

# CENTER FOR METROPOLITAN STUDIES

Eduardo Marques DCP/USP and CEM

www.fflch.usp.br/centrodametropole/



- Started in 2000 15 years
- One of the leading Social Sciences Centers in Brazil, dedicated to researches on inequality and public policies in large cities.
- Located at Universidade de São Paulo and Cebrap
- Financed by Fapesp (Cepid) and CNPq (INCT) between 2009 and 2013
- Researchers form several disciplines demography, political Science, sociology, anthropologists
- Research, Transference and Diffusion



Main research focus on the processes of inequality reproduction in the metropolis.

Since 2000, 51 books, 7 abroad, 47 thesis, approximately 434 journal articles, 18 working papers and 165 book chapters in Brazil and abroad.



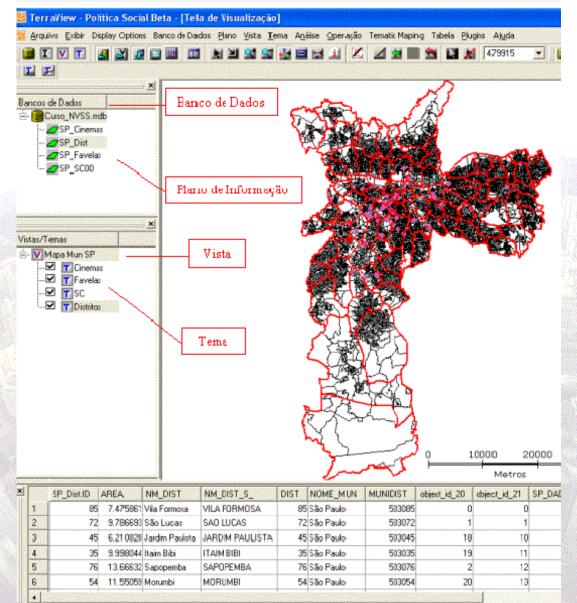


- Affirmative action initiatives in education
- Public schools: incentives, teachers and inequalities
- Labor Market, policies and opportunities
- Access to health services
- Intra-urban mobility and segregation
- Territorial inequalities (at the national scale)
- Beyond cash transference
- Electoral competition and democracy
- State format, politics and redistribution
- Governance patterns in large metropolises
- In the margins of the city
- Institutionalized arenas of social participation

## B. Transference I – Data, software and courses







## **Terraview Política Social**

Courses

## Public dissemination of databases



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## Transference



MASP

Objectives

■ Databases ■ Map Servers

TerraView Social Policy
Software

Public Sector

Courses

| Databases

CEM has made available to the general public geocoded databases in downloadable format. The archives present information organized and systematized by the team at CEM.

The data was taken from research or from gathering primary information in various public databases and organized in order to allow the application of their contents in research and social transformation projects.

On the digital databases, the following information can be found:

### Demography

Demographic census for 1991 (Metropolitan Region of São Paulo by census tracts) Demographic census for 2000 (Metropolitan Region of São Paulo by census tracts)

## Social Inequality

Map of Social Vulnerability (City of Sao Paulo by census tracts)

### Territorial Divisions

Administrative Districts of the Sao Paulo Metropolitan Region
Municipalities of the Sao Paulo Metropolitan Region
Postal Code Sectors of the Sao Paulo Metropolitan Region
Administrative subdistricts (Subprefeitures) of the City of Sao Paulo
Cartographic digital database of shantytowns (favelas) of the City of Sao Paulo

### Education

Public schools - Geocoded databases of the Metropolitan Region of Sao Paulo, from the public school census 2001

### **Electoral Results**

Electoral Results in the Metropolitan Region of São Paulo between 1994 and 2006.

### Businesses

Central list of Businesses (IBGE, 2000)

### Street Maps

Digital Street Map of the municipality of Sao Paulo

### Health

Authorization for inpatient care (AIH) - Databases of Inpatient Care at Hospitals (SUS) in the Metropolitan rea of Sao Paulo.

