OpenAddresses
An OpenGeodata Project

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Georeferenced Street Addresses

• (At least) One address per building containing streetname, housenumber, postcode, placename

• Important for micro-geospatial analysis, LBS, delivery and emergency services etc.

• Availability – yes, of course!
  Accessibility – well, sort of…

• Alternatives: Interpolated navigation-data
Compute Catchment Areas

Geocoded addresses to start from…

Map data: © Grundbuch- und Vermessungsamt Basel-Stadt
Compute Catchment Areas

Create Voronoi
Compute Catchment Areas

Dissolve
OpenWebMapServices (OWMS) Geocoders

Not too bad – but not too good either:

Geocoding 90'483 addresses (Canton Solothurn):

- Google Maps:
  - 79'785 addresses (88.5%) at streetlevel
  - 69'131 (76.7%) < 20m distance to official data

- Microsoft Bing Maps:
  - 77'392 addresses (85.8%) at streetlevel
  - 36'770 (40.8%) < 20m distance to official data
OpenAddresses.org – The Project

• Idea:
  − Take advantage of individual’s local expertise and collect this knowledge via Internet
  − collected data available & accessible – for free and open

• Implementation (since 2010):
  − MapFish Server
  − Client: GeoExt, OpenLayers and ExtJS
  − PostgreSQL/PostGIS (Database)
  − Python (Server), JavaScript (Client)
OpenAddresses.org – History

- Jul '07: Idea: collect addresses via GM API
- Aug '07: First version www.openaddresses.ch
- Jul '08: www.openaddresses.at online
- Dec '08: Start 'Map Your World'
- ...
- Mar '10: OpenAddresses.org live
OpenAddresses.org …

… is an OpenSource portal for geocoded addresses worldwide

… stores only address-information – no personal information

… is compliant with OpenStreetMap

… offers services for geocoding and reverse-geocoding

→ http://code.google.com/p/openaddresses/wiki/RESTService

… offers download service for OA data
Areas of Interest

Switzerland

OpenAddresses.org BETA
Areas of Interest

Washington (USA)
Areas of Interest

Villach (Austria)
Areas of Interest

Barcelona (Spain)
Websources on OpenAddresses

http://openaddresses.blogspot.com
http://groups.google.com/group/OpenAddresses
http://twitter.com/openaddresses

OpenAddresses receives an award at AGIT 2010

Blog Archive
- 2010 (2)
- July (1)
- June (1)
- May (1)
- April (1)
- March (1)

http://openaddresses.blogspot.com
People behind OpenAddresses

Project Steering Committee:

• **Stefanie Andrae**, Carinthia University of Applied Sciences, Austria
• **Lukas Bähler**, University of Applied Sciences Northwestern Switzerland, Switzerland
• **Jeff Konnen**, ubithere, Luxembourg
• **Lars Lingner**, Germany
• **Jean-Luc Miserez**, inser, Switzerland
• **Cédric Moullet**, swisstopo, Switzerland
• **Luca Palli**, inser, Switzerland
• **Hans-Jörg Stark**, University of Applied Sciences Northwestern Switzerland, Switzerland (PSC President).
Growth of OpenAddresses data

Currently: 13\text{,}518\text{,}257 geocoded addresses

number of records in OpenAddresses

University of Applied Sciences Northwestern Switzerland
School of Architecture, Civil Engineering and Geomatics
Research around OpenAddresses

Quality assessment ISO/TC 211 based:
Using OpenWebMapServices for attribute and positional accuracy
Relation between OA and OSM

• 100% compatible with OSM (license)
• OA more focussed on address data and services
• OA2OSM sync currently in work
• We support OSM – vice versa…?
• There are more than one OSS for one task – why should there be only one single data repository?
• VGI-SDI !
  For Interoperability between OpenGeodataProjects
visit and join

www.openaddresses.org

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