

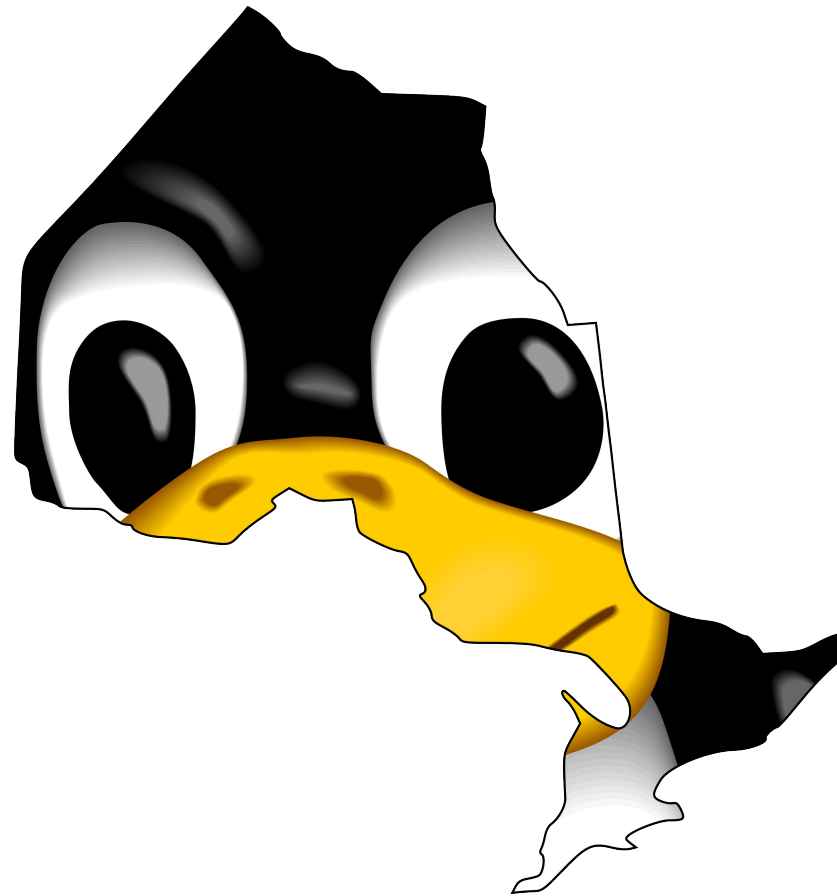


Introduction to OSM
Richard Weait

Presentation cc-by Richard Weait <http://weait.com>
OSM Map Data cc-by-sa <http://OpenStreetMap.org/>

Ontario [GNU] Linux Fest 2009

Saturday 24 October 2009



<http://onlinux.ca/>



Introduction to OpenStreetMap

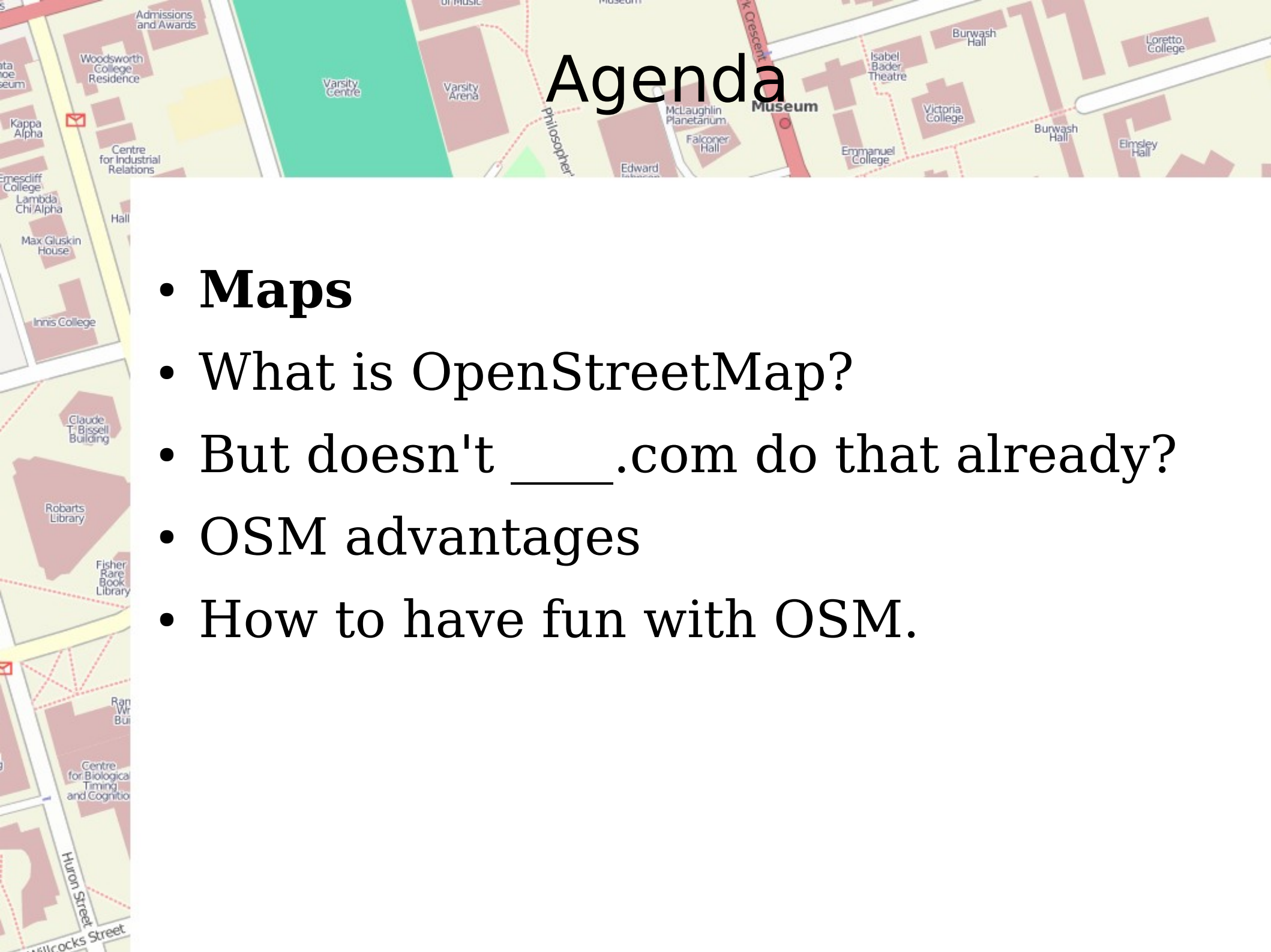
My Goal

Your Goal

Any current OSM users?

Introduction to OSM
Richard Weait

Presentation cc-by Richard Weait <http://weait.com>
OSM Map Data cc-by-sa <http://OpenStreetMap.org/>



Agenda

- **Maps**
- What is OpenStreetMap?
- But doesn't _____.com do that already?
- OSM advantages
- How to have fun with OSM.

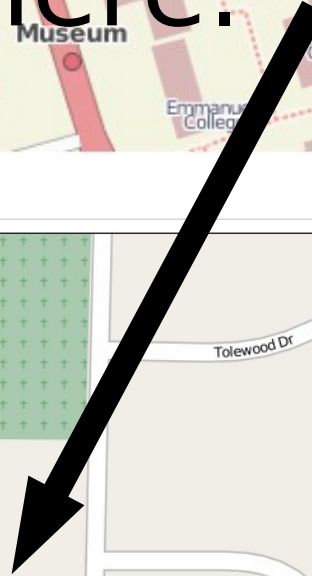
A background map from OpenStreetMap showing a university campus. The map includes various buildings, streets, and green spaces. Labels on the map include "Woodsworth College Residence", "Centre for Industrial Relations", "Kappa Alpha", "Emescliff College", "Lambda Chi Alpha", "Max Gluskin House", "Innis College", "Claude T. Bissell Building", "Robarts Library", "Fisher Rare Book Library", "Centre for Biological Timing and Cognition", "Huron Street", "McIlroy Street", "Burwash Hall", "Loretto College", "Emmanuel College", "Victoria College", "Falconer Hall", "McLaughlin Planetarium", "Edward", "Philosopher", "Museum", "Admissions and Awards", "Woodsworth College Residence", "Kappa Alpha", "Emescliff College", "Lambda Chi Alpha", "Max Gluskin House", "Innis College", "Claude T. Bissell Building", "Robarts Library", "Fisher Rare Book Library", "Centre for Biological Timing and Cognition", "Huron Street", "McIlroy Street", "Burwash Hall", "Loretto College", "Emmanuel College", "Victoria College", "Falconer Hall", "McLaughlin Planetarium", "Edward", "Philosopher", "Museum", "Admissions and Awards".

OpenStreetMap is ...

"OpenStreetMap is a project aimed squarely at creating and providing free geographic data such as street maps to anyone who wants them."

-- www.openstreetmap.org

You are Here.



OpenStreetMap



The Free Wiki World Map

Help & Wiki
News blog
Shop
Map key

SotM July 10-12 in Amsterdam

Come to the 2009
OpenStreetMap Conference,
The State of the Map

Search Where am I?

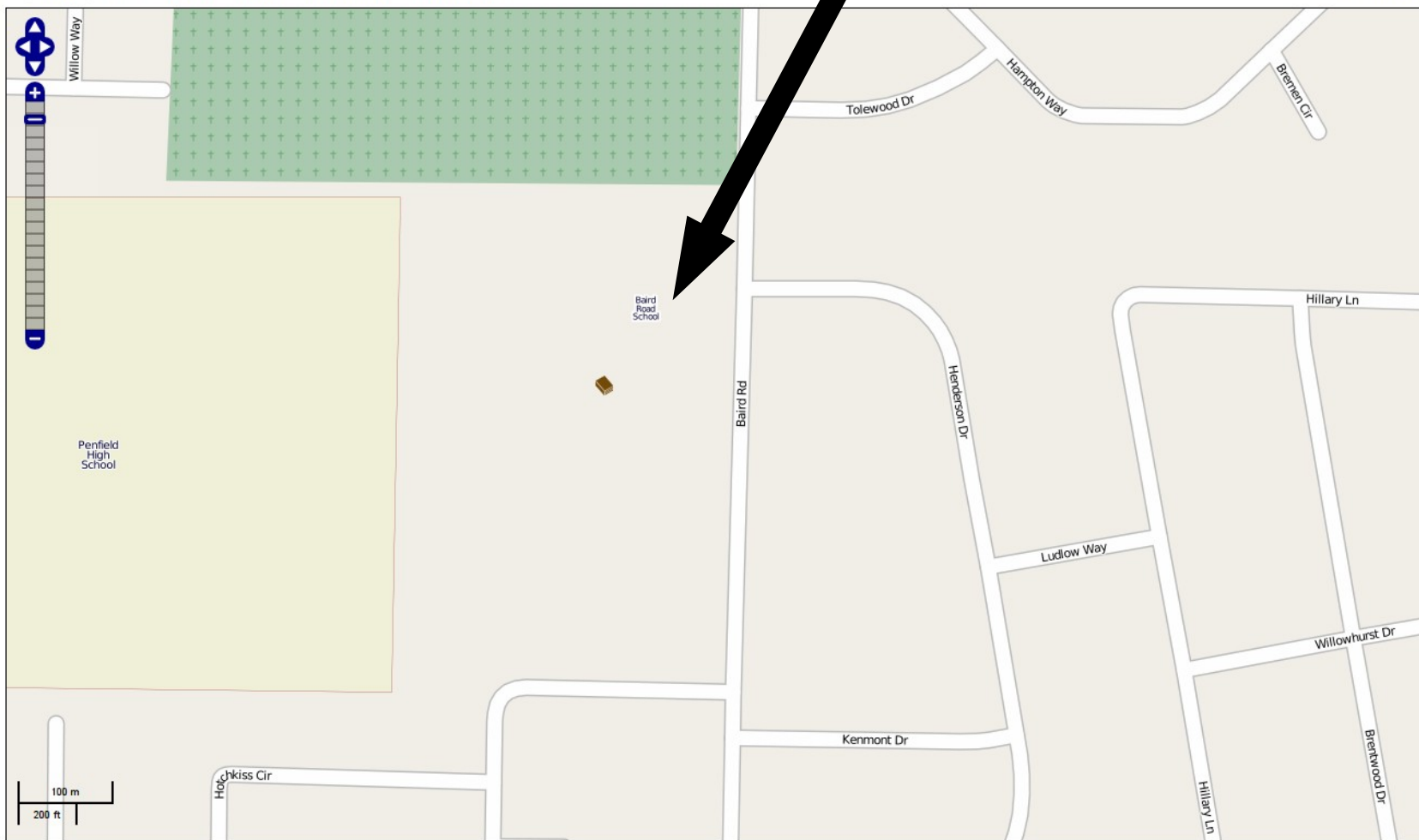
examples: 'Alkmaar', 'Regent
Street, Cambridge', 'CB2 5AQ',
or 'post offices near Lünen'
[more examples...](#)

Make a Donation



View Edit History Export GPS Traces User Diaries

Welcome, hal14



A detailed campus map of the University of Toronto, showing various buildings, streets, and green spaces. The map is oriented with North at the top. Key locations labeled include the Varsity Centre, Varsity Arena, Museum, and several colleges and halls. The text "So what?" is overlaid in the upper right quadrant.