Hospitals and Clinics - Databases of public clinics and hospitals in the Sao Paulo Metropolitan Area - source of information: DATASUS for 2001.

Note: For those users who would like to work only with the data tabulated, make an extra copy of the archive in .dbf format.

To download CEM's databases, please complete the registration form.

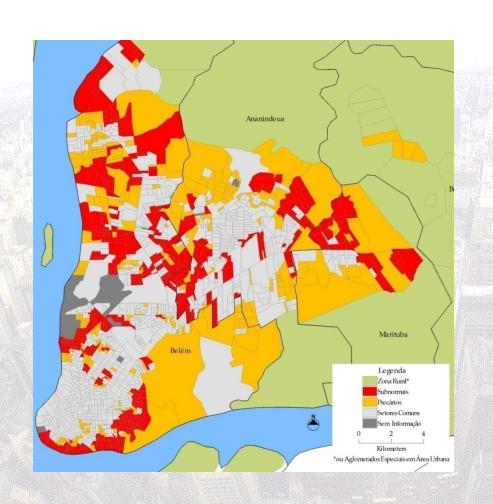


New data

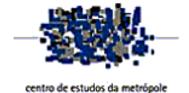
# Transference II - Applied research for policy decision

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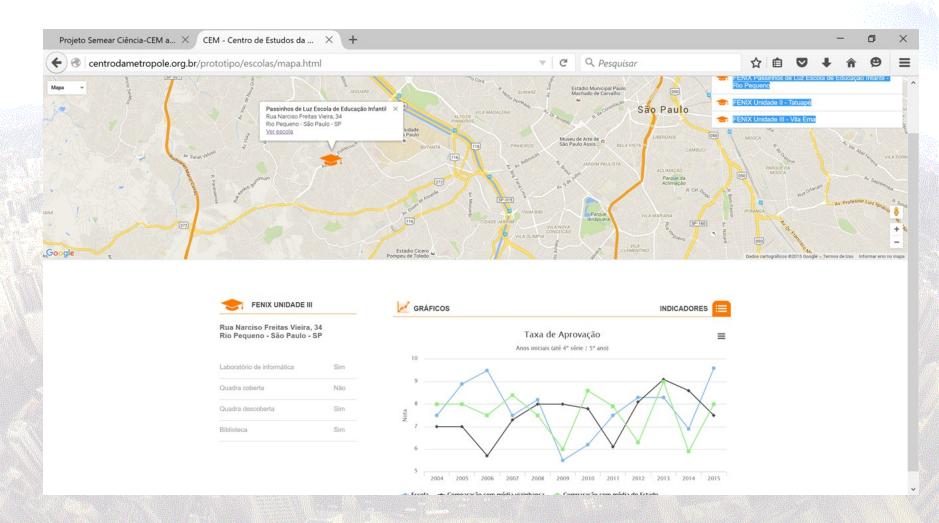
Example: Ministério das Cidades, 2000

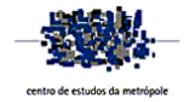


# Transference III - School location and neibouring areas



http://centrodametropole.org.br/escolas/





## Transference IV: ReSolution

In development in association with CASA/UCL; Poli/USP; UFABC and INPE:

- 1.A webportal with technology transference from CASA for the UK (except Scotland);
- 2.An agent-based model for urban mobility.

The Portal propotype is hosted at InterNuvem (USP).



## We included variables from:

- 1.The Census tracts;
- 2.The Census weighting areas;
- 3.Transportation.

