# Cartagena Data Festival

Better data for a better tomorrow

#DATA2015

**Wifi**
Network: casa1537
Password: venue1537

Cartagena Data Festival | Better data for a better tomorrow

# Geo Big Data 4 Mass Collaboration

## Speakers:

Javier Carranza, Director, GeoCensos, Argentina
Taissa Abdalla de Souza, Taissa Abdalla F. de Sousa, Data Visualization at IBGE, Brazil
Olga Henker, Hackathon Lead, GeoCensos, Colombia
Jeffrey Villaveces , Information Unit, UNOCHA, Colombia

# Map of the side event

## Part 1: Introduction and Stakeholders´ ideas 30 mins

## Part 2: Posters and presentations of Geo Big Data experiences 60 mins

# Map of the side event


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# Geo Big Data 4 Mass Collaboration

## Snapshots:


Sabina Talero, Independent Researcher, Colombia

Gabriel Dicelis, Geo Node

Louis Remmondin, CIAT

Ariel Nuñez, WorldBank

Ricardo López Valverde, Observatorio Opinión Pública Bolivia


# What is geo Big data?

**According to ESRI:** *Visualizing and analyzing big amounts of data in a way that reveals territorial patterns, trends, and relationships that reports don't. This includes data of disparate places, streams, or web logs*

**According to OSM :** *This is a recent trend, being analized in last OSM in Buenos Aires as the proliferation of mobile devices that are connected to the Internet, location based services. Challenges for them are locating a large number of objects, e.g. connected cars, on a map.*

# Why geo Big Data?

**Excerpt from the Open GIS Consortium Vision (1994)**

*"Approximately 80% of business and government information has some reference to location, but until recently the power of geographic or spatial information and location has been underutilized as a vital resource for improving economic productivity, decision-making, and delivery of services. We are an increasingly distributed and mobile society. Our technologies, services, and information resources must be able to leverage location, (i.e., my geographic position right now) and the spatial information that helps us visualize and analyze situations geographically."*

# Who has set the agenda? What about national statistics offices tradition?

1. August 2013 John Dunne, of the CSO Ireland, “data can be processed through cloud computing by third-party providers”
2. Sept 2013 Struijs / Daas from CBS : Great impact. Paradigm shift from a survey oriented to a more secondary data-focussed orientation
3. Mostly European and Asian orgs are influencing, such as ECE, Eurostat, OECD, ESCAP but next: World Statistical Congress to be held from 26 to 31 July 2015 in Rio de Janeiro, Brazil

# Why geo Big Data for NSOs?

1. Geographic advances has evolved into a multilayered one, not only  multidimentional as in traditional statistics, but also with massive information capabilities

