Recurrent Property Tax,
  Income Tax,
  Wealth Tax
  Tax on the Increase in Value of Urban Land,
  others.

From a non-tax view:
  expropriation,
  urban assessments,
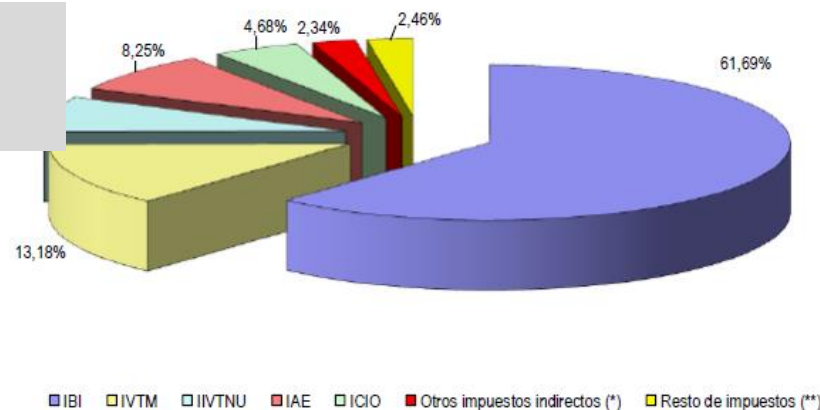 *certain types of aids,*
  scholarships and grants, etc.

64% of local fiscal income

RECURRENT real estate tax is the main income of the Spanish municipalities,

14.800 millons € aprox. 2018

14.750.899.759 €

IBI 61,69% IVTM 13,18% IIVTNU 8,25% IAE 4,68% ICIO 2,34% Otros impuestos indirectos (*) 2,46% Resto de impuestos (**)

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Indispensable for the financing of the Local Administration

Cadastre- recurrent property tax allows local financial sufficiency (also in times of crisis)

RECAUDACIÓN IBI 1990-2017

13.591 M€

In 2018: 14.800 .000.000 e.

1 euro that the government invests in Cadastre

Generates
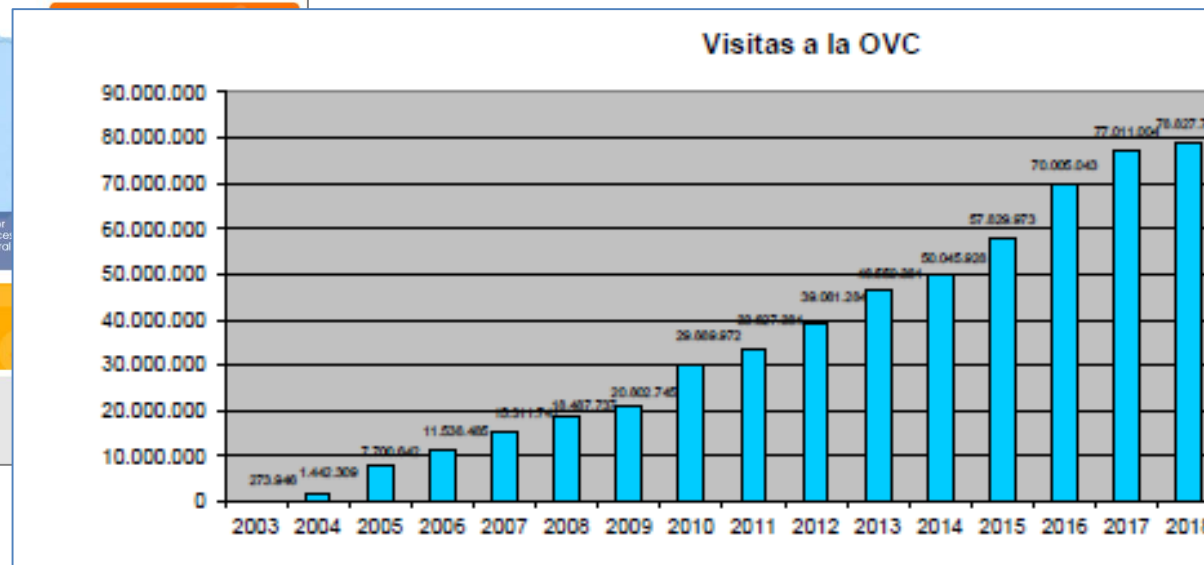
7 euros of income for the municipalities