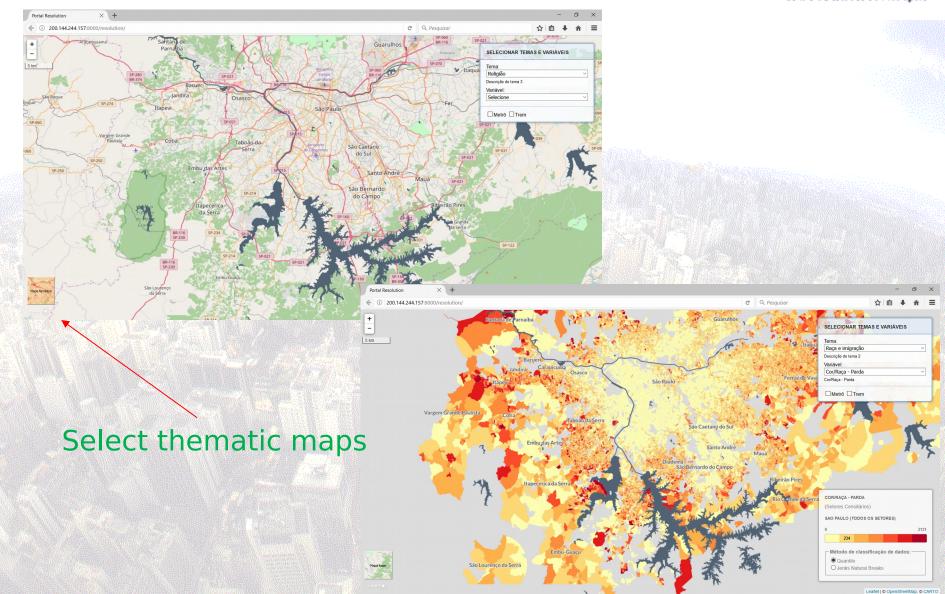
Over a 'cosmetic layer' with submunicipal and municipal boundaries, rivers, large green areas and large institutional areas.

Depending on scale, the information of CT or WA is shown.

# Base maps and thematic maps

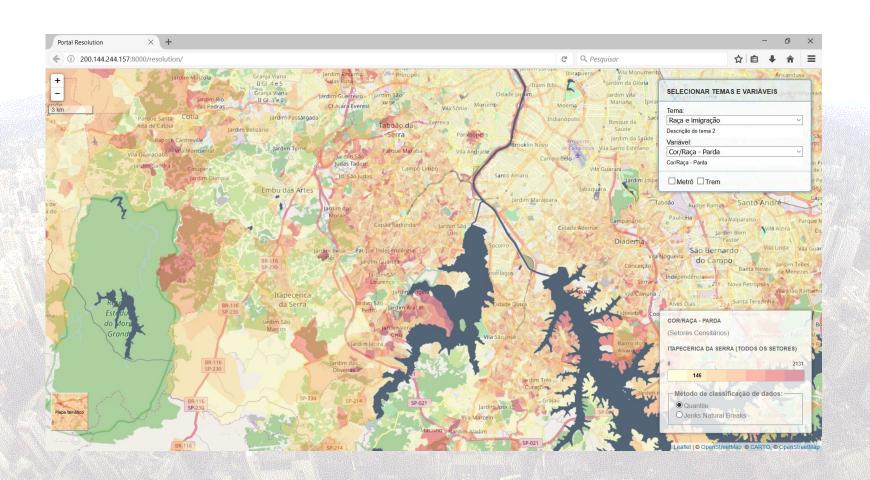


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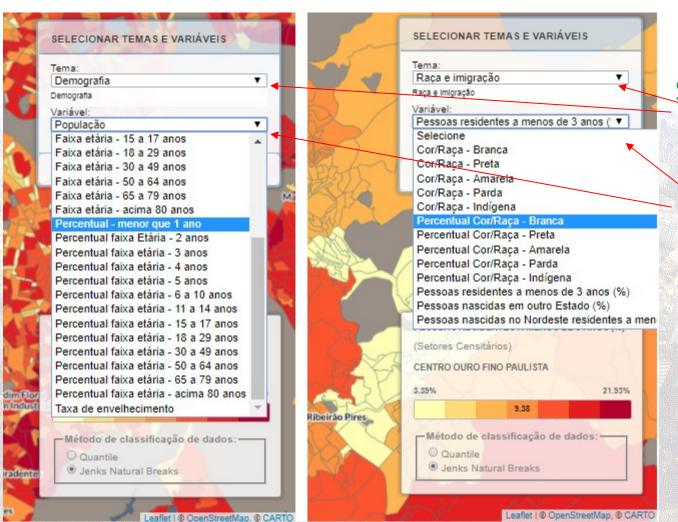




