Crowdsourcing and Government
Best Practices, Lessons and Challenges

Vyron Antoniou

Research Team

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Project Background

- Crowdsourcing GI maturing
(OpenStreetMap 2004, TomTom Map Share 2007, Google Map Maker 2008, Waze 2008)

- Quality demonstrated to be 'good enough' and 'fit for purpose'

- GFDRR (and other funders) sponsor VGI

- Open questions:
    How to ensure that projects are successful?
    What are the barriers?
    Opportunities?

Scope

- Public to Government.

- Government to Public to Government

- Public to Government to Public.

Methodology

- Workshop at SOTM '13

- 7 seed-cases, website, survey

- Further 4 cases through experts

- Jan – May 2014:
  Continued effort to identify cases, response to submissions

- May 2014 – Skype workshop and write up

- Total 29 cases, over 35 identified

Crowdsourcing and Government

... about governmental projects that incorporate crowdsourced data.

| Home | Case Studies | The Report – Analysis of case studies | The Research Team | GFDRR & UCL collaboration |

FixMyStreet
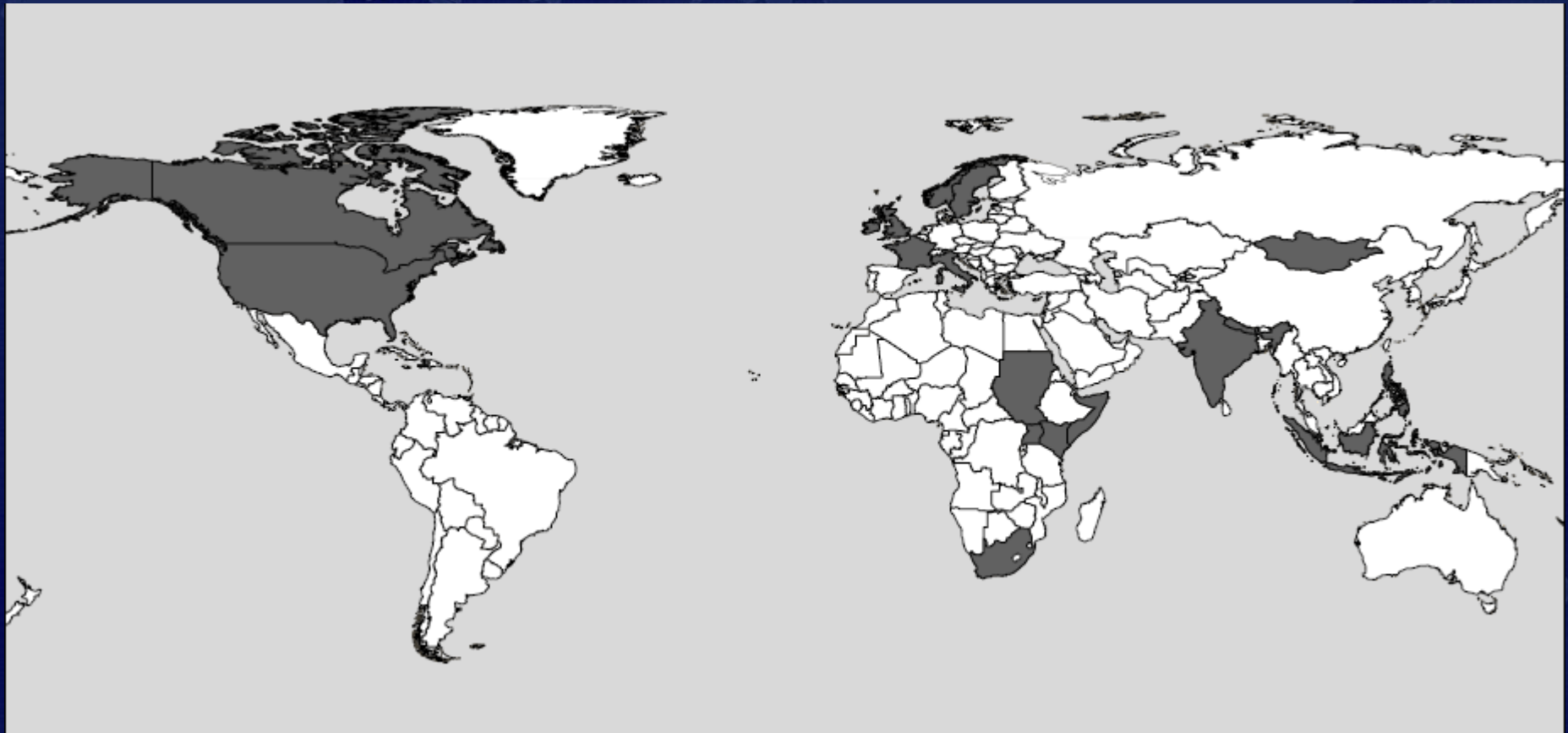
Interaction type	Public → Government
Trigger Event	-
Domain	Local authority/municipality maintenance
Organisation	MySociety (originally developed with central government funding)
Data sets in use	Originally, the website used government datasets: postcodes, basemap, local authorities boundaries, contact details and email addresses of relevant personnel in local authorities.
Process	An indication of a problem on a website, through the use of a postcode where the problem occur, create an email that alerts the local authority to the problem. The authority can respond to the complaint on the website.