And also indispensable for many public policies and private uses

electronic office
https://www.sedecatastro.gob.es/

Serving **daily 1.1 million consultations and almost 21.000 certificates**

Enabling **maps downloads** at a rate of over **180 Milions per year**

TOTALLY FREE OF CHARGE

And also indispensable for many public policies and private uses

Easy to use

Viewer that allows users to navigate from an overview of the complete territory to approach each one of the parcels, buildings and units and also through the map access to the most relevant alphanumeric characteristics of them.

Download service of massive graphic and literal information (several standards, INSPIRE etc..)
Many other services adapted to users

Private users savings

	2012	2013	2014	2015	2016	2017	2018
Saving in number of hours	2.800.674	3.246.573	6.174.663	7.694.667	8.253.567	8.867.987	9.120.201
Monetaring savings	72.064.926	49.270.251	135.403.871	105.293.298	112.678.498	115.723.615	120.265.784

Cadastre is determinant for protection

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Important uses "not easily transform in economic value

Rights Protection:

✓ Property rights extended to all real estate.
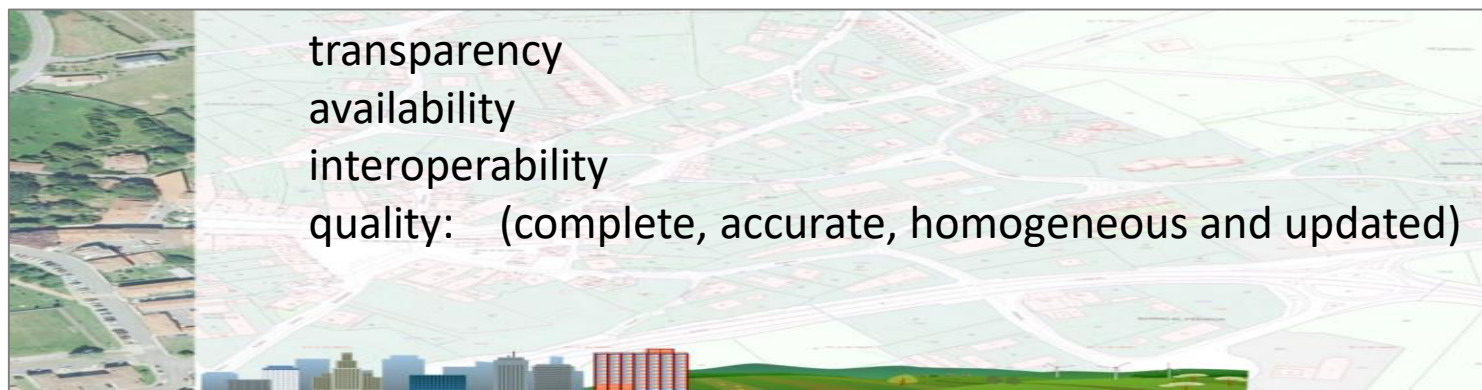   Private and Public (patrimonial and public domain)
✓ Other rights (agricultural subsidies) , restrictions (urbanism) and responsibility
--- but also compensations : e.g. floods, earthquakes, etc.

Environmental Protection:

✓ Delimitation of restricted areas
✓ Attribution of energy efficiency in real estate
✓ other uses………as agricultural planning and Fire Fighting Improvement

Personal Protection:

✓ Use for Civil protection (e.g.: police and firefighters use height and structure of building for Catastrophe Management------- Risks, access, evacuation)

transparency
availability
interoperability
quality: (complete, accurate, homogeneous and updated)

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Cadastral data offers many possibilities in the digital society: 2 examples: Tax Agency and Statistics Office

The General Directorate for Cadastre publishes official statistics on cadastral data and the recurrent property tax