So what?

Why do we care about maps?

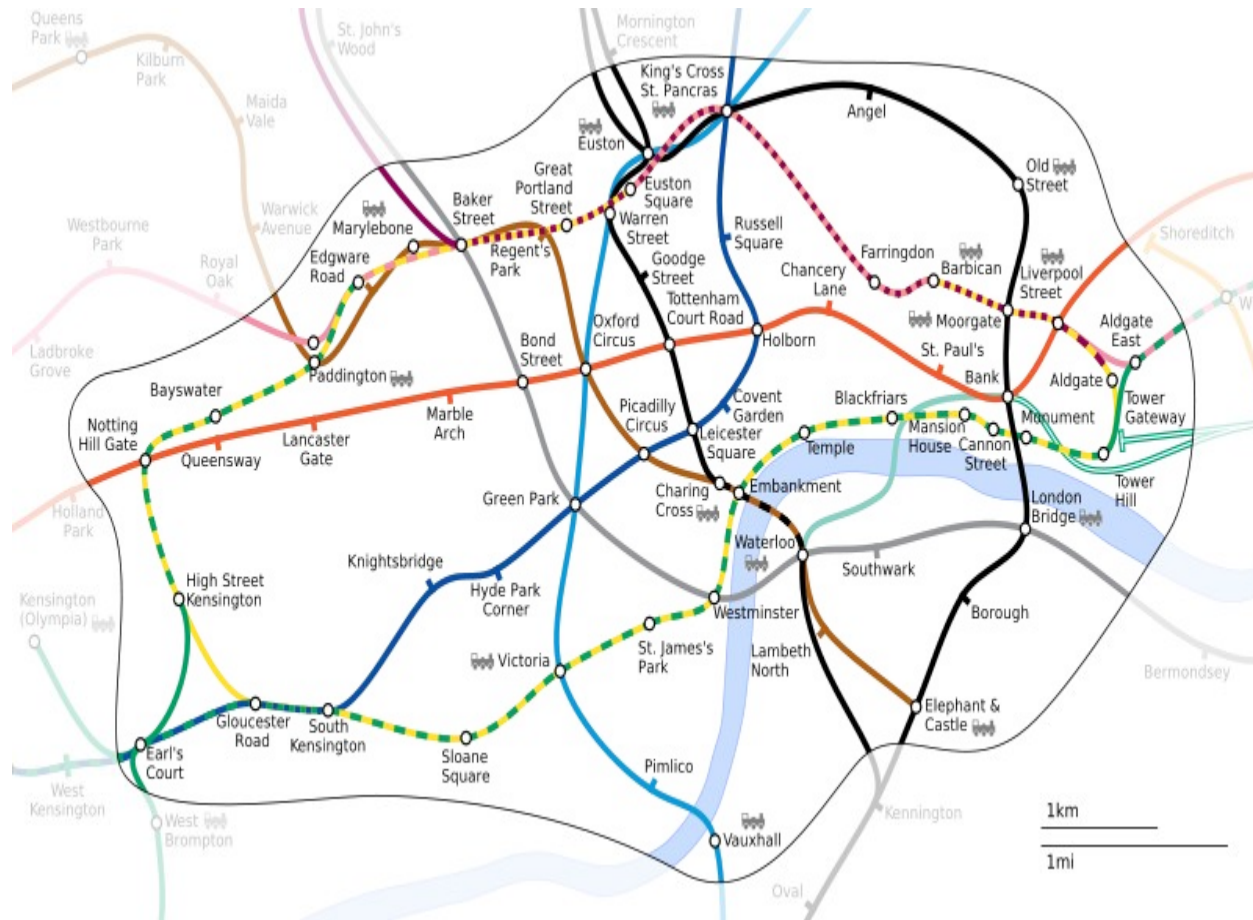
Recognize this map?



Copyright Transport for London

http://en.wikipedia.org/wiki/Image:TubeMapZ1_TFL.png

Cartogram

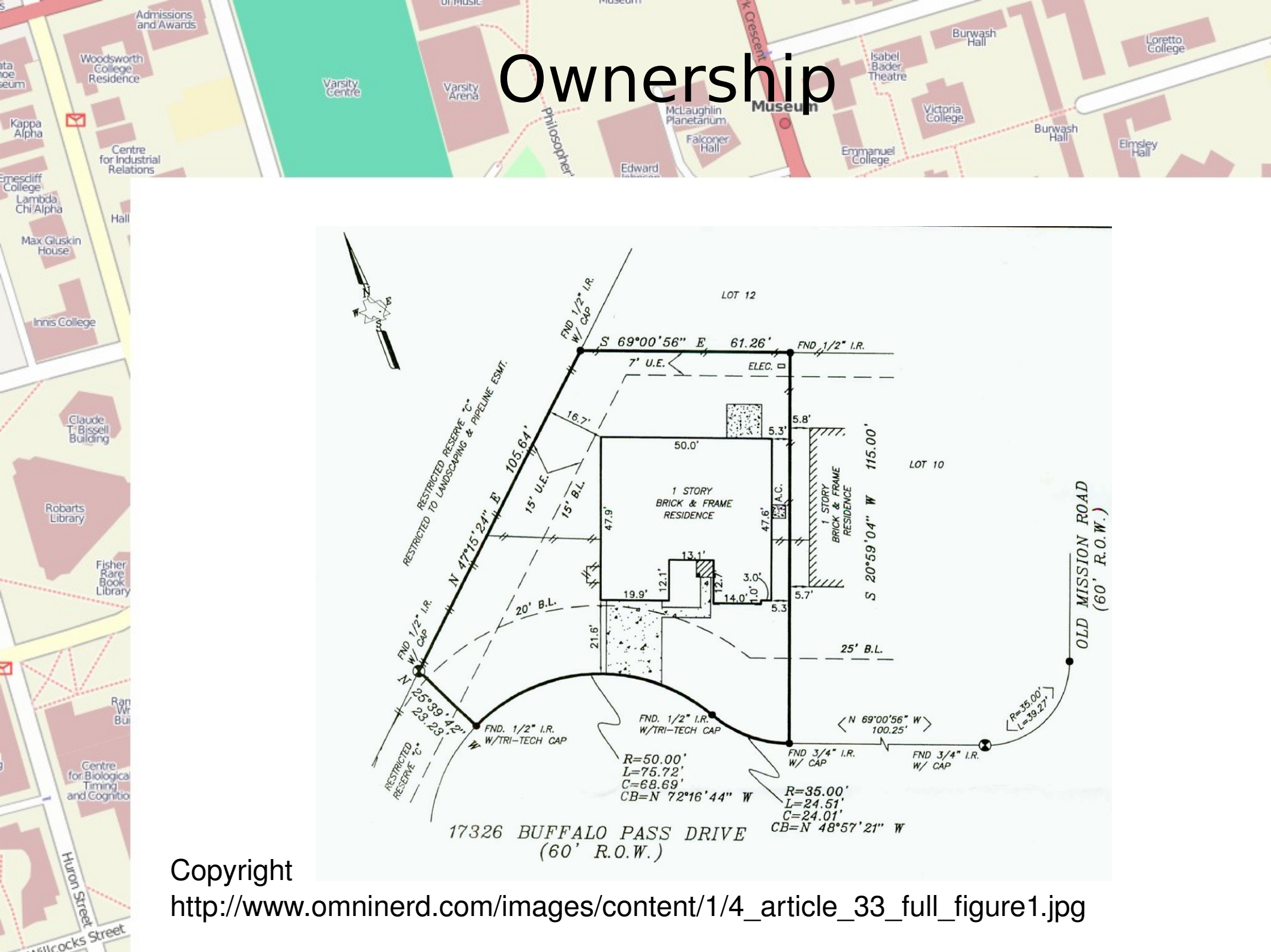


Copyright ed g2s GnuFDL / cc-by-sa

http://en.wikipedia.org/wiki/Image:London_Underground_Zone_1.svg

Ownership

Copyright
http://www.omninerd.com/images/content/1/4_article_33_full_figure1.jpg



http://www.omninerd.com/images/content/1/4_article_33_full_figure1.jpg

http://www.omninerd.com/images/content/1/4_article_33_full_figure1.jpg

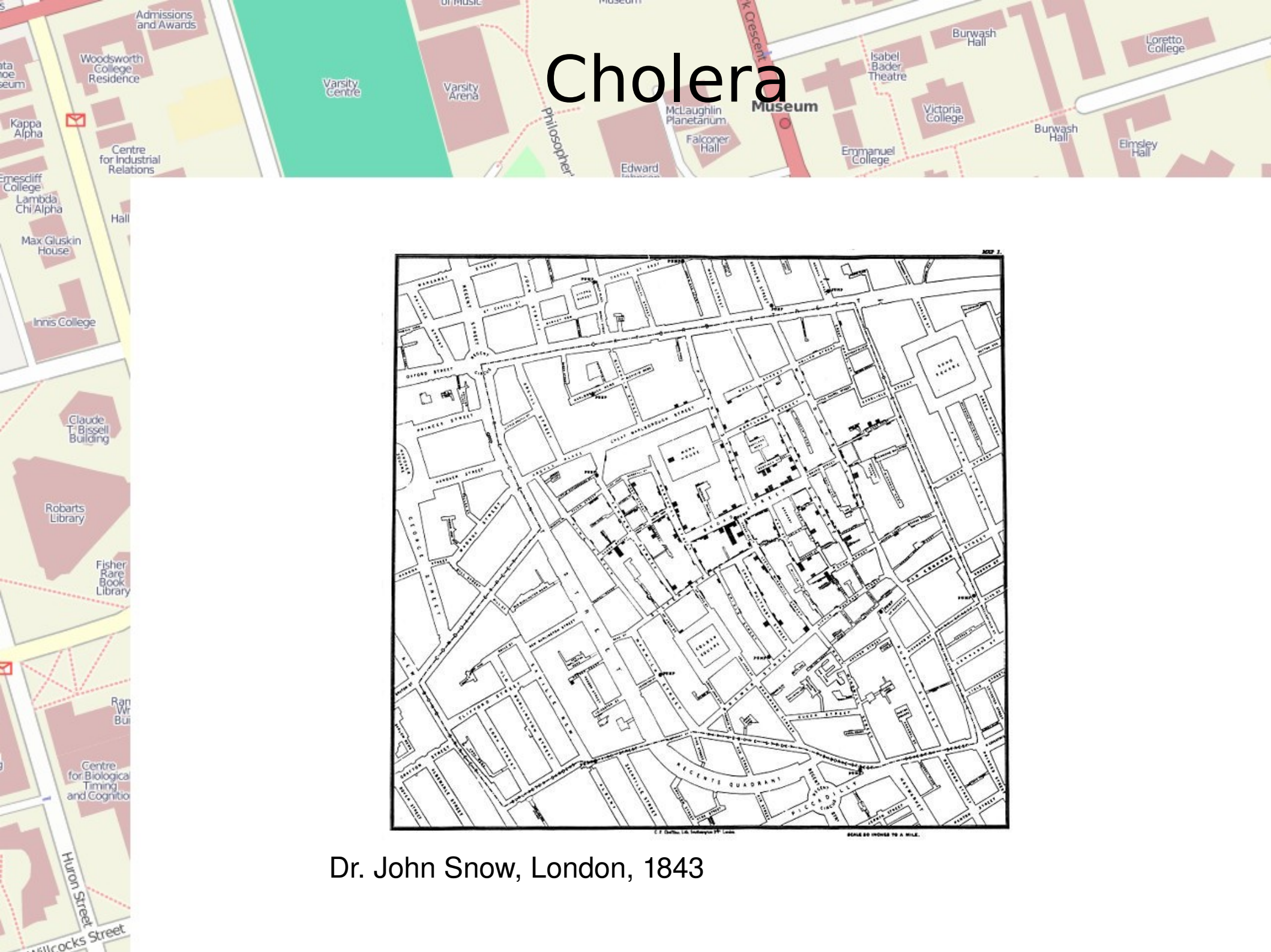
Haldimand Tract



Copyright

<http://www.sixnations.ca/LandsResources/HaldProc.htm>

Cholera



Dr. John Snow, London, 1843

A background map from OpenStreetMap showing a portion of the Victoria University campus. The map includes various buildings such as Woodsworth College Residence, Kappa Alpha, Emescliff College, Lambda Chi Alpha, Max Gluskin House, Innis College, Claude T. Bissell Building, Roberts Library, Fisher Rare Book Library, Centre for Biological Timing and Cognition, Huron Street, and Millrocks Street. A large green area is visible in the upper left, and a red line indicates a street or path. The text "OpenStreetMap is ..." is overlaid on the map.