# Third option: both



# Layers can be selected through menus (Drop Down Lists);

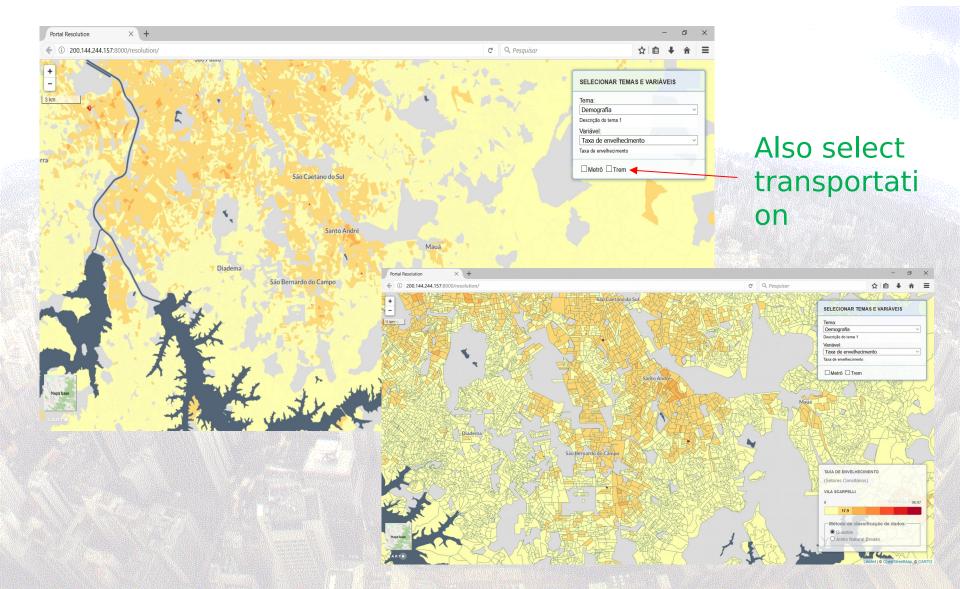


Select themes

Select variables

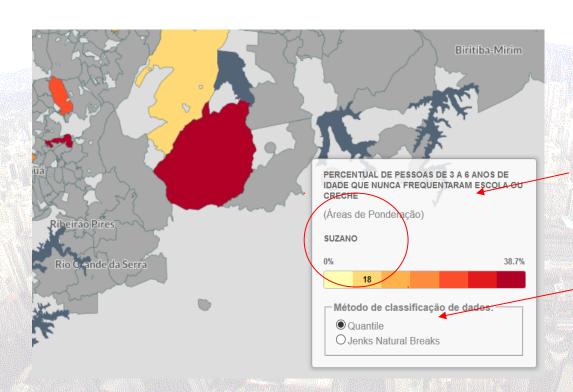


# Dynamic borders, depending on scale



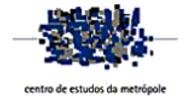


# Thematic map representation



Interactive access to data (of the unit under the mouse)