- N º urban real estate (disaggregated by uses),
- cadastral value of urban real estate (also by uses),
- soil and construction value,
- n º urban parcels (built and unbuilt),
- urban parcels according to area,
- number of rural parcels, sub-parcels etc…,
- cadastral value of rural areas (disaggregate by crop type etc..).
- Units by buildings
- Category, antiquity and other characteristics of these units
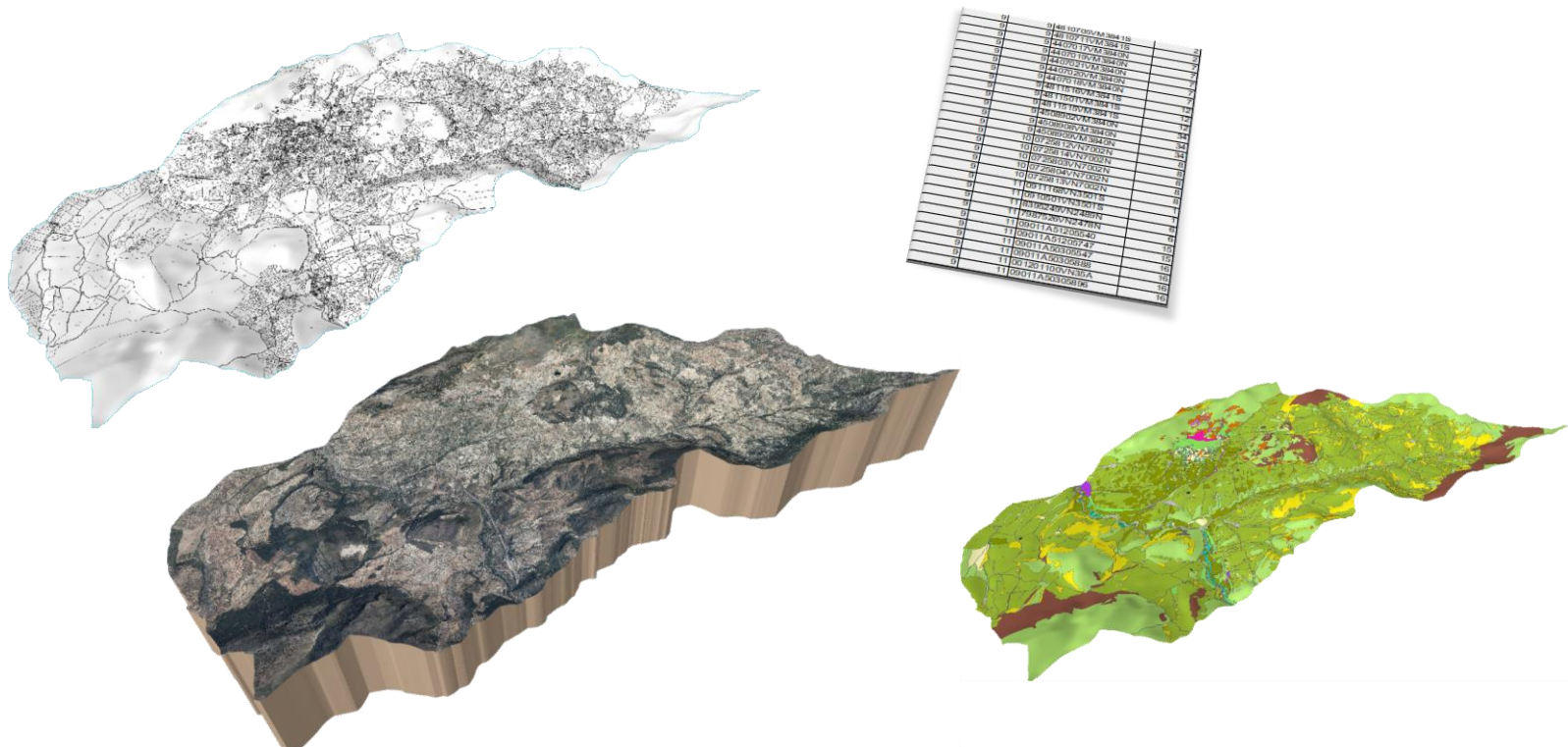- cadastral value by units, by titleholder etc…
- Vacant land ,...

by municipality, province, regional and nation.

