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# Open Data Strategies in public transportation

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ACCENTURE



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# Getting full value from Big Data and analytics requires two steps – collect & measure, visualize & analyze - to enable actions and reach outcomes



INSIGHT

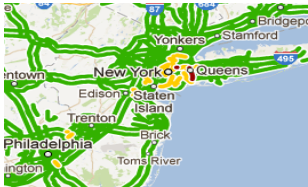
**VISUALISE & ANALYZE**

**ACTION & OUTCOMES**

DATA

**COLLECT & MEASURE**

Analytics Engine



Source : Accenture Analysis

# Deriving insight from data requires first to study the typologies of Open data

## Open data research protocol

### Geographical scope

**6 cities:** Paris, New York, London, Singapore, Toronto, Madrid

### Sources:

Public Transport authorities web site  
Open data government web site

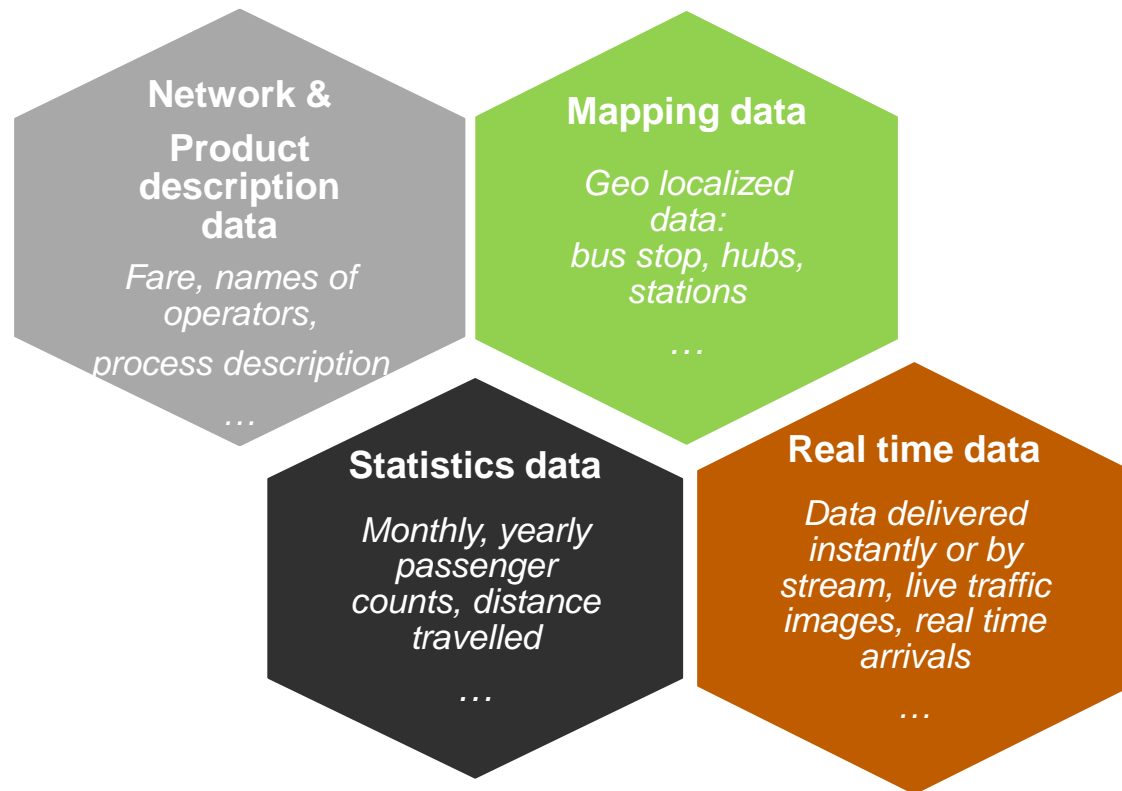
### Analyses:

- By types of data or categories (#4)
- By modes: bus, metro, cycling, river, road
- By format (XLS, PDF, XML, JSON, SHAPE, GFTS ...)