OpenStreetMap is ...

"The project was started because most maps you think of as free actually have legal or technical restrictions on their use, holding back people from using them in creative, productive or unexpected ways."

-- www.openstreetmap.org

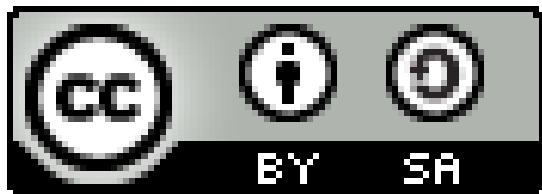
OpenStreetMap is ...



Four freedoms of Free Software



Data license



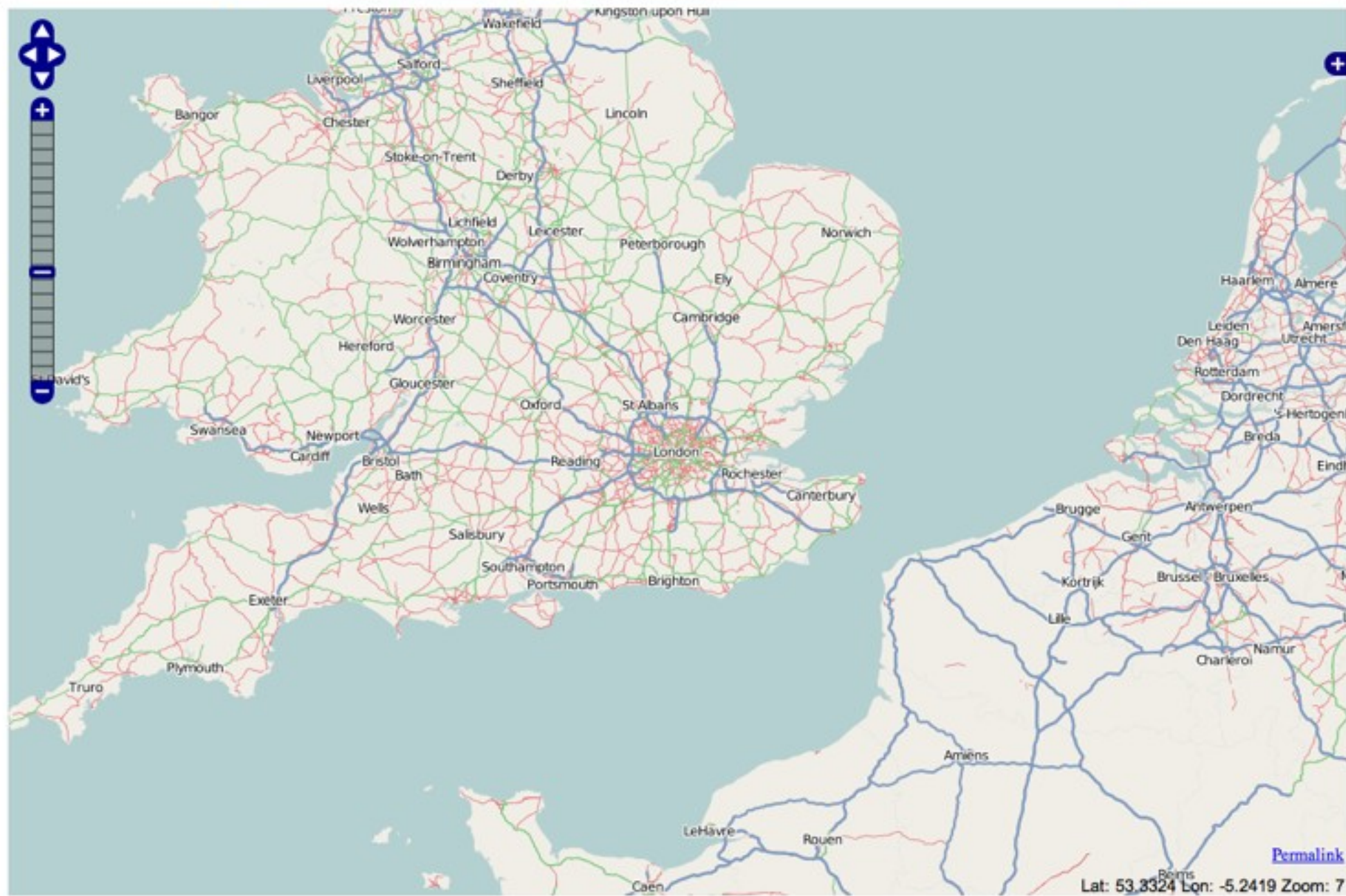
ODbL

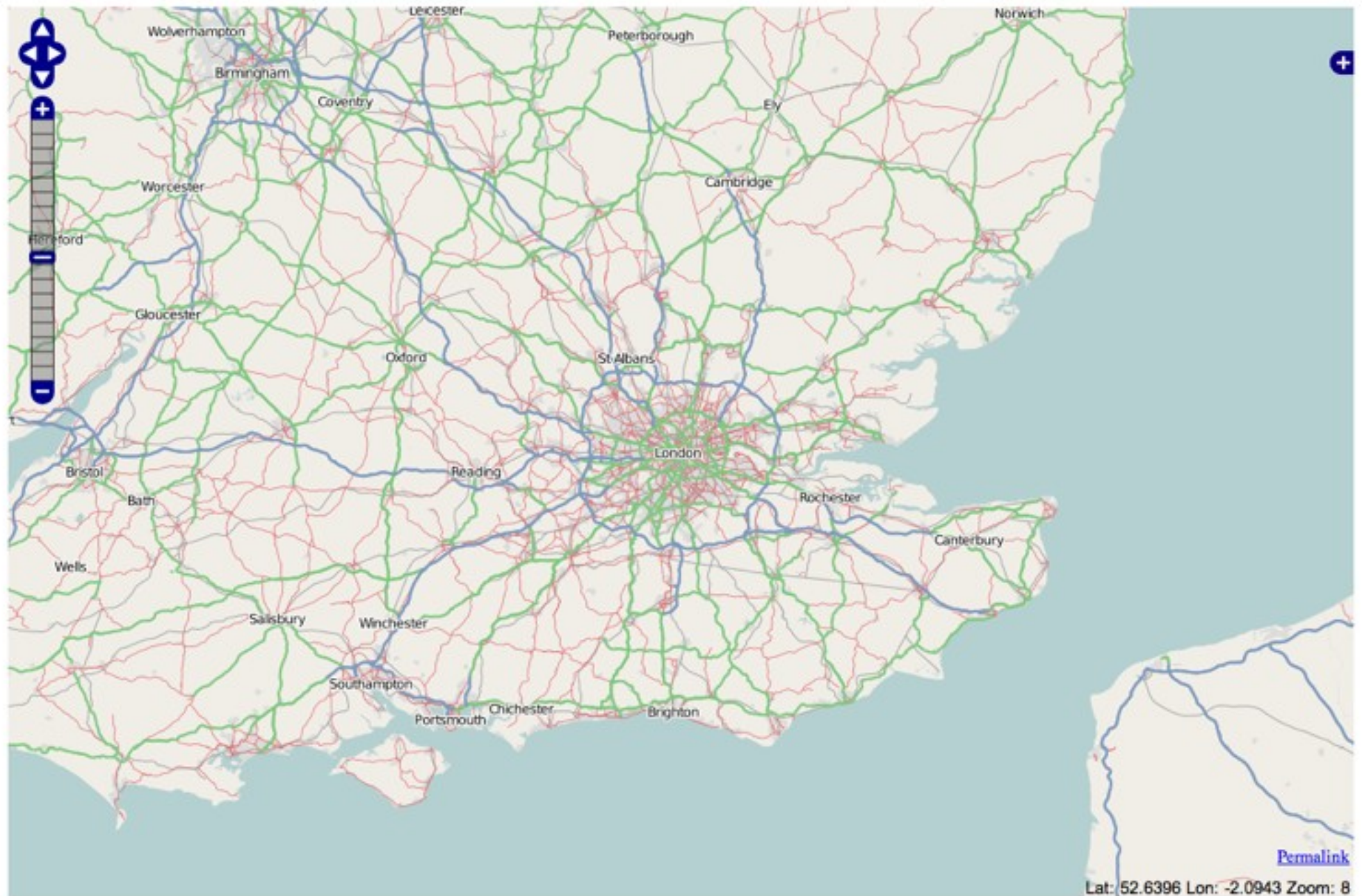
The background of the slide is a map from OpenStreetMap, showing a university campus area. The map includes various buildings, streets, and green spaces. Labels on the map include 'Varsity Centre', 'Museum', 'Victoria College', 'Burwash Hall', 'Loretto College', 'Emmanuel College', 'Falconer Hall', 'McLaughlin Planetarium', 'Edward', 'Innis College', 'Max Gluskin House', 'Claude T. Bissell Building', 'Roberts Library', 'Fisher Rare Book Library', 'Centre for Biological Timing and Cognition', 'Huron Street', and 'Willcocks Street'. The OpenStreetMap logo is prominently displayed in the upper center of the map.

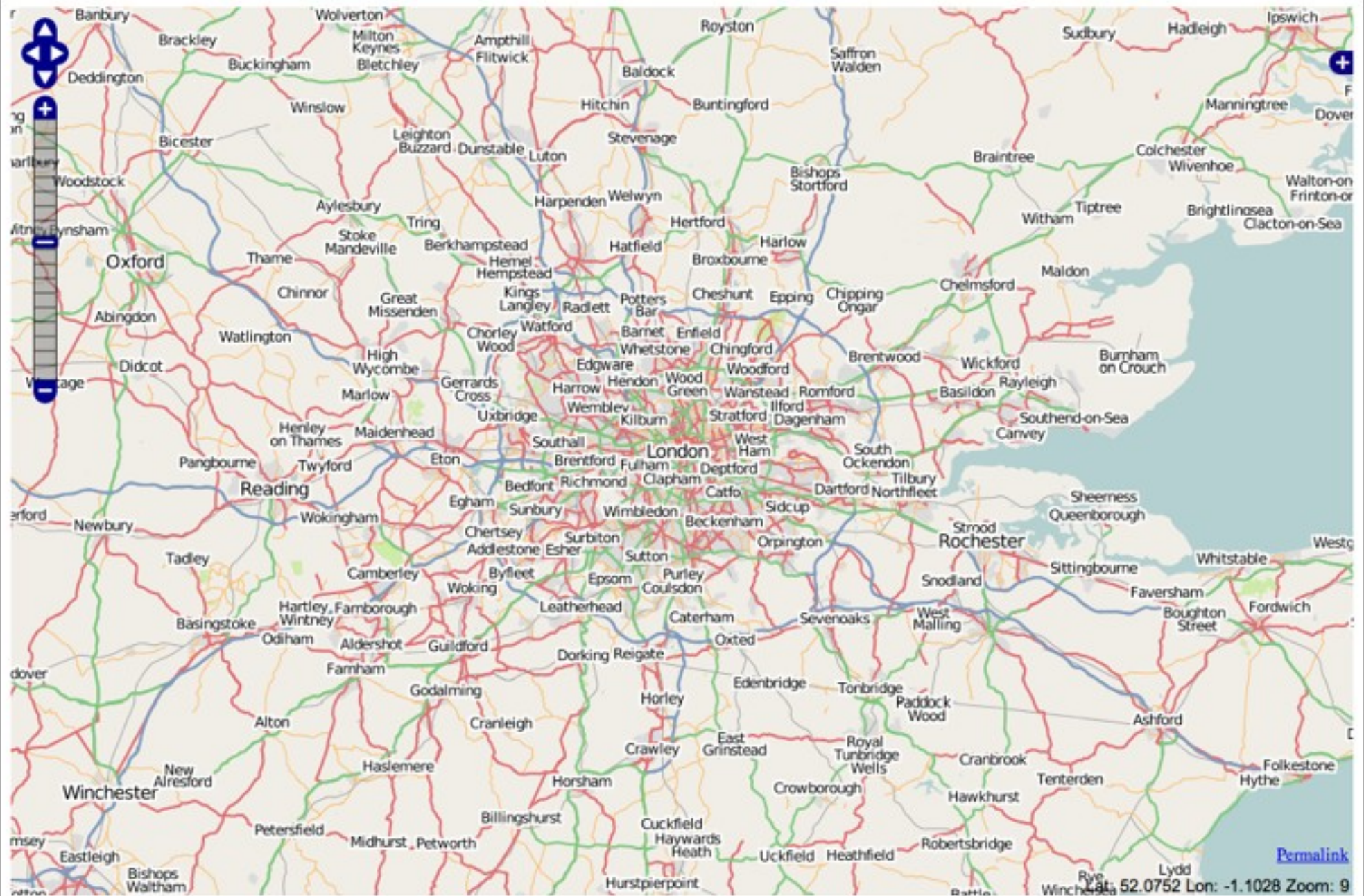
OpenStreetMap

We make beautiful maps.

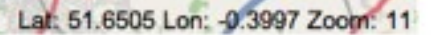
And we give them away.