Official value

- Average market value of real estate

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Cadastral data offers many possibilities in the digital society:
2 examples: Tax Agency and Statistics Office

The cadastral database also has many other data of Real estate of interest for both national policies and the European Union;

All these data are georeferenced and susceptible of mapping at different levels for their better understanding for the users.

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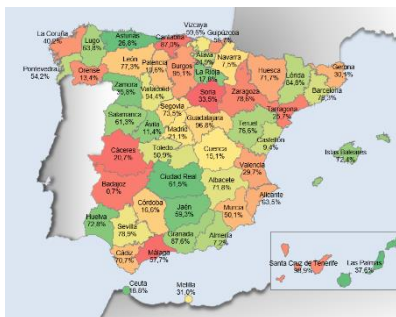6 - 7 June 2019
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Cadastral data offers many possibilities in the digital society:
2 examples: Tax Agency and Statistics Office

Statistic office uses cadastral data for merging statistics and geo-spatial information:

Mainly National Statistic Institute uses cadastral data to geolocated information in all their field works, but also uses other cadastral information in their surveys.

NSI access via web in any moment to continuously <u>updated</u> cadastral information. And they can download also the variations in a period automaticaly
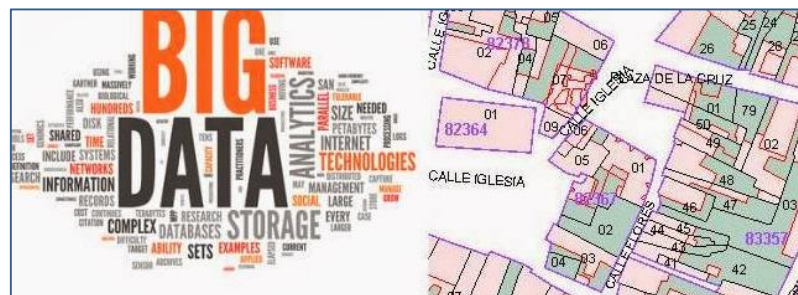
For example

In order to elaborate the last **Census of Population and housing** 2011, the NSI changed its methodology and worked on cadastral information.
NSI not only used the cadastral cartography as base, but they used the associated cadastral information as for example the units within a building or the uses of each unit of the real estate.

The NSI also used the graphical and alphanumeric cadastral data in the elaboration of the **Agrarian Census.**

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Cadastral data offers many possibilities in the digital society:
2 examples: Tax Agency and Statistics Office

The Tax Agency uses 'big data' tools to cross cadastral data with data from various sources to prosecute tax fraud.
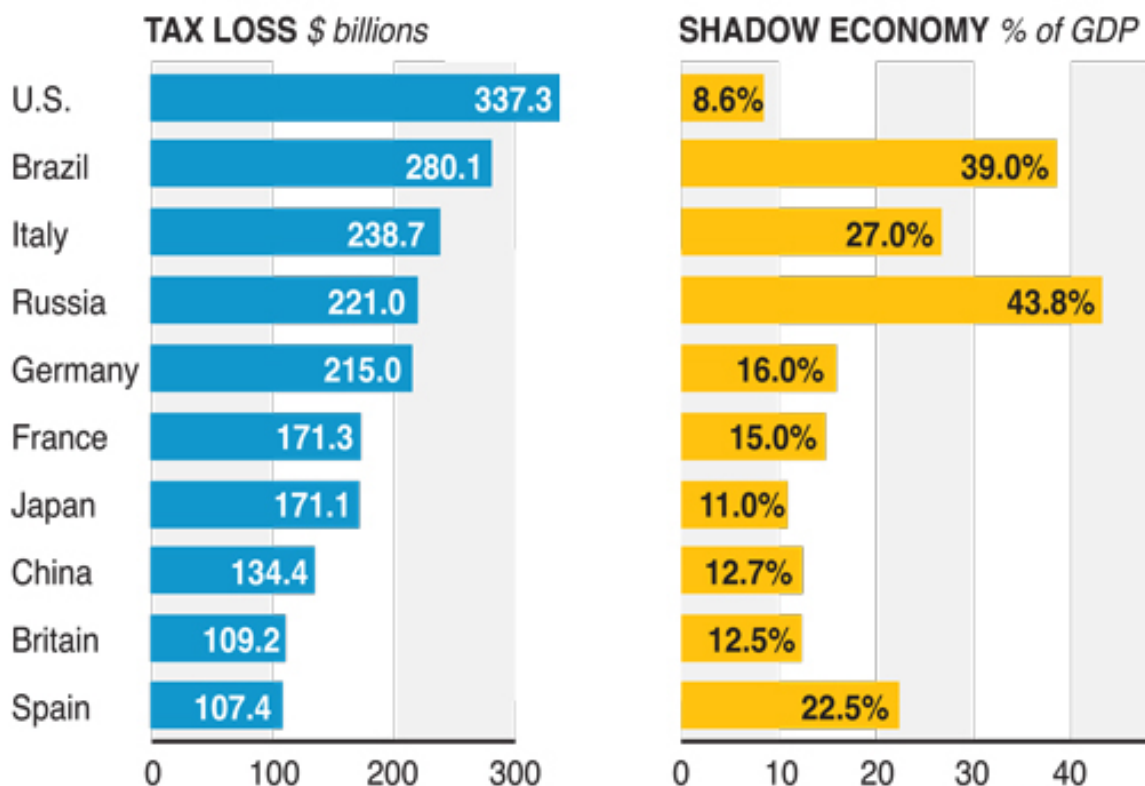