Case Studies

Analysis

1. Incentives/drivers to start a project, mostly from the government perspective

2. Scope and aims

3. Participants, stakeholders and relationships, identifying the roles that different participants play

4. Modes of engagement

5. Technical aspects

6. Success factors

7. Problems encountered

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Incentives/drivers

• Lack of institutional data in time sensitive situations
(Haiti earthquake disaster response, Mapping schools and health facilities in Kathmandu Valley)

• Policy change around governmental data
(New York City Open Data, French Corine Land Cover in OSM, US State Department "Imagery to the Crowd" policy)

• Low resources and need for infrastructure support
(Canadian National Mapping Agency (NMA), "Smart City" project in Ulaanbaatar, Mongolia)

• Research and development efforts
(CROS in California, Towns Conquer in Spain, FINTAN in UK)

• Environmental monitoring through citizen science
(USGS Did You Feel in US, Skandobs in Norway and the Swedish)

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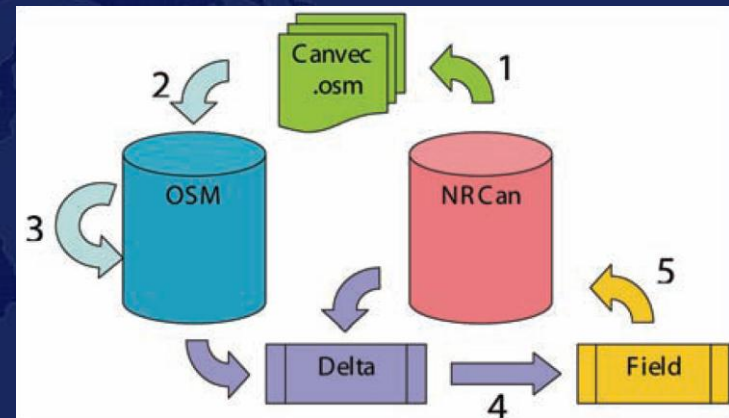
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Success factors