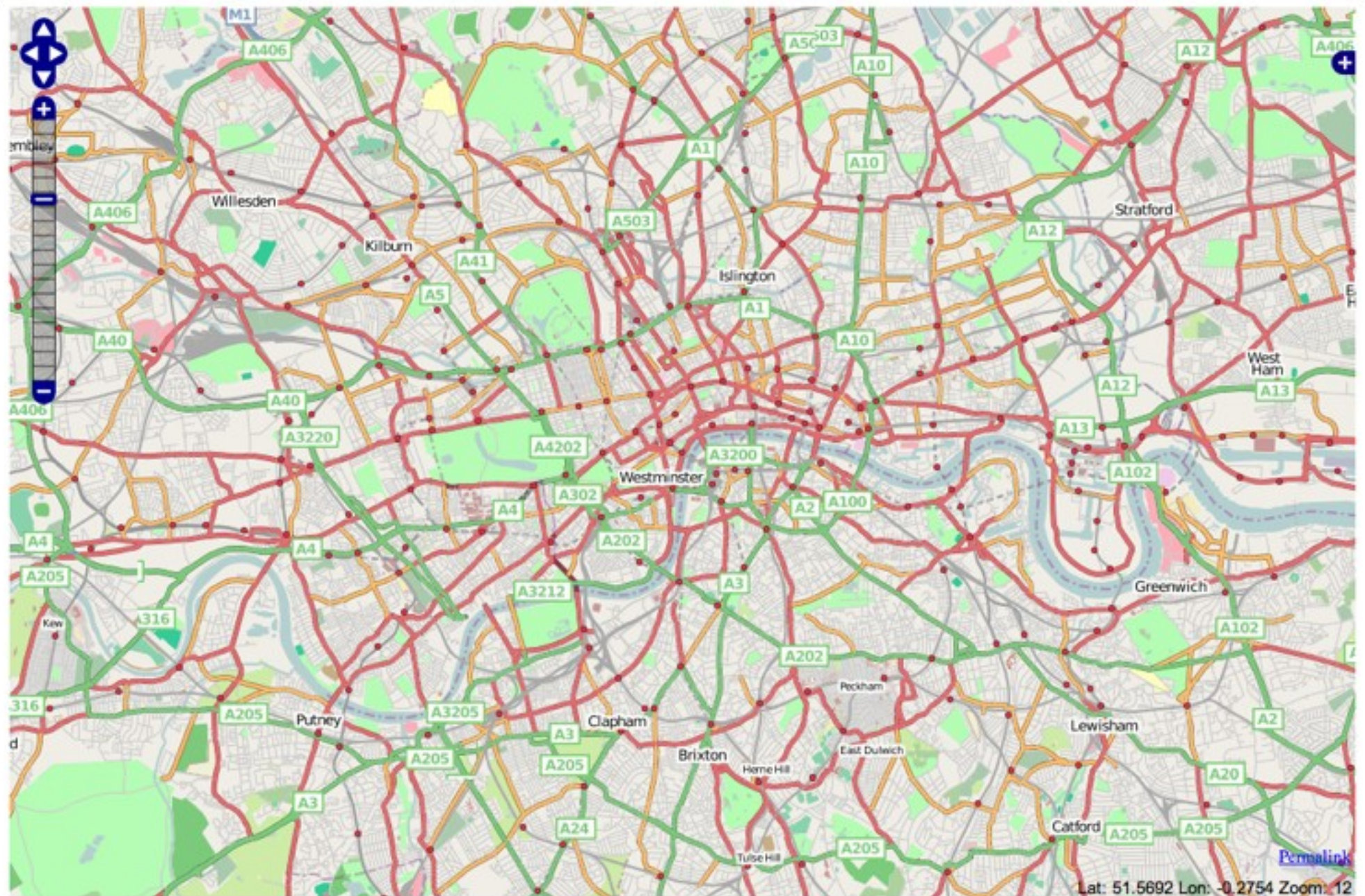


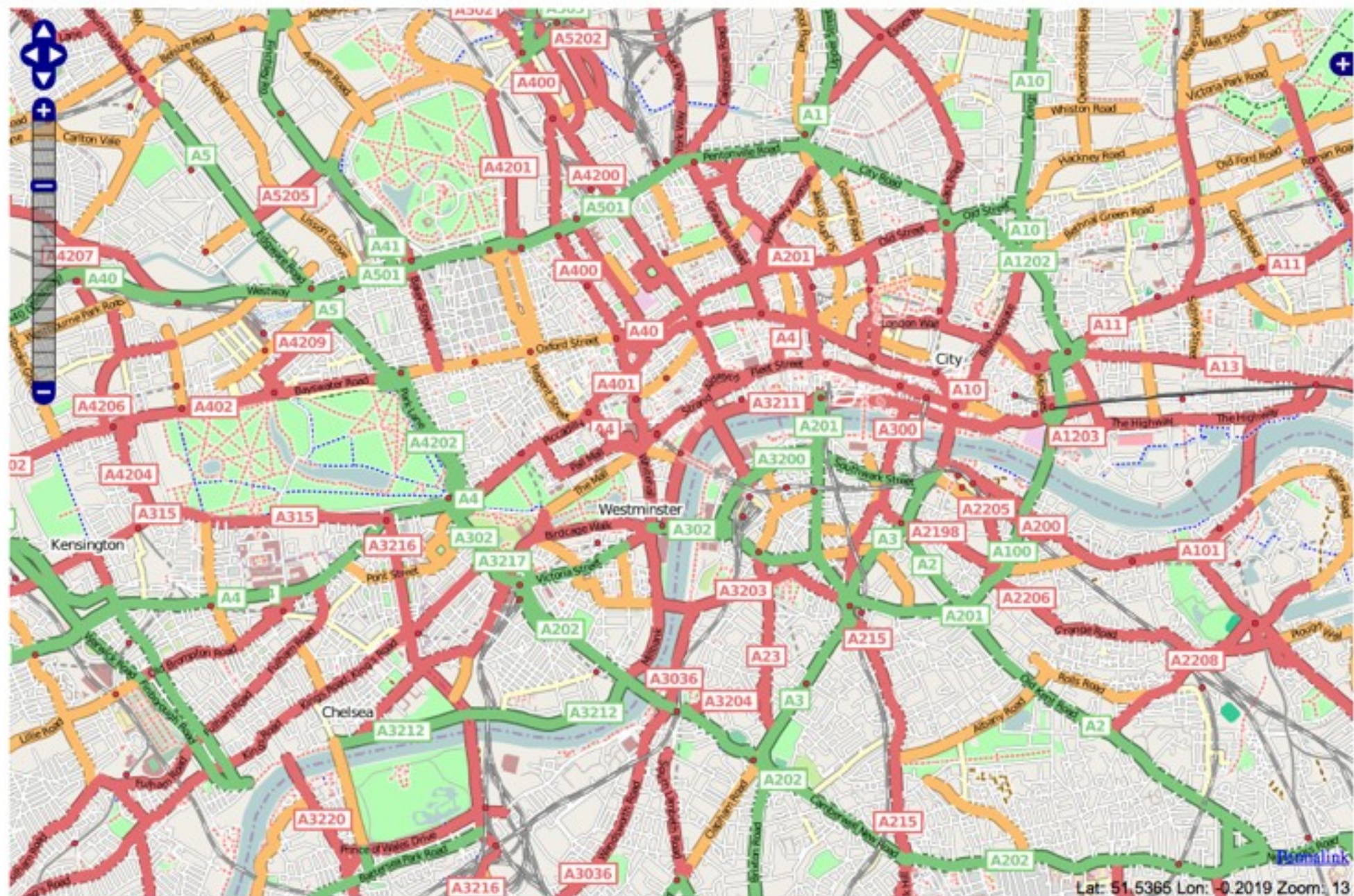


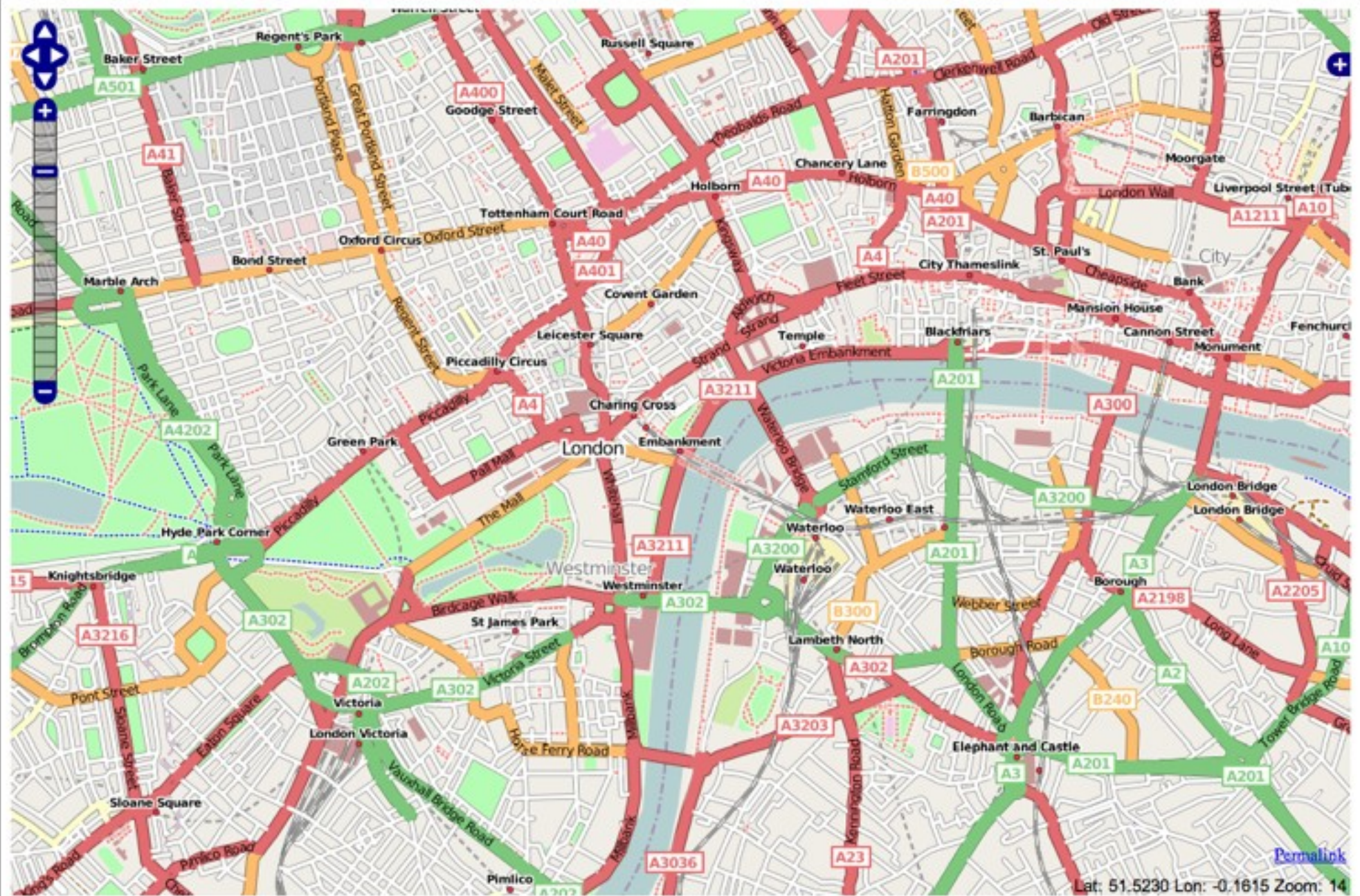




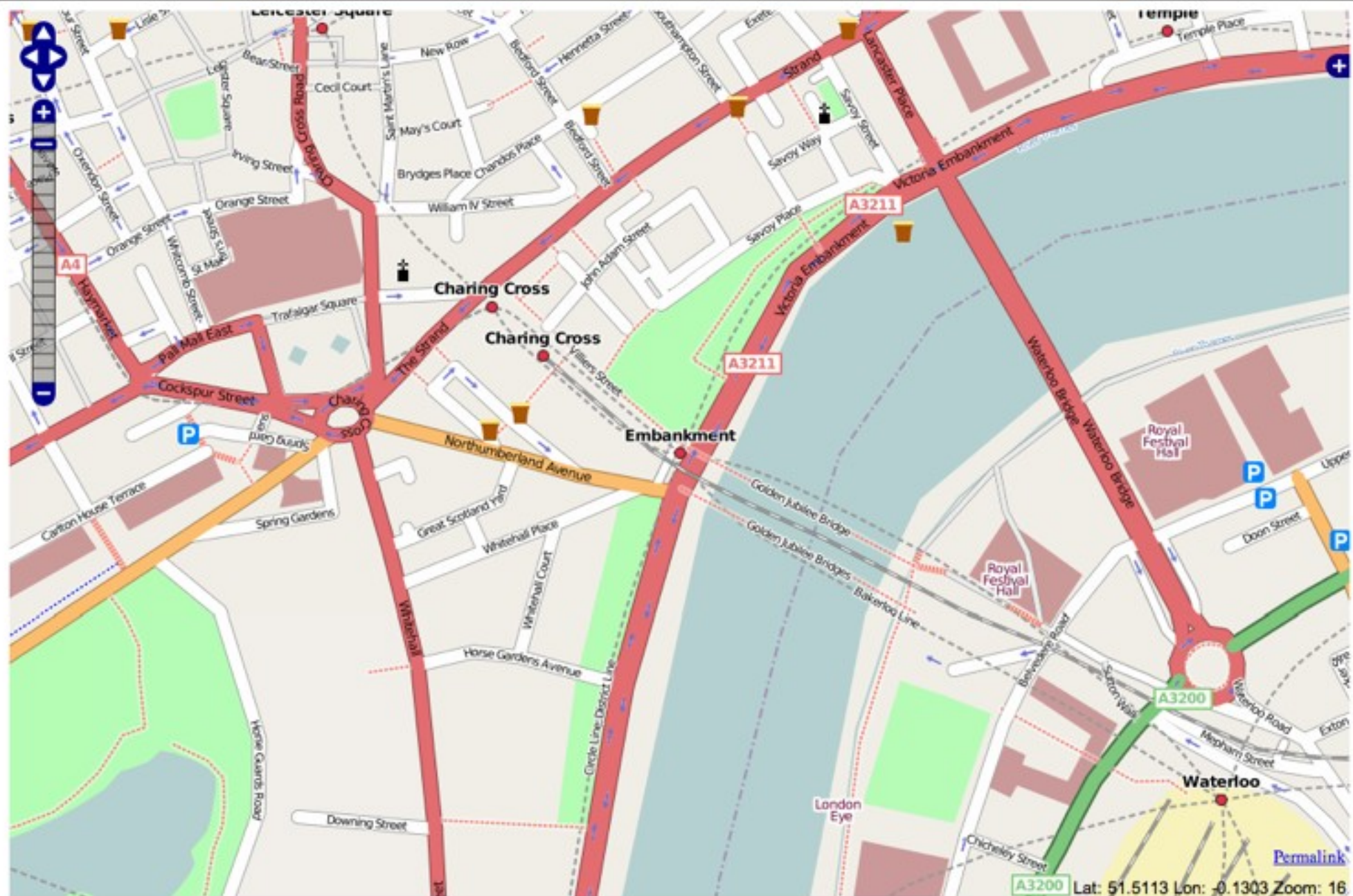






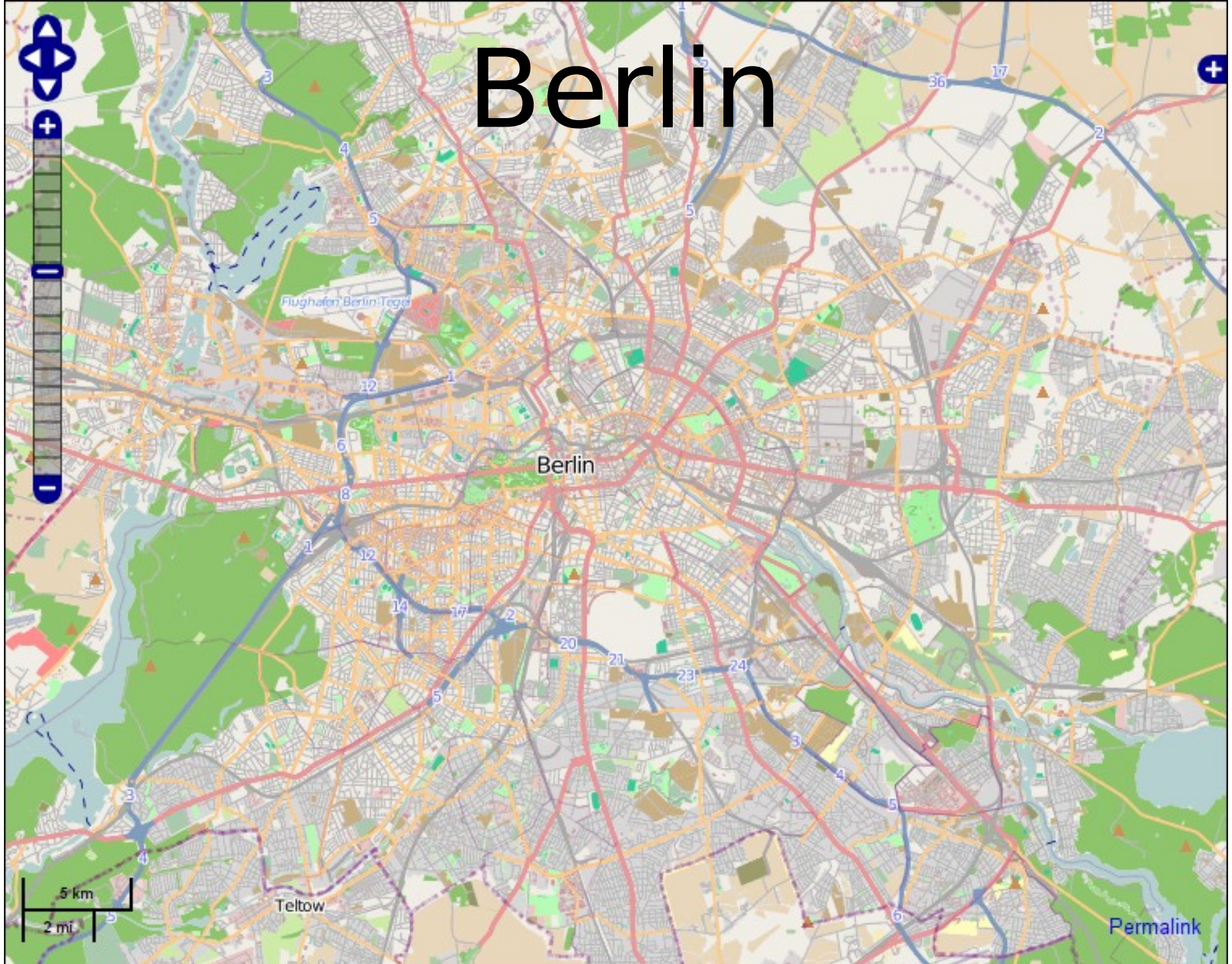




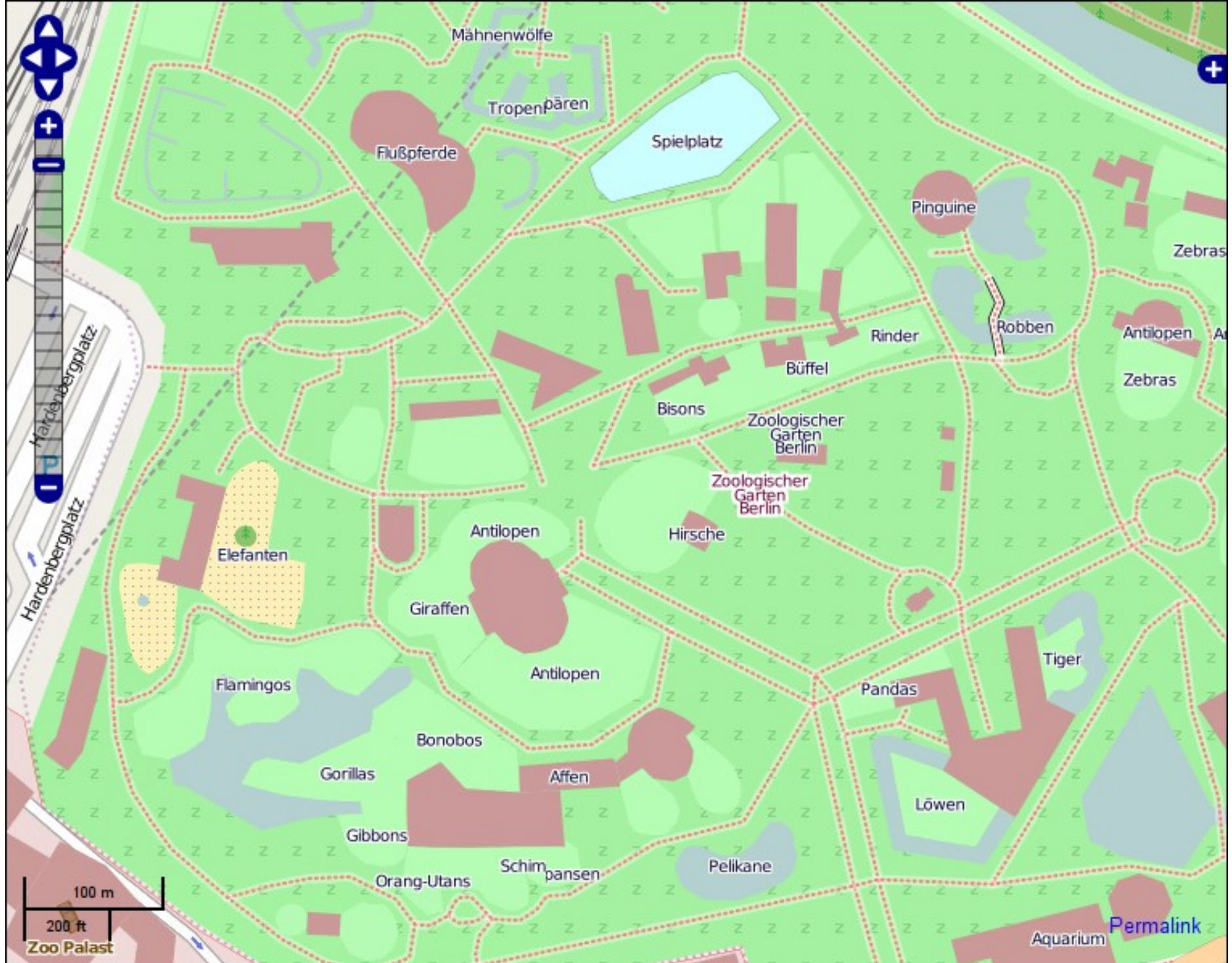




Berlin



<http://openstreetmap.org/?lat=52.511&lon=13.399&zoom=11&layers=B000FTF>



