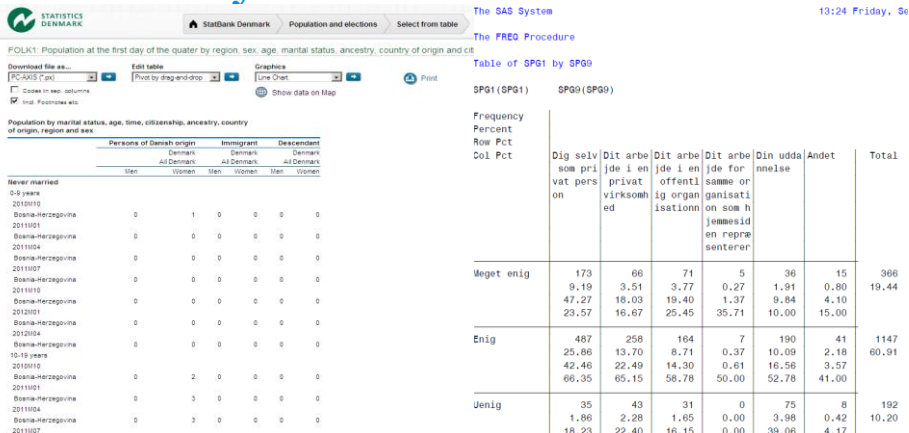


Making data more understandable through visualizations

Jesper Ellemose
jej@dst.dk



The beauty of cross tabs

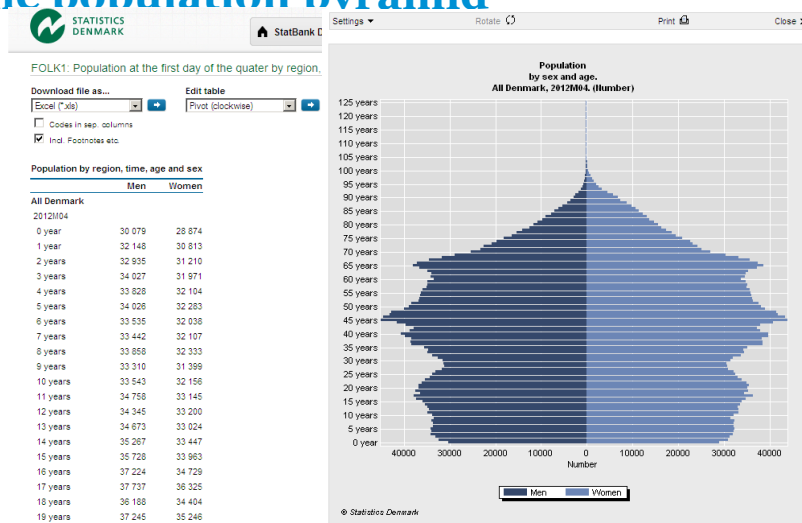


Different tools for different users

- Tourists
- Farmers
- Miners
 - Different tools for different tasks



The population pyramid



Best Practices

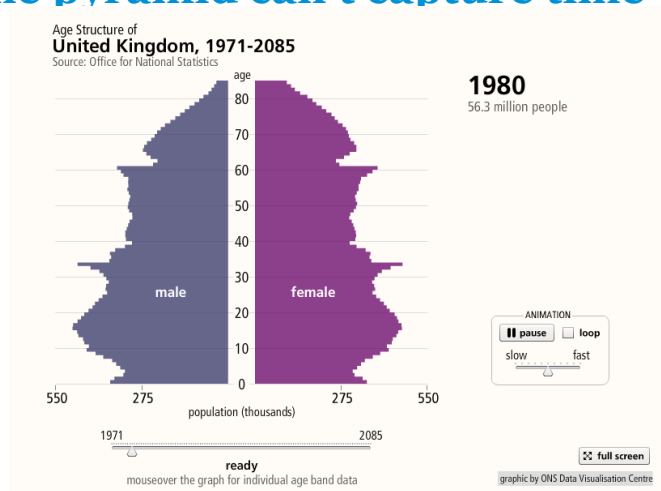
UNECE

- Making Data Meaningful, Part 2
- A guide to presenting statistics
- Chapter 2: Visualization of statistics

http://www.unece.org/fileadmin/DAM/stats/documents/writing/MDM_Part2_English.pdf



The pyramid can't capture time



<http://www.ons.gov.uk/ons/interactive/uk-population-pyramid---dvc1/index.html>

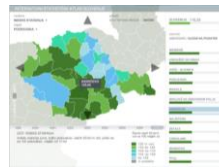
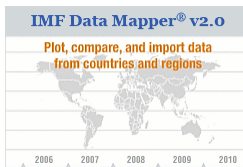