- Identification of appropriate cooperation between the public and government

- Partnership of scientific organizations

- Recruitment of volunteers

- Workshops

- Innovative techniques

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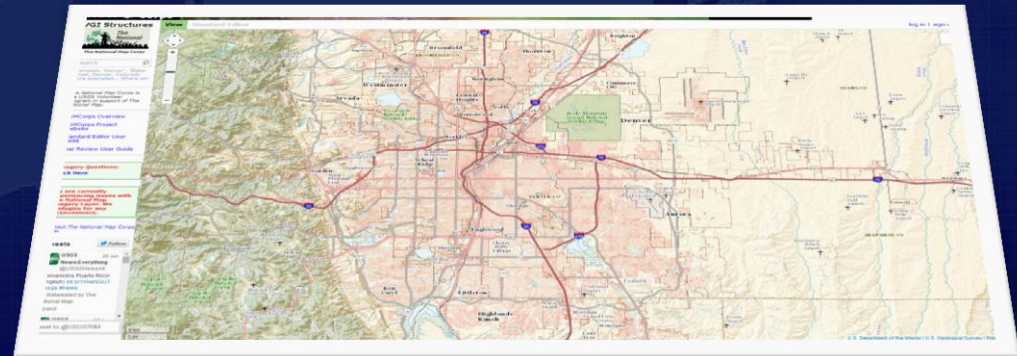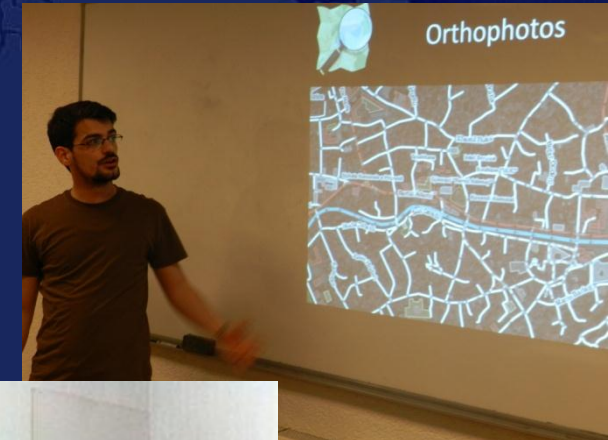- Identification of appropriate cooperation between the public and government

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Problems Encountered

- One-off event versus on-going initiative

- Accuracy and reliability

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Challenges that need to be addressed

Traditional practices and concern over organizational change

Project continuation and sustainability

Separation between data collection and use for policy analysis

Licensing and other Intellectual Property Rights (IPR)

Contact points

Conflict between channels of reporting

Inherent coverage, temporal and participation biases
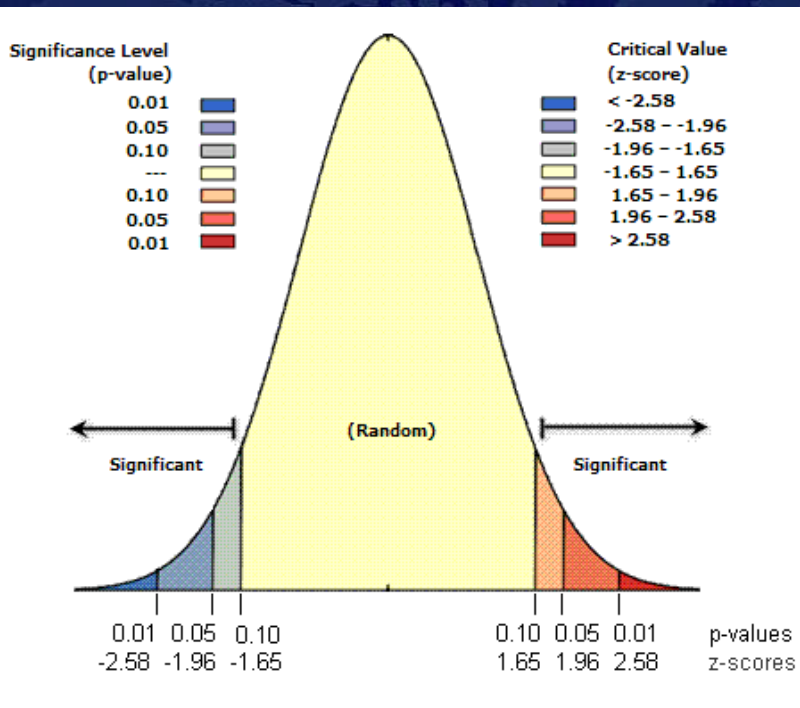
Participation Patterns for geo-tagged photos