<http://openstreetmap.org/?lat=52.5078&lon=13.33787&zoom=17&layers=B000FTF>

Fort Fun



Show area on: Choose map...



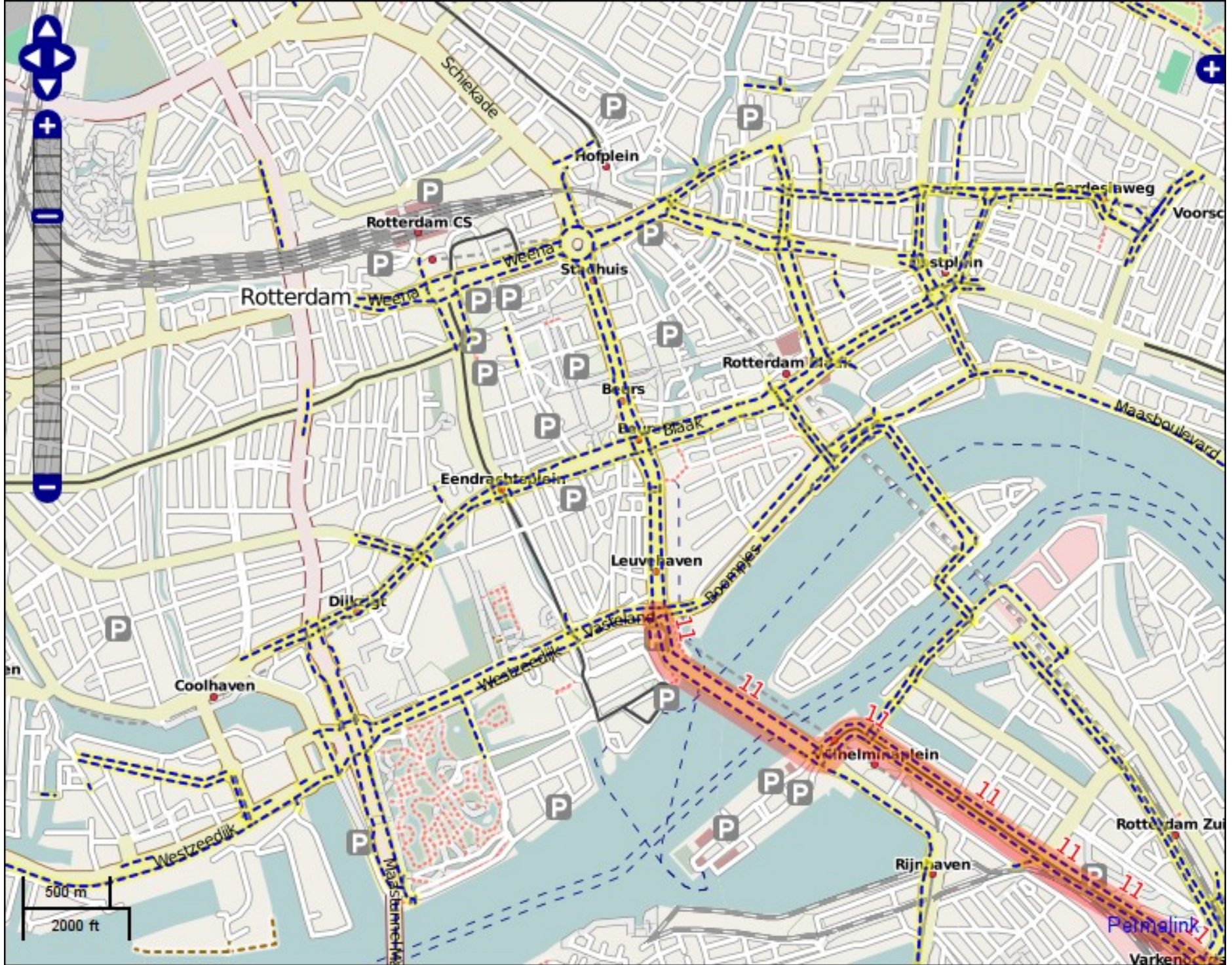
zoom=16

[Permalink](#)Data/Maps Copyright 2009 [Geofabrik GmbH](#) and [OpenStreetMap Contributors](#) | License: [Creative Commons](#)<http://tools.geofabrik.de/map/?type=Mapnik&lon=8.43681&lat=51.31206&zoom=16>