### Research period:

April 2013 & May 2014

## The different categories of available transportation open data:

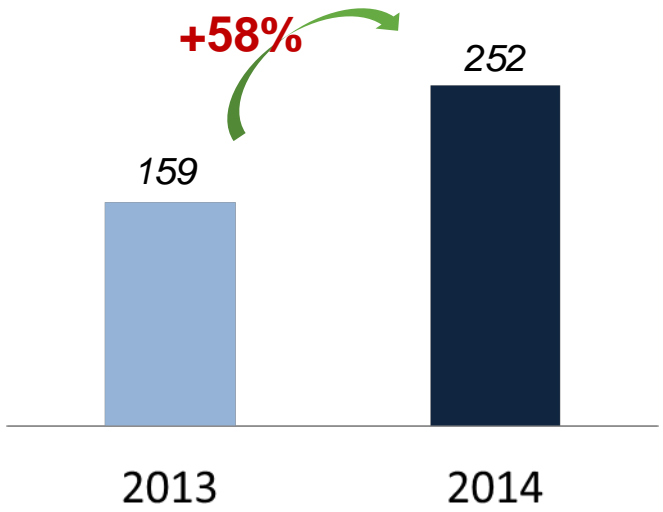


Source: Accenture Research analysis based on public information

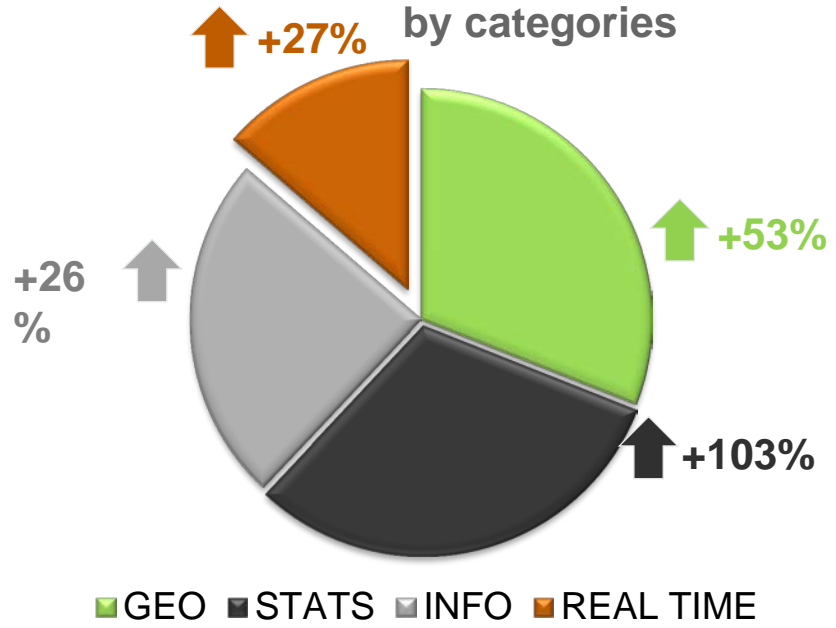
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# Number of data sets available in free access is still growing. The statistical and geographical data are the most common

Data sets available (comparison 2013/2014)