Flickr in 3D
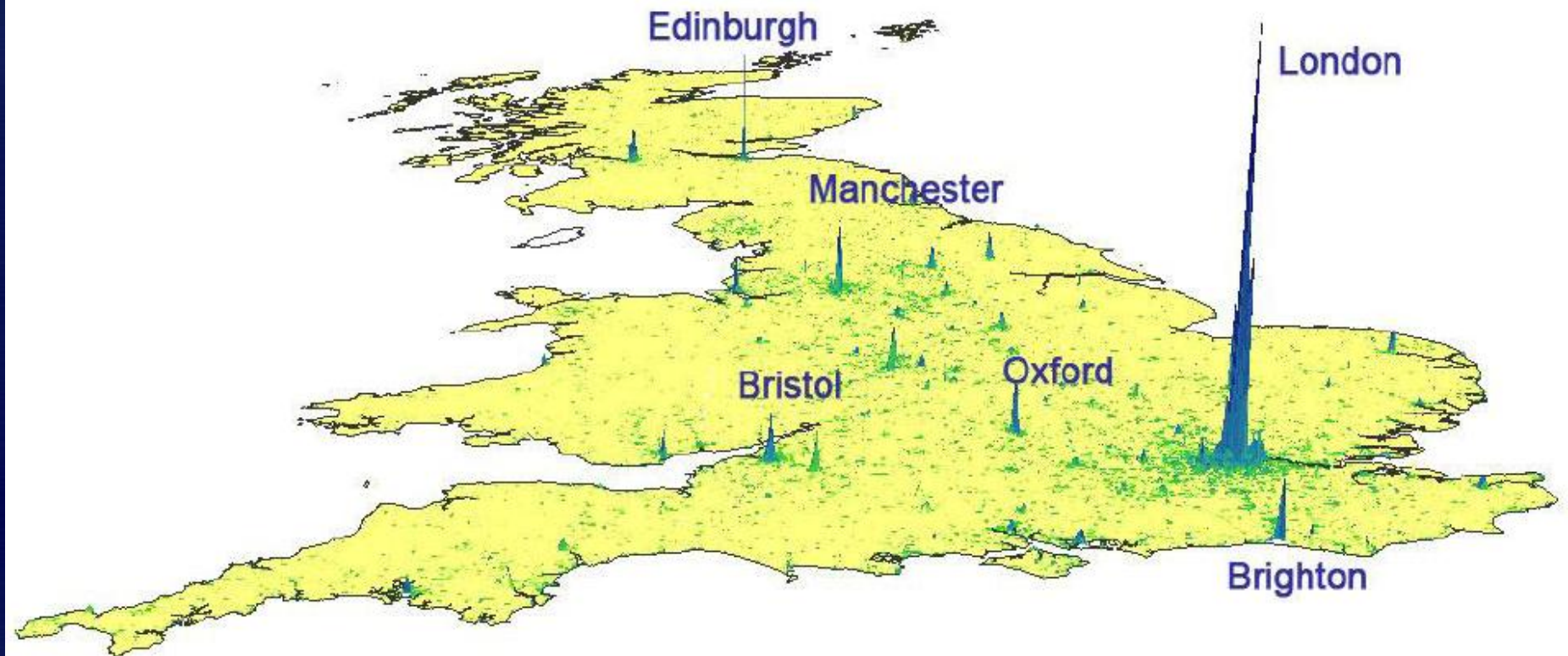
Participation Patterns - OpenStreetMap