Rotterdam



<http://openstreetmap.org/?lat=52.50826&lon=13.33935&zoom=17&layers=B000FTF>



<http://openstreetmap.org/?lat=52.50826&lon=13.33935&zoom=17&layers=B000FTF>



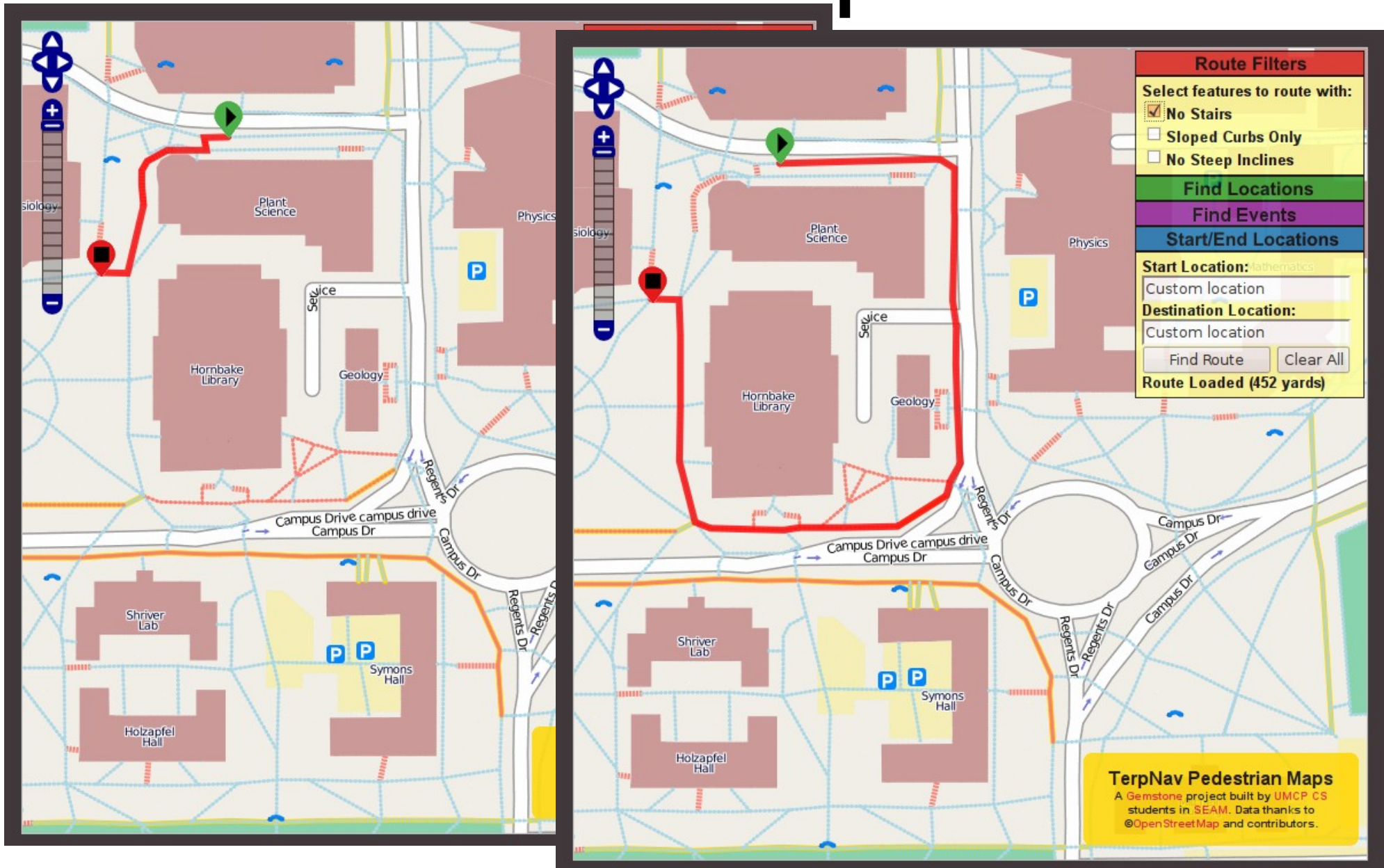
http://wiki.openstreetmap.org/wiki/Image:Osm_putney_cycle.jpg

Fedora and gpsDrive



<http://wiki.openstreetmap.org/wiki/Image:Car-Monitor-CID650.jpg>

UMD - TerpNav



<http://seamster.cs.umd.edu:8090/map/index.html#>

Baghdad, Iraq



<http://openstreetmap.org/?lat=33.2674&lon=44.4109&zoom=13&layers=B000FTF>

Kinshasa, DRC



<http://openstreetmap.org/?lat=-4.3346&lon=15.3105&zoom=13&layers=B000FTF>

Gaza City

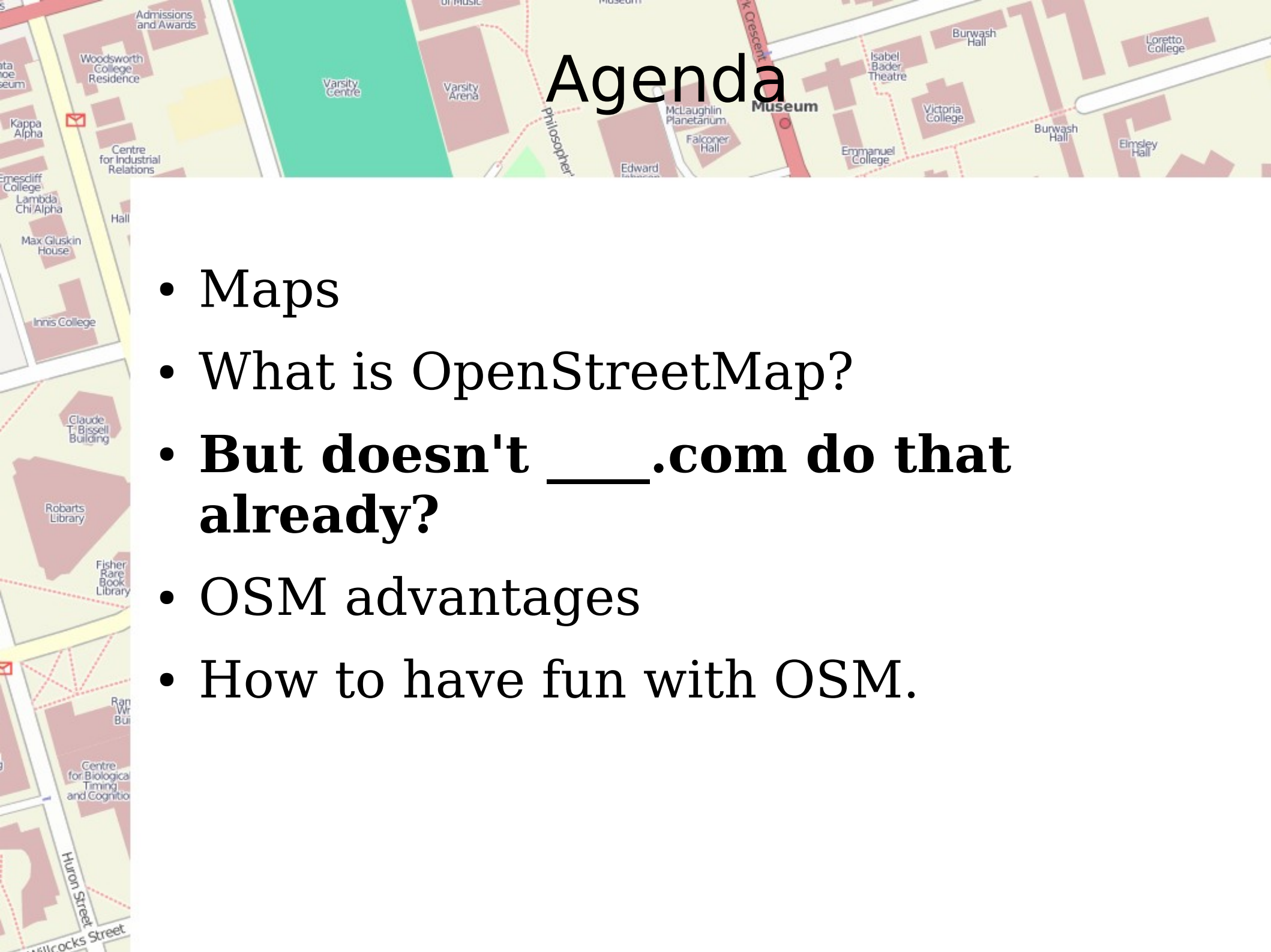


<http://openstreetmap.org/?lat=31.5161&lon=34.4737&zoom=13&layers=B000FTF>

Cyprus



<http://openstreetmap.org/?lat=35.152&lon=33.411&zoom=10&layers=B000FTF>



Agenda

- Maps
- What is OpenStreetMap?
- **But doesn't _____.com do that already?**
- OSM advantages
- How to have fun with OSM.

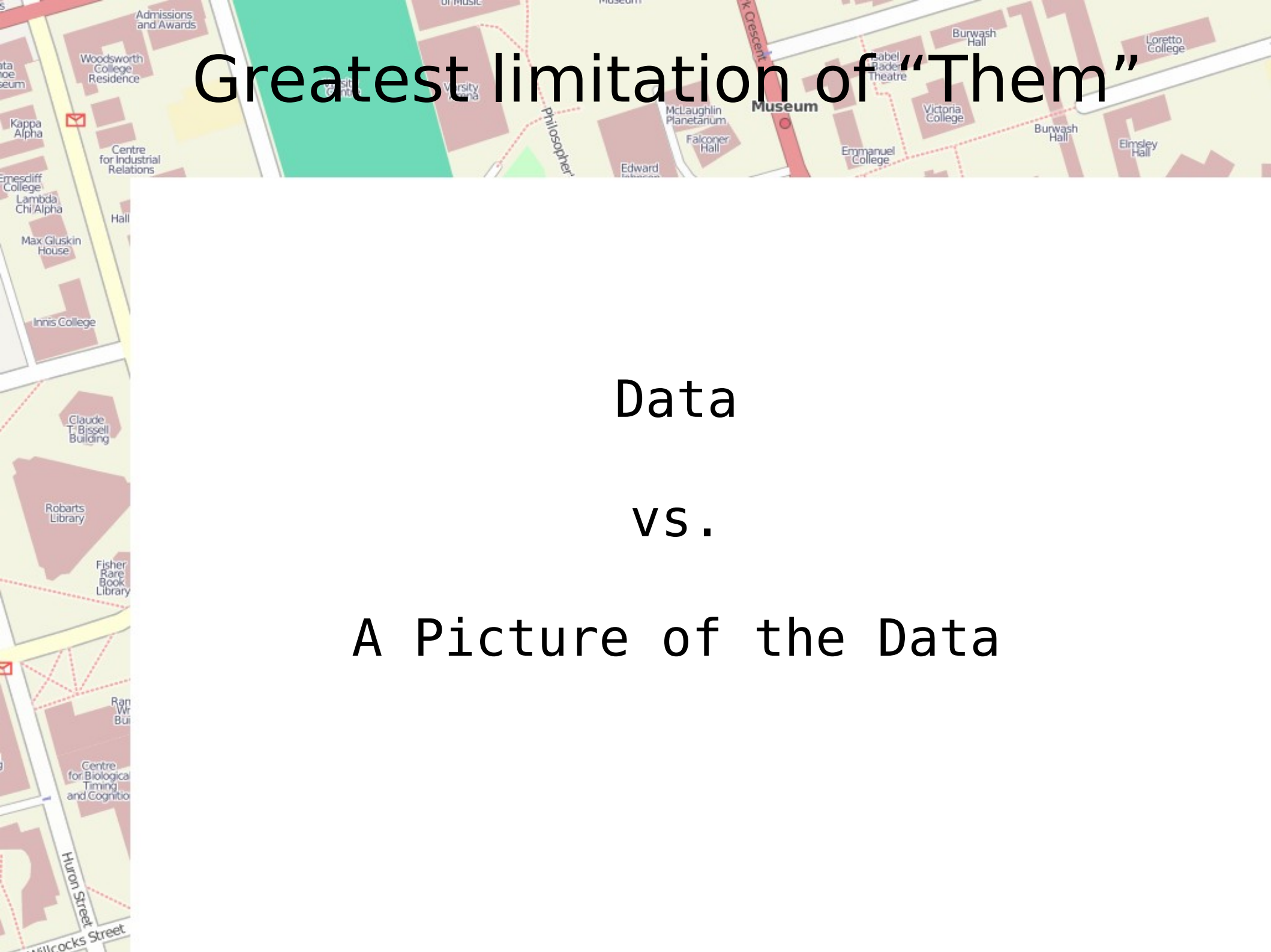
Commercial online maps

Google maps
Yahoo maps
Mapquest
Mapblast



They are all good, but they have limitations.