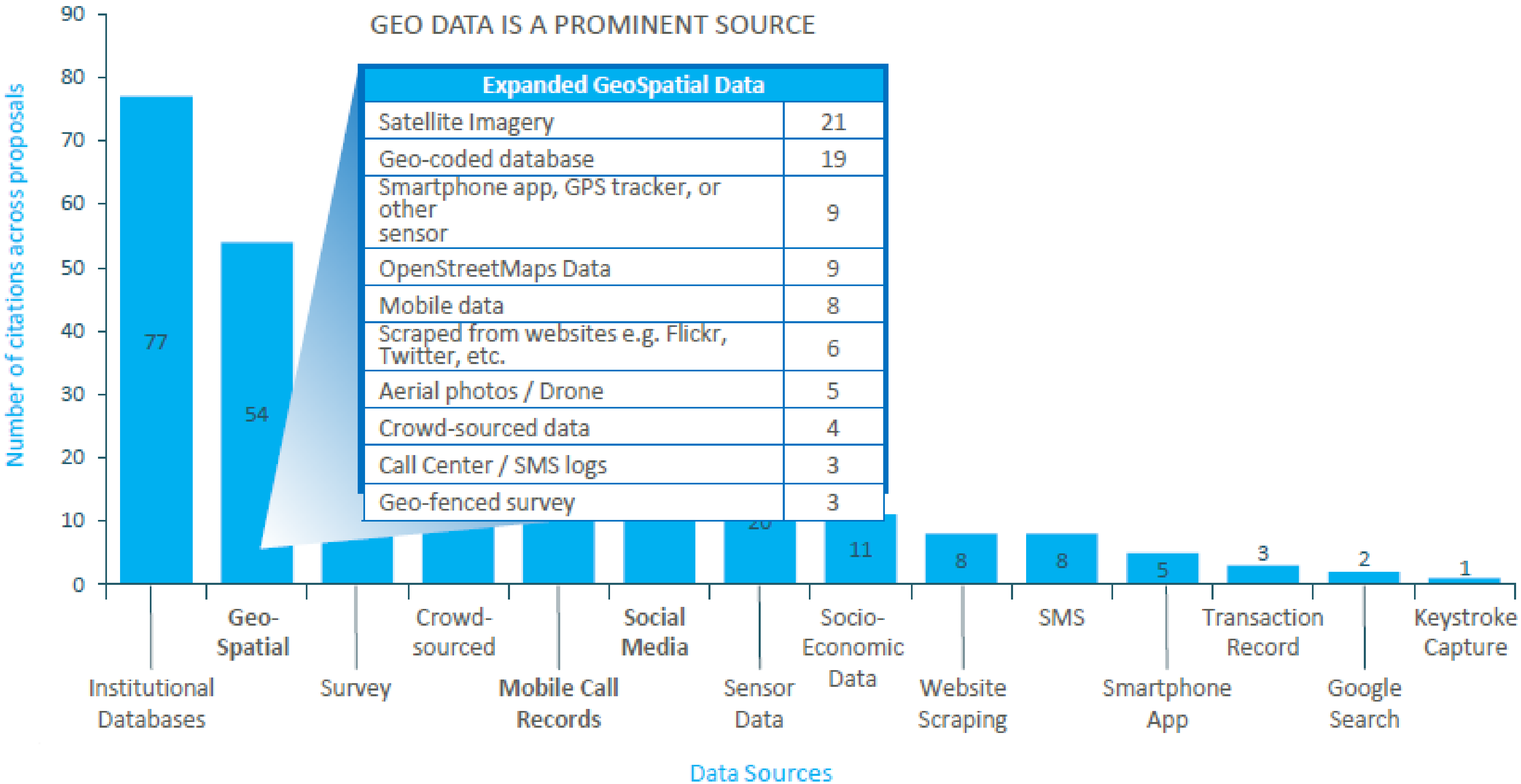
2. Data are in general set in geographic context, territory adds information

3. Technologies have exponentially developed to process geographical data that were non existent when statistic offices where created

4. More sophisticated and efficient collection methods and technologies that challenge survey traditional statistics (pasive crowdsourcing / gps pda).

# Top Big Data sources

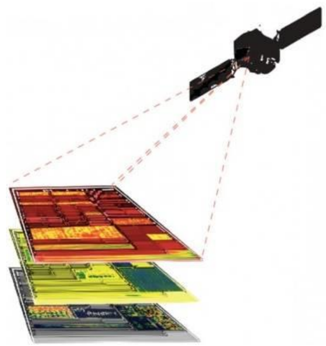
Geo and satellite prominent, call records, crowd-sourced, social and traditional sources cited in proposals to big data competition




| Expanded GeoSpatial Data | |
|---|---|
| Satellite Imagery | 21 |
| Geo-coded database | 19 |
| Smartphone app, GPS tracker, or other sensor | 9 |
| OpenStreetMaps Data | 9 |
| Mobile data | 8 |
| Scraped from websites e.g. Flickr, Twitter, etc. | 6 |
| Aerial photos / Drone | 5 |
| Crowd-sourced data | 4 |
| Call Center / SMS logs | 3 |
| Geo-fenced survey | 3 |

# How is geo big data collected?

1. Sensor network sources
2. Satellite imaging
3. Road Sensors
4. Climate Sensors
5. Tracking device sources
6. Mobile telephones
7. Global Positioning System (GPS)



# Snapshots of Geo Big Data