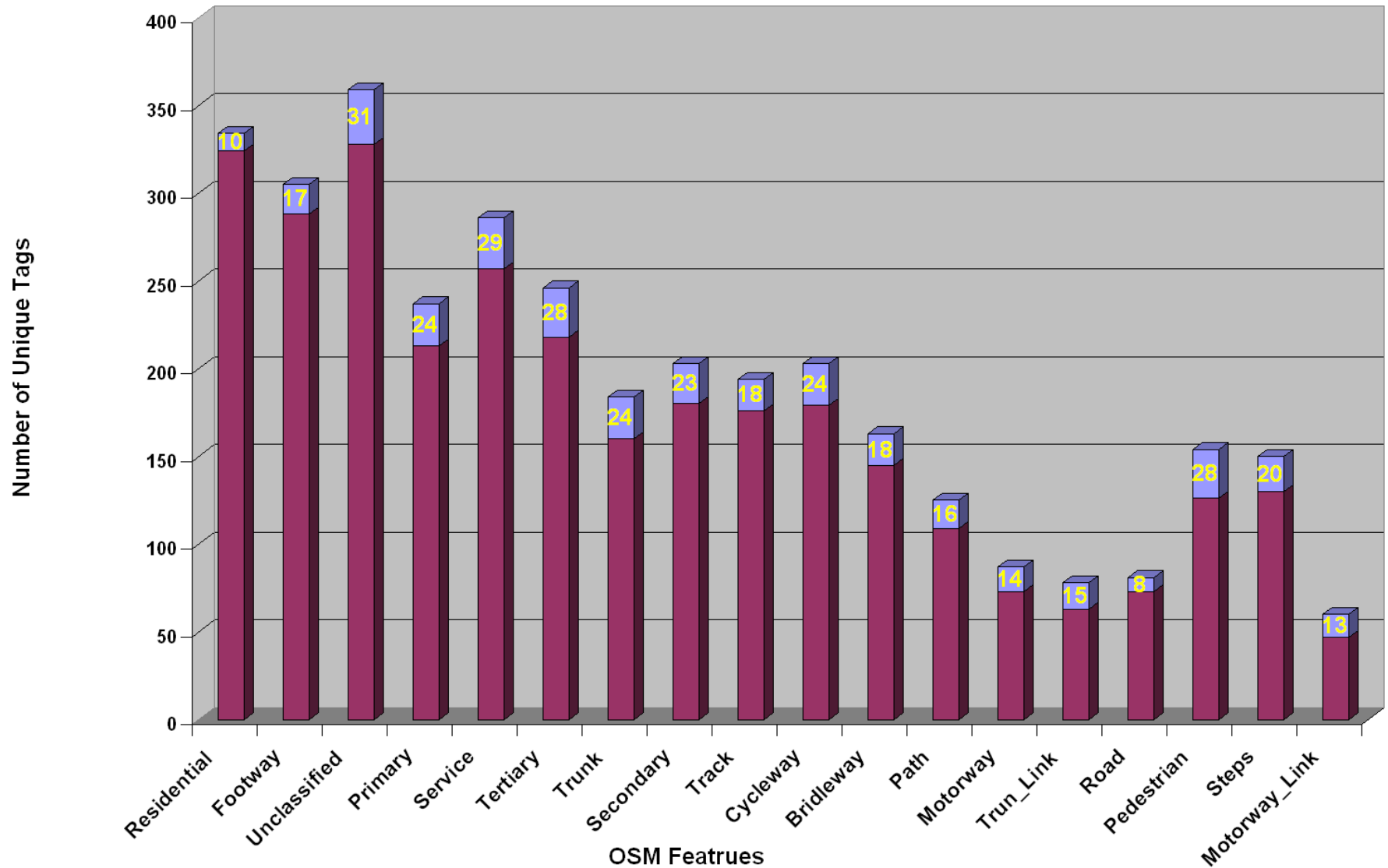
Participation Patterns in OSM