Photo Copyright R.Weait



Greatest limitation of “Them”

Data

vs.

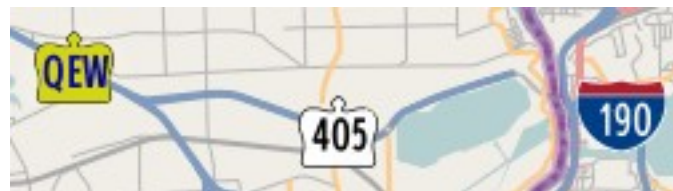
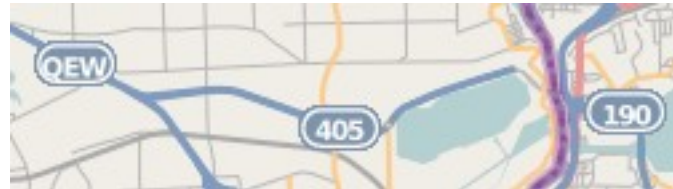
A Picture of the Data

Pubs with free WiFi



<http://www.flickr.com/photos/gravitystorm/2772146828/in/photostream/>

Highway shields



OpenRouteService.org

OpenLS Route Service with free OSM data - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.openrouteservice.org/ Google

OpenRouteService.org

Free OpenLS Route Service with Free OpenStreetMap Data

MAP&ROUTING HELP INFO NEWS WIKI FREEOPENLS CONTACT

Routing with user-generated, collaboratively collected free geodata. This service is based on open standards by the Open Geospatial Consortium (OGC). Thanks to OpenStreetMap.org - please donate your geographic data to openstreetmap.org!

Map ☒ Map Interaction ☐ Get Information [Where am I?](#)

Search
e.g. 'Bonn Meckenheimer Allee' or Postalcode '53111'

POIs ☐ Position

Routing ☐ Start ☐ End

☐ Use Real Time Traffic* ☐ No Motorways

Add regions to be avoided when routing: [Extended Routing Version](#)
Calculates reachable regions in given time: [Accessibility Analysis](#)

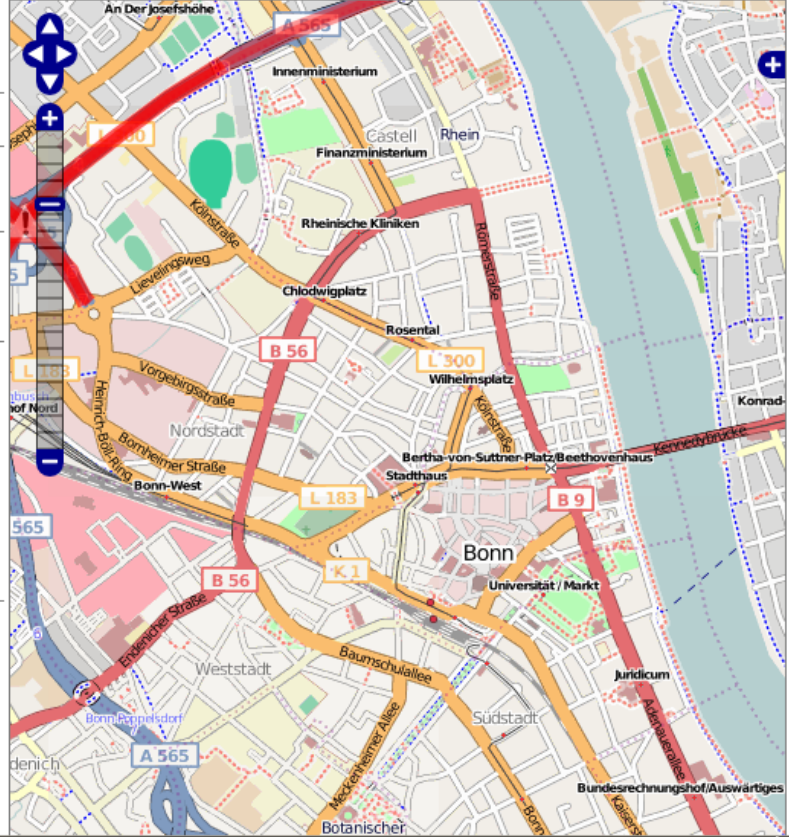
Routing in **Germany, Austria, Switzerland, Italy, Denmark, Liechtenstein, UK and Ireland** with user-generated, collaboratively collected free geodata.

To get more information how to use Map&Routing, please click [Help!](#)

First Germany-, Austria-, Switzerland-, Italy-, Denmark-, Liechtenstein-, UK- and Ireland-wide ...

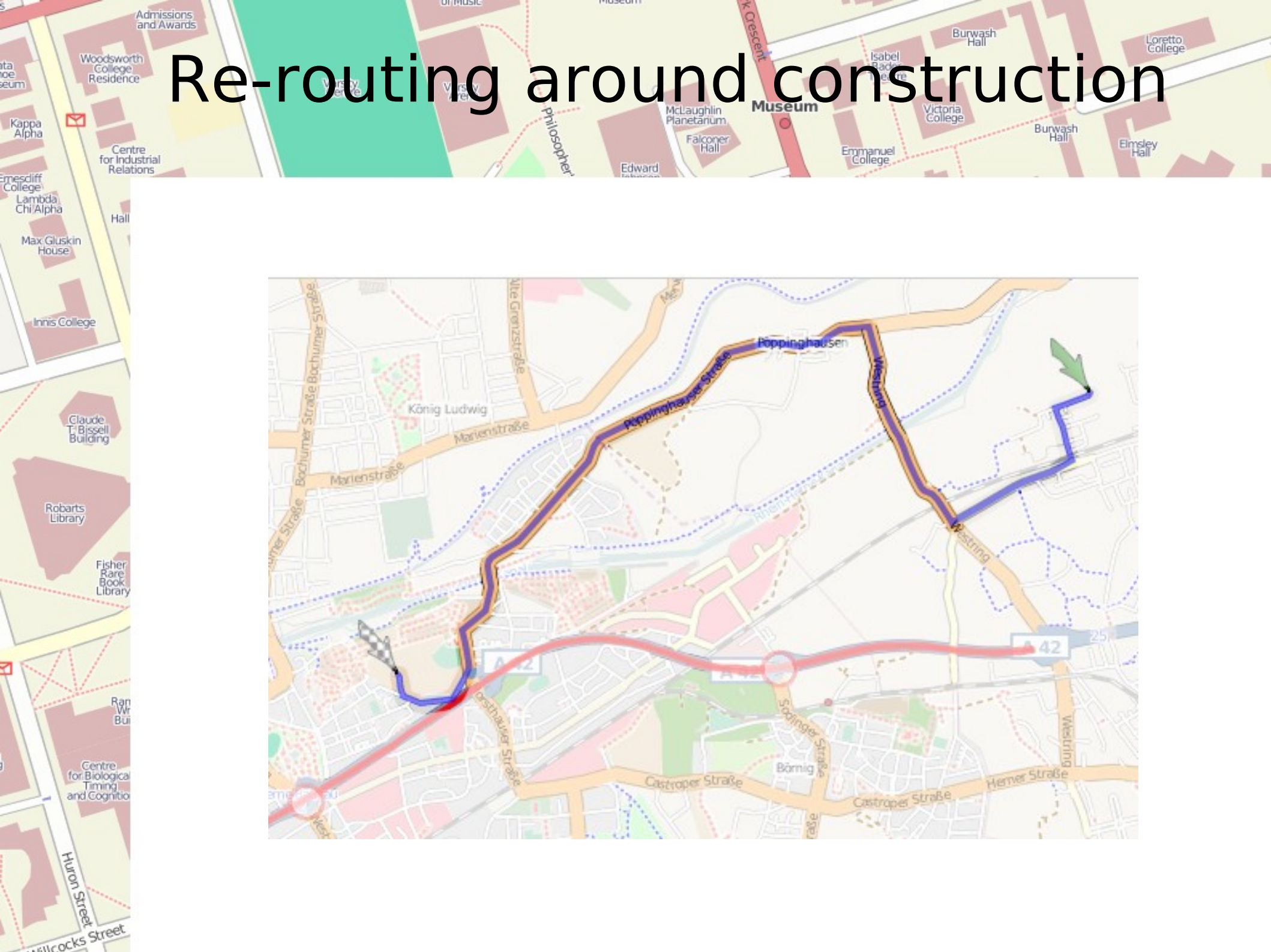
- Route Service
- Pedestrian Routing including stairs, passways etc. (as far as mapped by OpenStreetMap)
- Bicycle Routing

Done

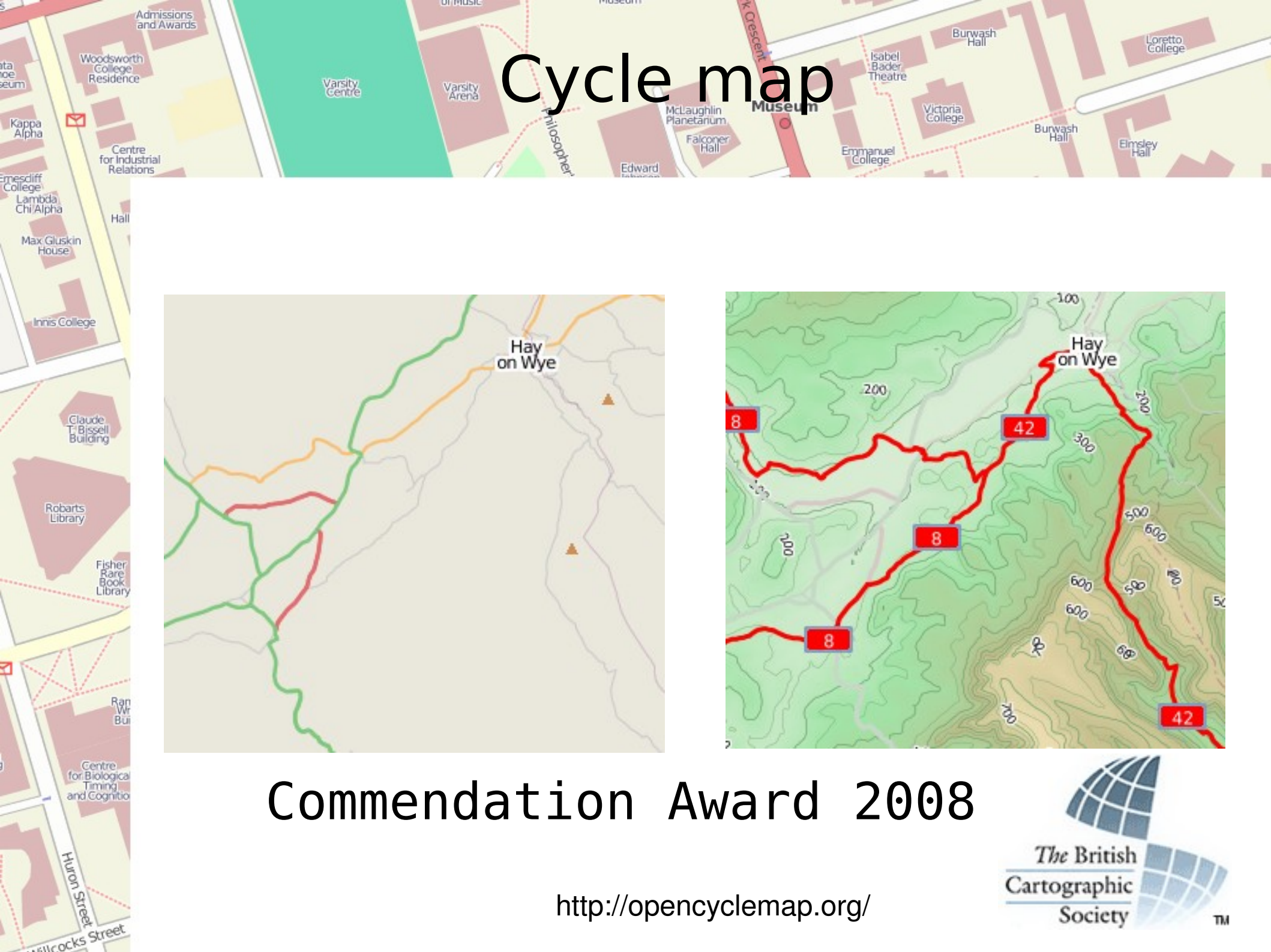


University of Bonn, Germany

Re-routing around construction



Cycle map



Commendation Award 2008

<http://opencyclemap.org/>

OpenPisteMap.org

OpenPisteMap

Map data licensed
[CC-BY-SA](#)
[OpenStreetMap](#)
(OpenStreetMap Foundation
and contributors)