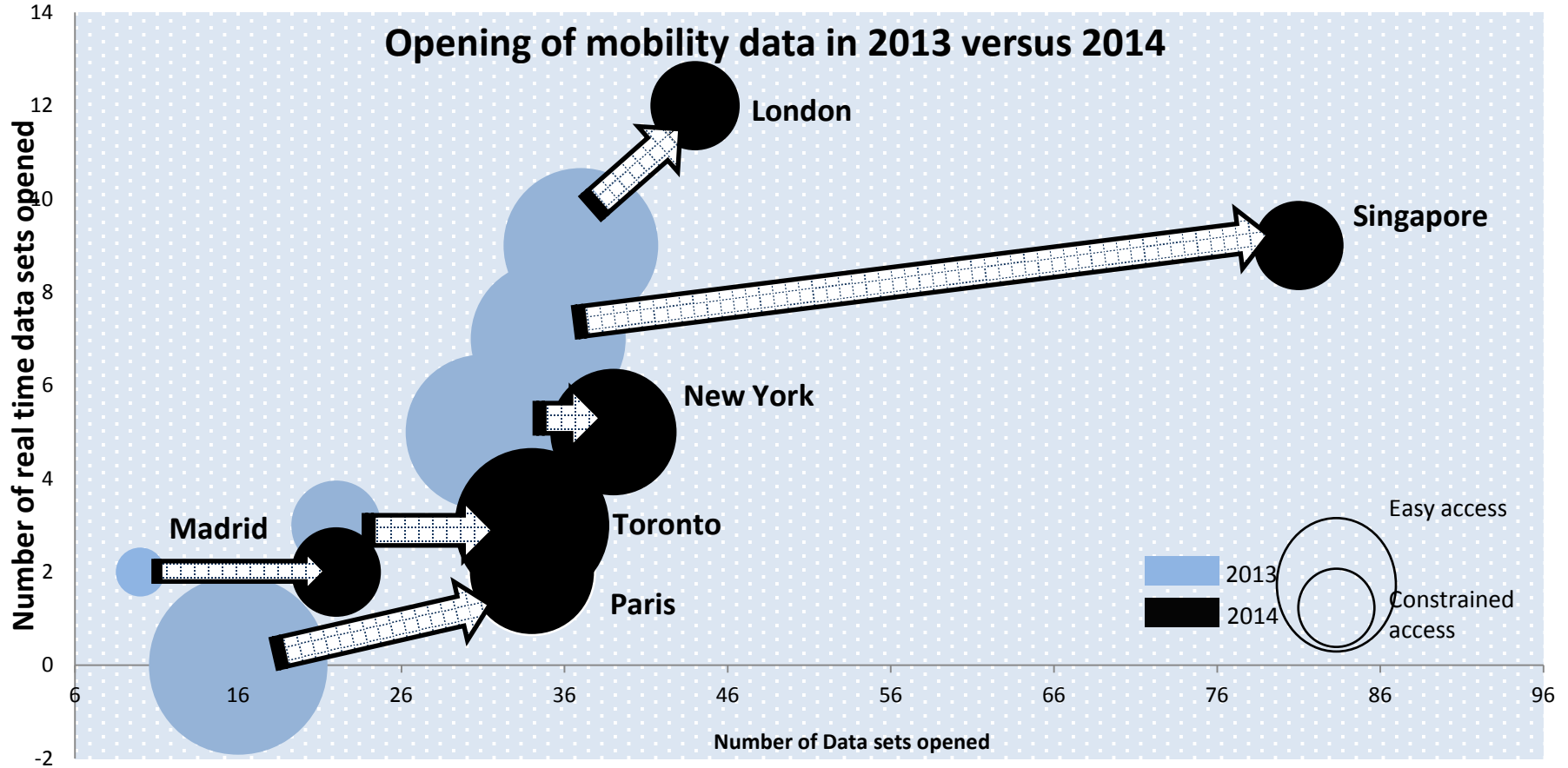


Distribution and progression of data sets by categories



Source: Accenture Research analysis based on public information

# Singapore and London remain the most active, yet we observed a strengthening of the access controls by authentication



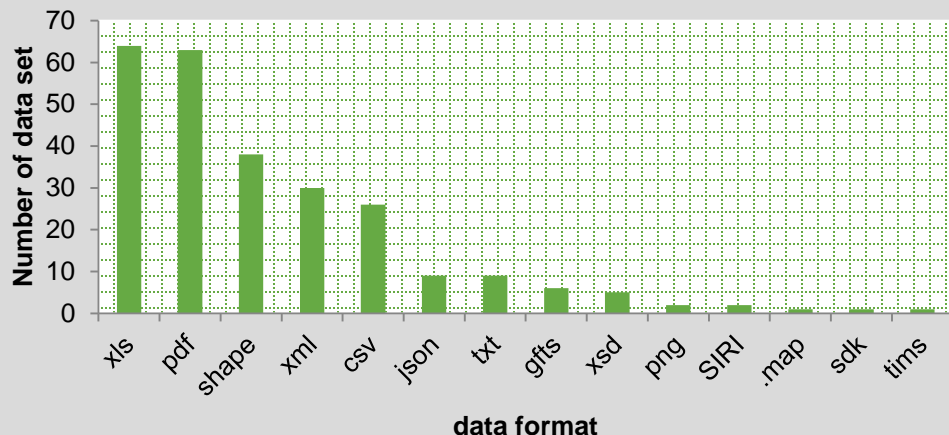
Source: Accenture Research analysis based on public information



# Some complementary lessons...

## Data format

(Toronto, New York, London, Paris, Madrid, Singapore)  
May 2014



- Format**
- ✓ Xls and Pdf are frequently used for statistical data
  - ✓ Wide variety of formats, yet predominance of Shape, XML et CSV
  - ✓ GFTS has a strong presence in NYC and Toronto. It is choice for only some datasets in Madrid and Paris

- API**
- ✓ 18% of the data are available through an API
  - ✓ 60% of real time data are available through an API

## Access to data

- ✓ A variable accessibility of the data: portal versus a constellation of web sites.



Source: Accenture Research analysis based on public information



# Lessons learned to best leverage open data

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- **Create a community**
- **Guide developers on how to use the data**
- **Make sure Open data is part of the standard practice**
- **Encourage customer applications (eg: journey planners) but also think about the potential for network management**
- **Dedicate resources to this project**

**THANK YOU!**

**QUESTIONS?**

For more details on the study,  
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