News in newspaper:

Combining cadastral data with other data using big data and artificial intelligence techniques facilitates

- the determination of patrimonial changes and taxable events to be regularized,
- as well as the analysis of a permanently updated situation of assets and rights, for the purposes of declaratory control .

INTELIGENCIA ARTIFICIAL

Proyectos piloto en el Catastro
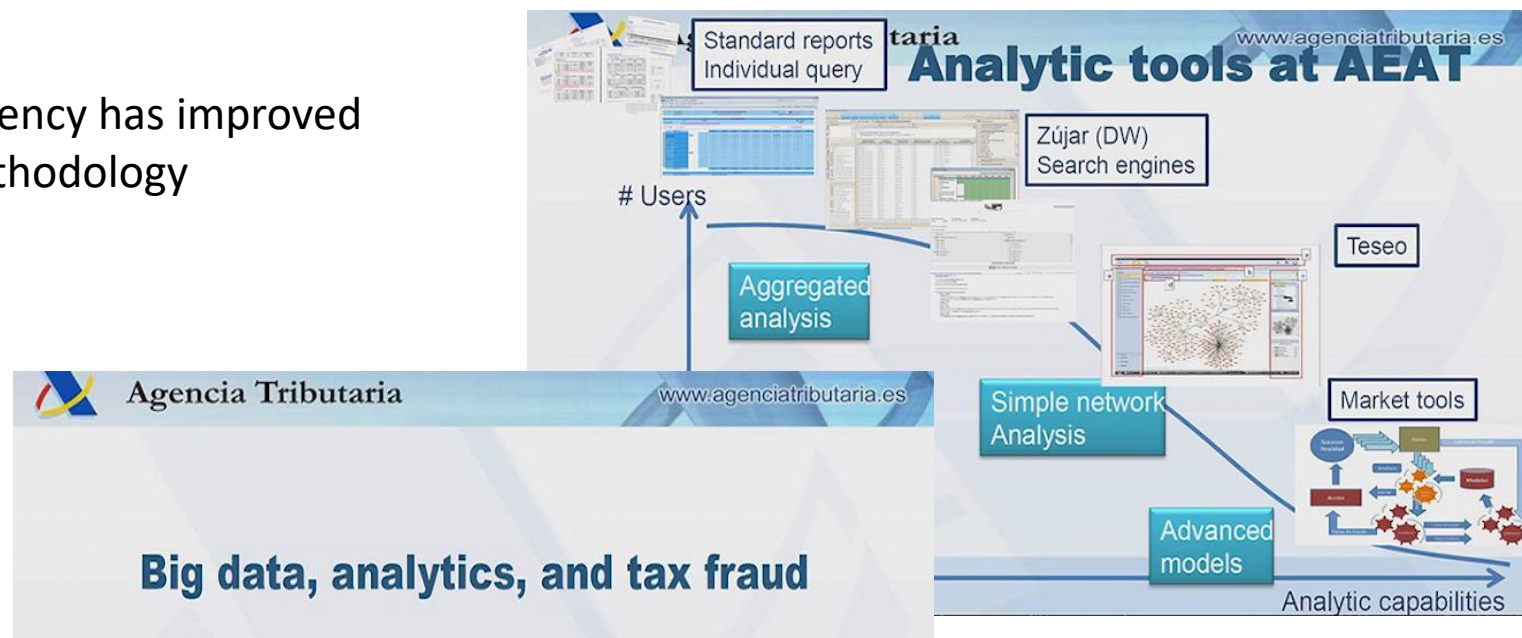
Una red para valorar Madrid