Interactive maps

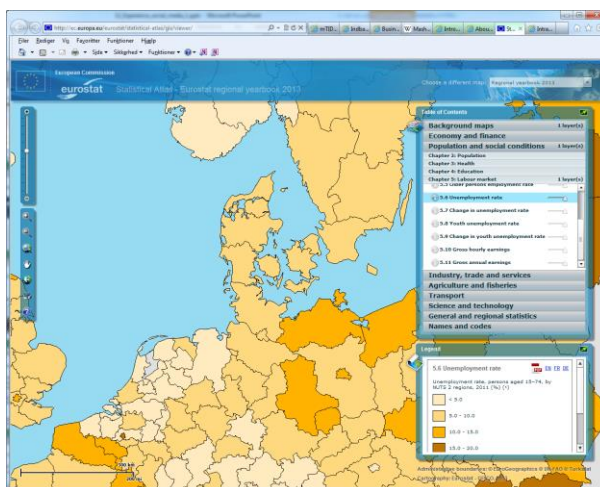
If “a picture is worth a thousand words”, then “a map is worth a thousand numbers”

UNECE, 2009

- Respect general principles of map design
- Texts (title, legend, footnotes): accurate, use key words, keep it simple
- Colour scheme IS important



Maps



Eurostat
Statistical Atlas
based on
Yearbook

<http://ec.europa.eu/eurostat/statistical-atlas/gis/viewer/>

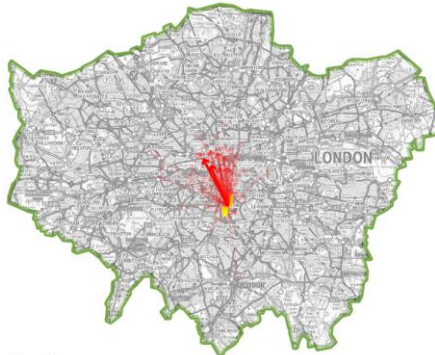
STATISTICS
DENMARK



8

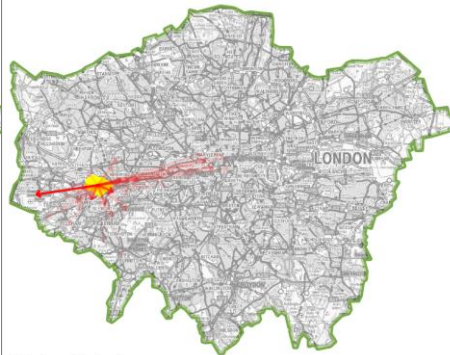
Journeys – Visualisation through SVG

Commuter journeys inside Greater London, 2001



Herne Hill
Source: 2001 Census
© Crown copyright. All rights reserved (ONS G0272183 2007). Graphic by ONS Data Visualisation Centre

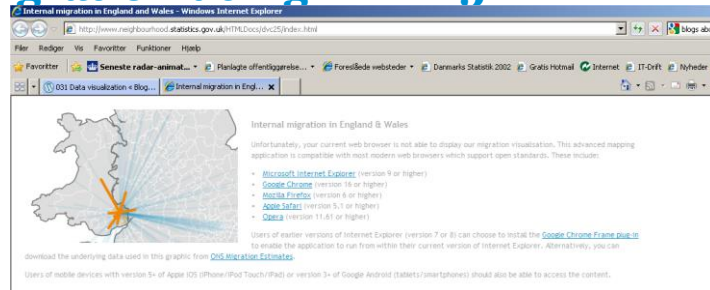
Commuter journeys inside Greater London, 2001



Osterley and Spring Grove
Source: 2001 Census
© Crown copyright. All rights reserved (ONS G0272183 2007). Graphic by ONS Data Visualisation Centre

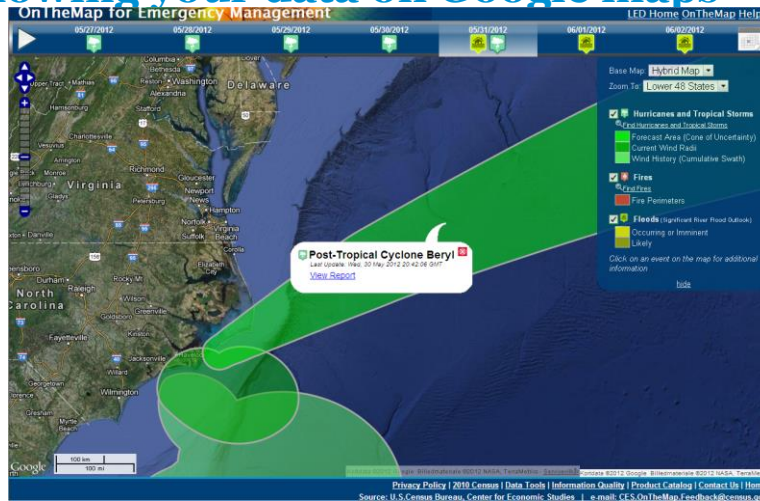
<http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dvc15/london2.svg>