Hot-spot Analysis on the number of edits for each feature
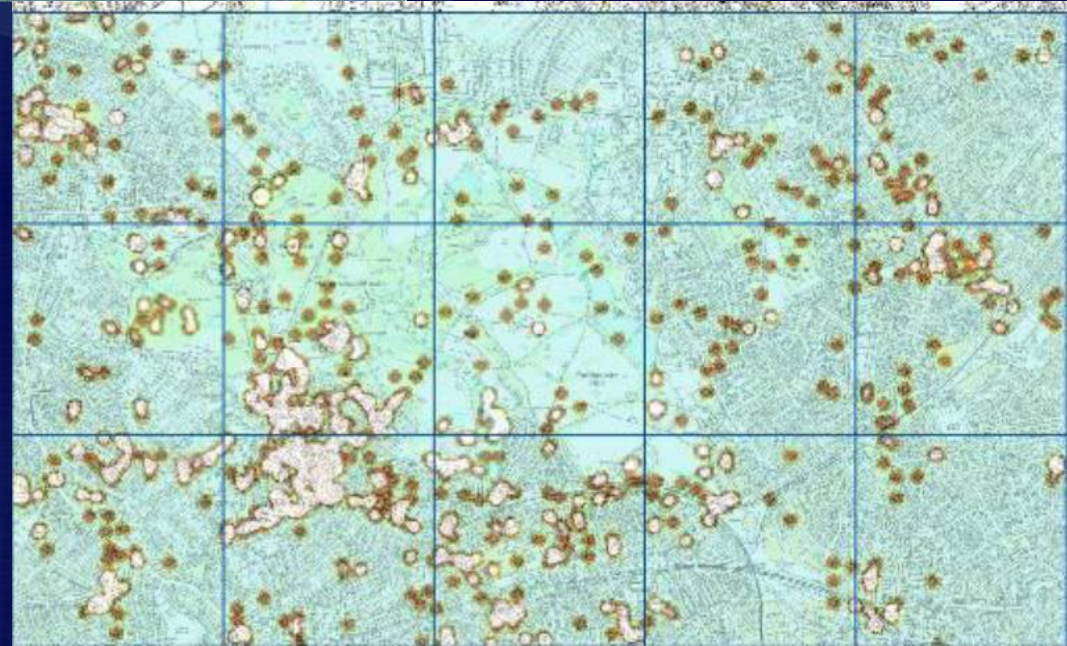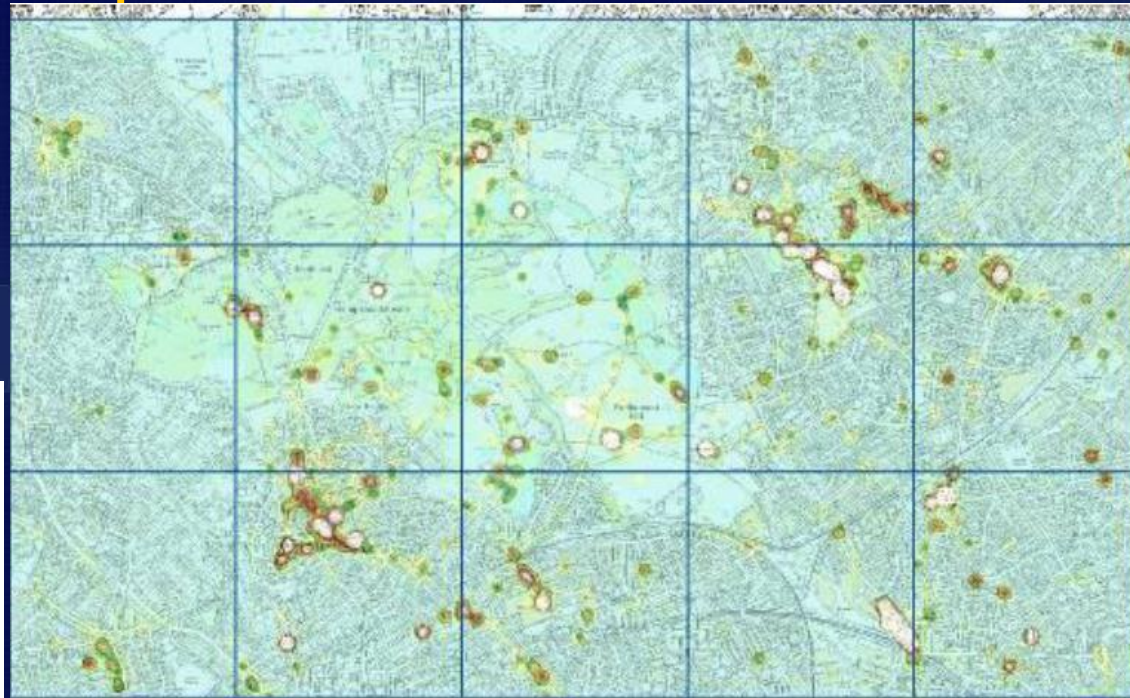
Participation Patterns in Flickr and Geograph
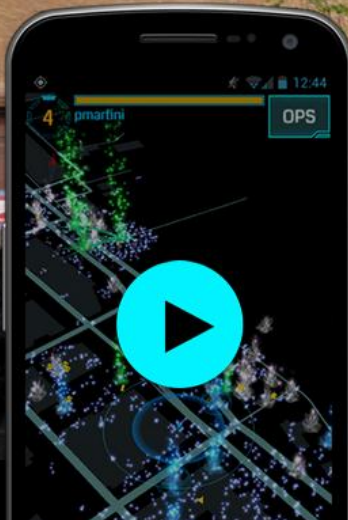

**Flickr
(7993 photos)**

Density Surfaces

**Geograph
(1109 photos)**

High

Low

Gamification

Thank you!

Download the report:

http://crowdgov.wordpress.com/report

CROWDSOURCED
GEOGRAPHIC
INFORMATION USE
IN GOVERNMENT

A report prepared for the World Bank
Global Facility for Disaster Reduction and Recovery

THE WORLD BANK   GFDRR   UCL