Quantile and Natural breaks



# Data layers selection

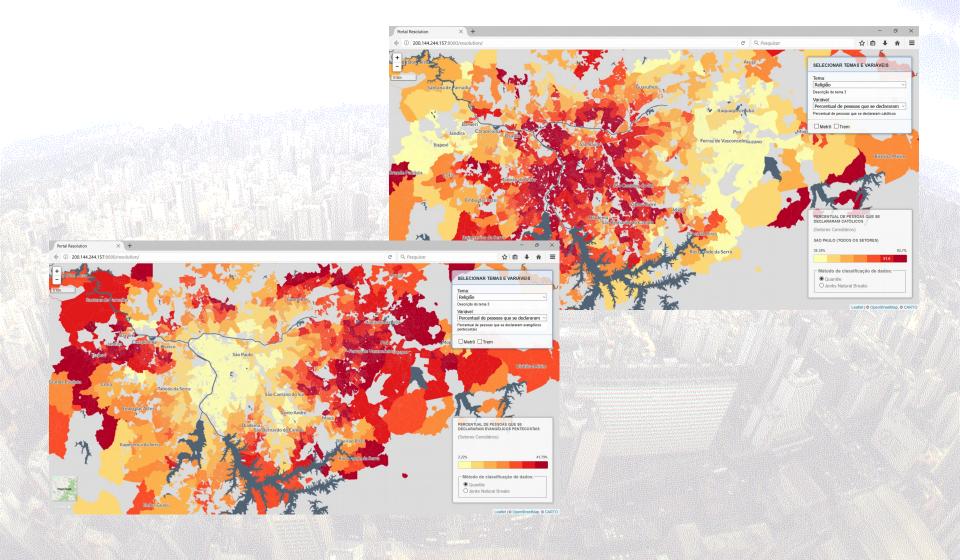
The following themes are available at the prototype, referring to the layers of the portal 50 variables, but soon 130):

- Demography;
- Race and immigration;
- Religion;
- Education;
- Income and work;



# Some examples: Religion

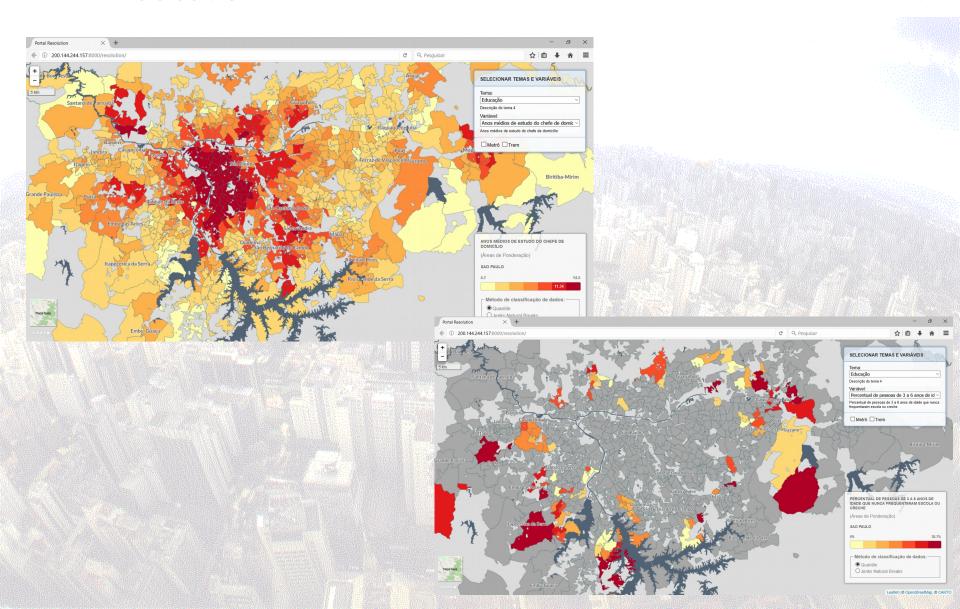






## **Education:**







## **Technical details**

The portal uses the following technologies:

- Carto (previously CartoDB);
- Leaflet.js;
- Javascript/Jquery;
- OpenStreetMap;
- Google Maps







OpenStreetMap





# Future development: Dynamic graphs

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