Migration using HTML5



<http://www.neighbourhood.statistics.gov.uk/HTMLDocs/dvc25/index.html>

Showing your data on Google maps

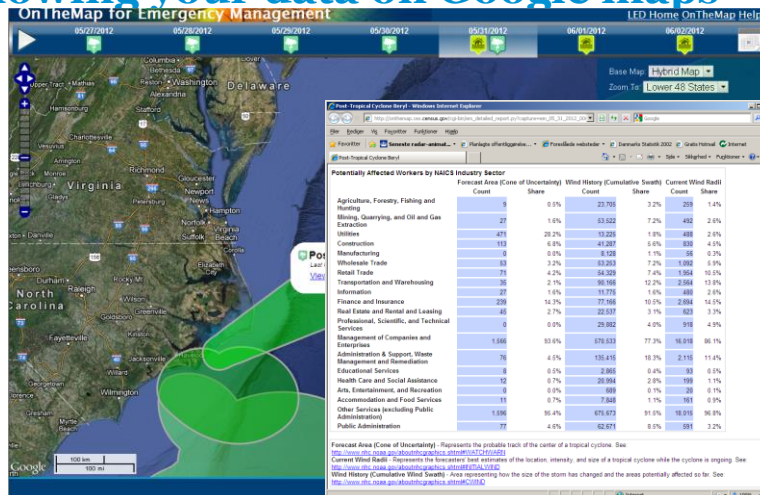


<http://onthemap.ces.census.gov/em.html>

STATISTICS
DENMARK

6/5/2014

Showing your data on Google maps

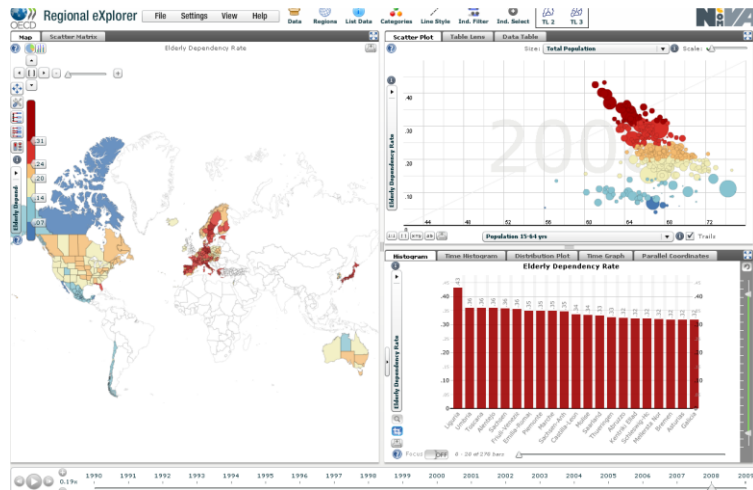


<http://onthemap.ces.census.gov/em.html>

STATISTICS
DENMARK

6/5/2014

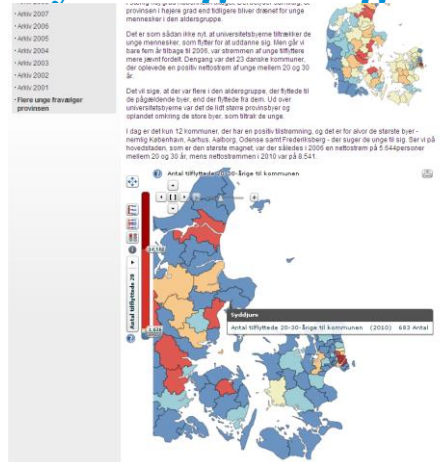
eXplorer- OECD / NComVA



<http://stats.oecd.org/OECDRegionalstatistics/#story=0>

STATISTICS
DENMARK

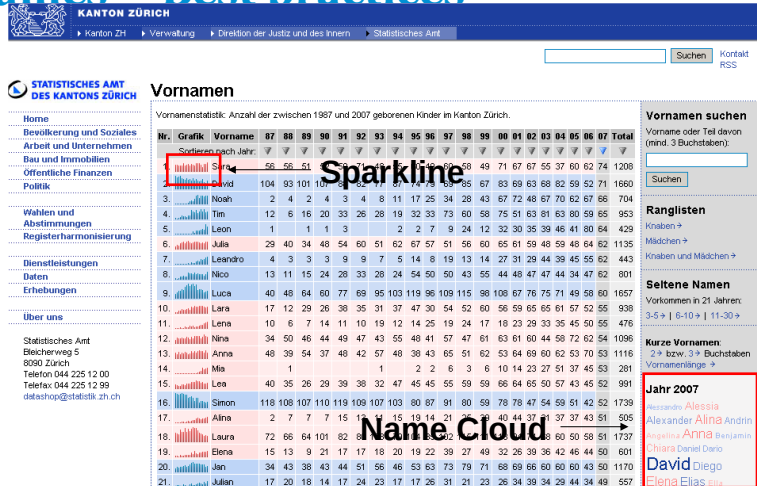
Story telling through maps



STATISTICS
DENMARK

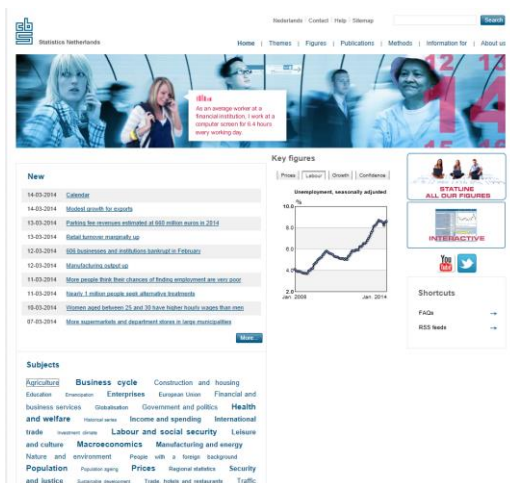
6/5/2014

Names – Best practices



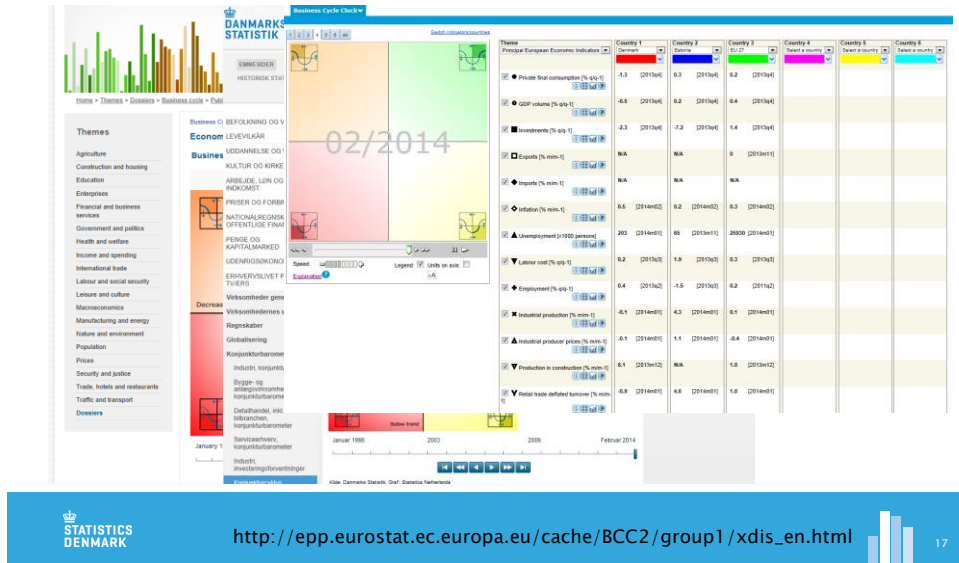
http://www.statistik.zh.ch/internet/justiz_innere/statistik/de/interaktives/vornamen.html

Best practices – Tag cloud for navigation



• www.cbs.nl

Business Cycle Tracer



Platform challenges

- PDF was a problem
- Flash became a standard
- Programmers hoped SVG would be a standard
- Silverlight died
- HTML 5 is the way forward
 - works with tablets and mobile phones

Different technics for presenting maps

- Image based (e.g. GIF maps from Shape files)
- Flash
- SVG (**S**calable **V**ector **G**raphics)
- KML (for Google- maps or Earth)
- WMS (Web Map Services)
- ...

What should we choose?



Pros and Cons ...

	Shape/GIF	SVG	Flash	KML (Maps)	KML (Earth)
Load speed	Fast	Slow	Slow	Slow	Slow
Plug-ins needed?	No	Yes	Yes	No	Yes
Copy/Paste support	Yes	Not by default	Not by default	Not by default	Yes
Dynamic effects	No	Yes	Yes	Yes	Yes
Visual appearance	Standard	Very nice	Very nice	Nice	Nice
Implementation	Easy	Easy	Not so easy	Easy	Easy
External services required	No	No	No	Yes	Yes

Gapminder.org



Unique universe of statistics explained – Relevance for official statistics?