TOP TEN TAX EVADERS

Comparing a World Bank report to a Heritage Foundation report, British accountant Richard Murphy estimates global tax evasion at five percent of the global economy and found these ten countries had the largest absolute levels of evasion

TAX LOSS *$ billions*

Country	Tax Loss
U.S.	337.3
Brazil	280.1
Italy	238.7
Russia	221.0
Germany	215.0
France	171.3
Japan	171.1
China	134.4
Britain	109.2
Spain	107.4

SHADOW ECONOMY *% of GDP*

Country	Shadow Economy
U.S.	8.6%
Brazil	39.0%
Italy	27.0%
Russia	43.8%
Germany	16.0%
France	15.0%
Japan	11.0%
China	12.7%
Britain	12.5%
Spain	22.5%

Source: Richard Murphy, Tax Justice Network

REUTERS

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Tax Agency has improved
its methodology

The ' Big Data ' analysis is the process of examining large amounts of data from
a variety of types to discover
      hidden patterns,
      unknown correlations
      and other useful information.

 Big Data can deal with huge amount data, but also can combine data of
different types: structured and unstructured

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These new techniques allow the tax agency to combine many data available for them with **cadastral data (values, cadastral references, addresses, title holders etc..)** to identify
Screen companies , hidden assets, true ownership, related operations, professional activities, or property alterations and transfer of rents.

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Combining: cadastral ref. + location + real estate value + characteristics of real estate + owner (National identity number) + other data of tax agency

Some examples:

The expenses on real estates that are paid directly or indirectly are compared with statements to search for inconsistencies:
- Undeclared patrimonial gains.
- Patrimonial gains unjustified
- Real estate sales to the family environment for a much lower price than the market
- etc

Rental statements far below the market.
Rents in areas of value that do not correspond to the salary.

Undeclared vacation rentals

In rural areas: calculation of the patrimonial value and of the agrarian income according to the crop and use extracted of the cadastral database

Many other

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Using cadastral data combined with other data with advanced data analysis systems permits

- the selection of taxpayers and activities for sampling,
- the creation of tax risk profiles,
- and the establishment of checks with greater speed and accuracy.

It will lead to **predictive analytics** to take **automatic decisions** in tax procedures

Also the preparation of PREDECLARATIONS:
To present to the taxpayer the assets that the administration knows: **real estate**, financial and corporate ..... to help him declare

Through the use of cadastral data with data analytics in the core of its business the Spanish Tax Agency is improving its results year by year, and accomplishing its mission in a more effective and efficient way.

Conclusions

Spanish Cadastre:

- Provides information to the totality of the Public Administrations
- Is fundamental for local funding
- Public and private users continuously are finding new purposes and developing existing purposes.

It has strong presence and big potential in the Digital society

       As for example

- combining statistics and geospatial data
- using cadastral data with big data technologies for stop taxation fraud

Serving **daily 1.1 million consultations and almost 21.000 certificates**
Enabling **maps downloads** at a rate of over **180 M per year**

For all this Cadastre is much more than a real estate data record

Fundamental for

    Social Cohesion,

    Territorial structuring,

    Socio-economic development

Big interoperable platform for territorial information Services

One of the great transversal public services of the country

Thank you for your attention