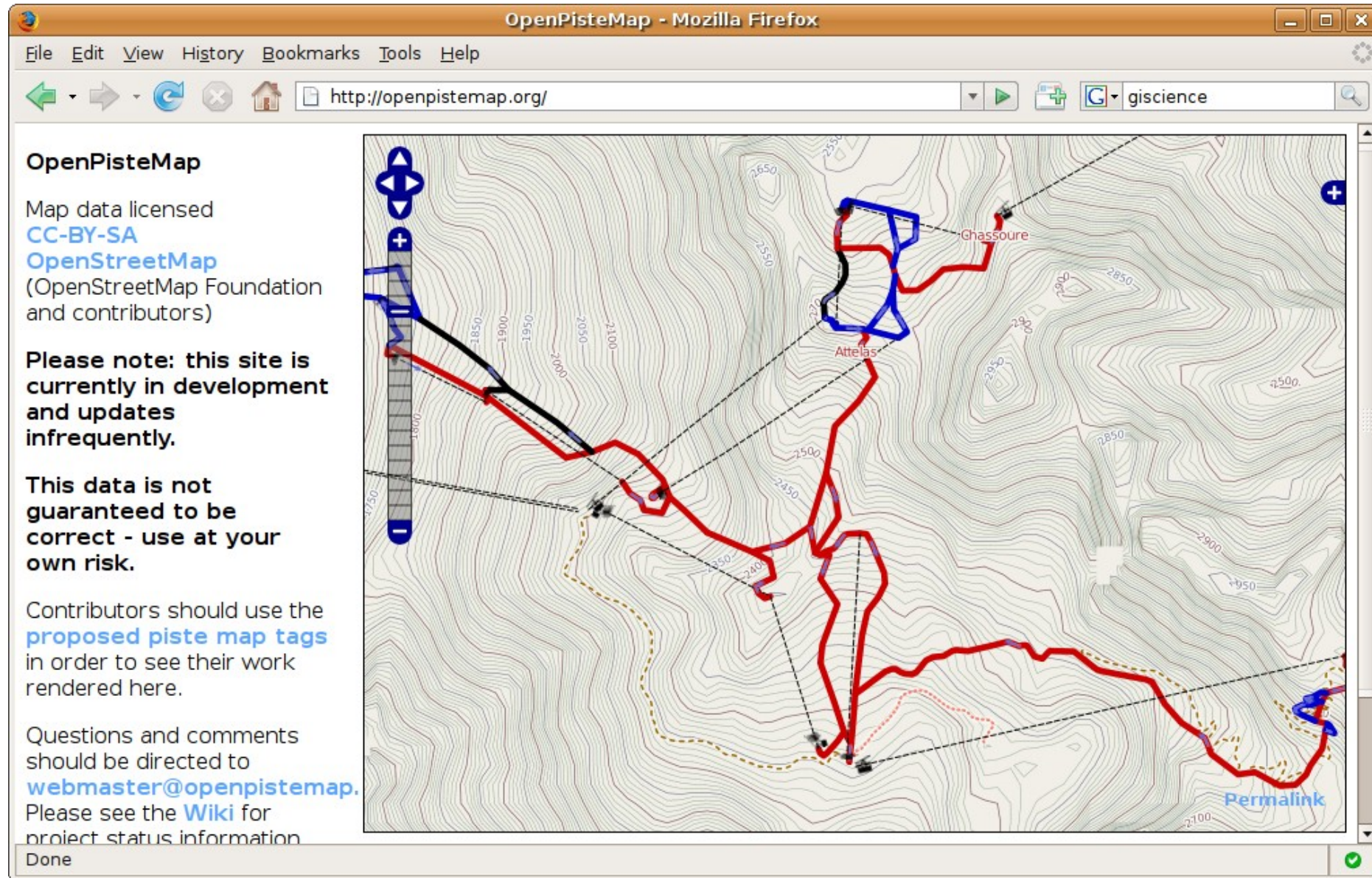
**Please note: this site is
currently in development
and updates
infrequently.**

**This data is not
guaranteed to be
correct - use at your
own risk.**

Contributors should use the
[proposed piste map tags](#)
in order to see their work
rendered here.

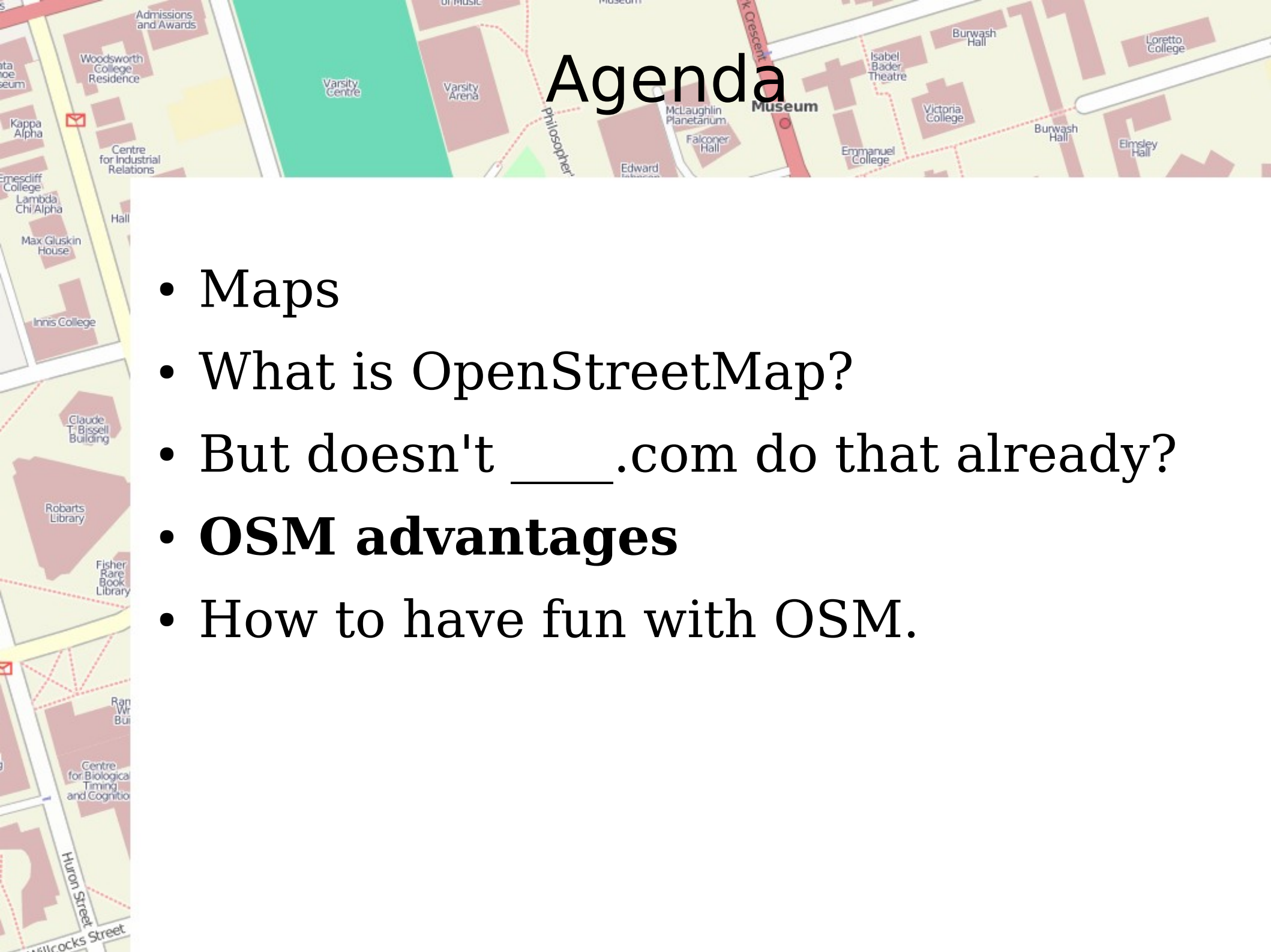
Questions and comments
should be directed to
webmaster@openpistemap.org.
Please see the [Wiki](#) for
project status information

Done





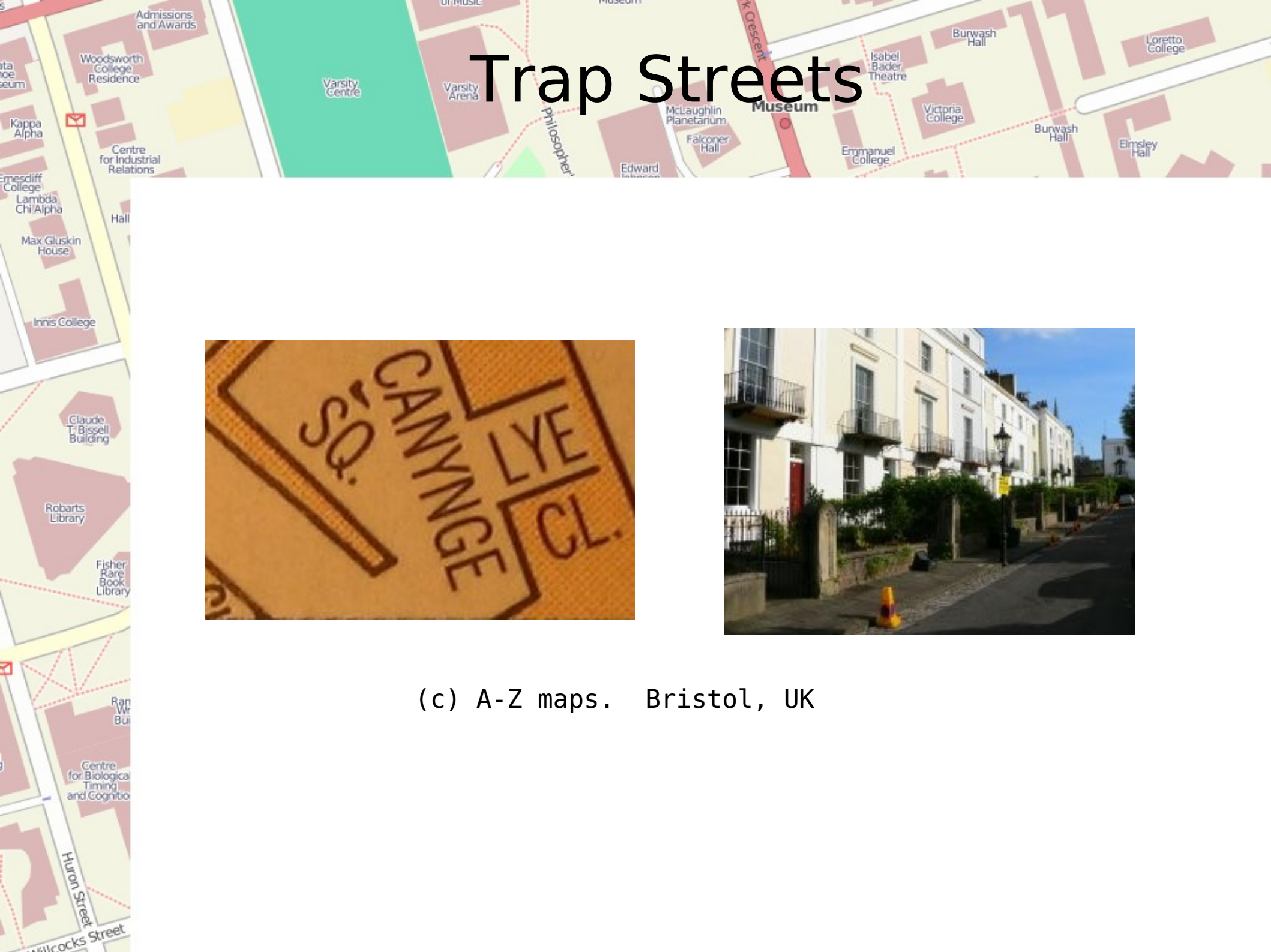
And even more...



Agenda

- Maps
- What is OpenStreetMap?
- But doesn't _____.com do that already?
- **OSM advantages**
- How to have fun with OSM.

Trap Streets



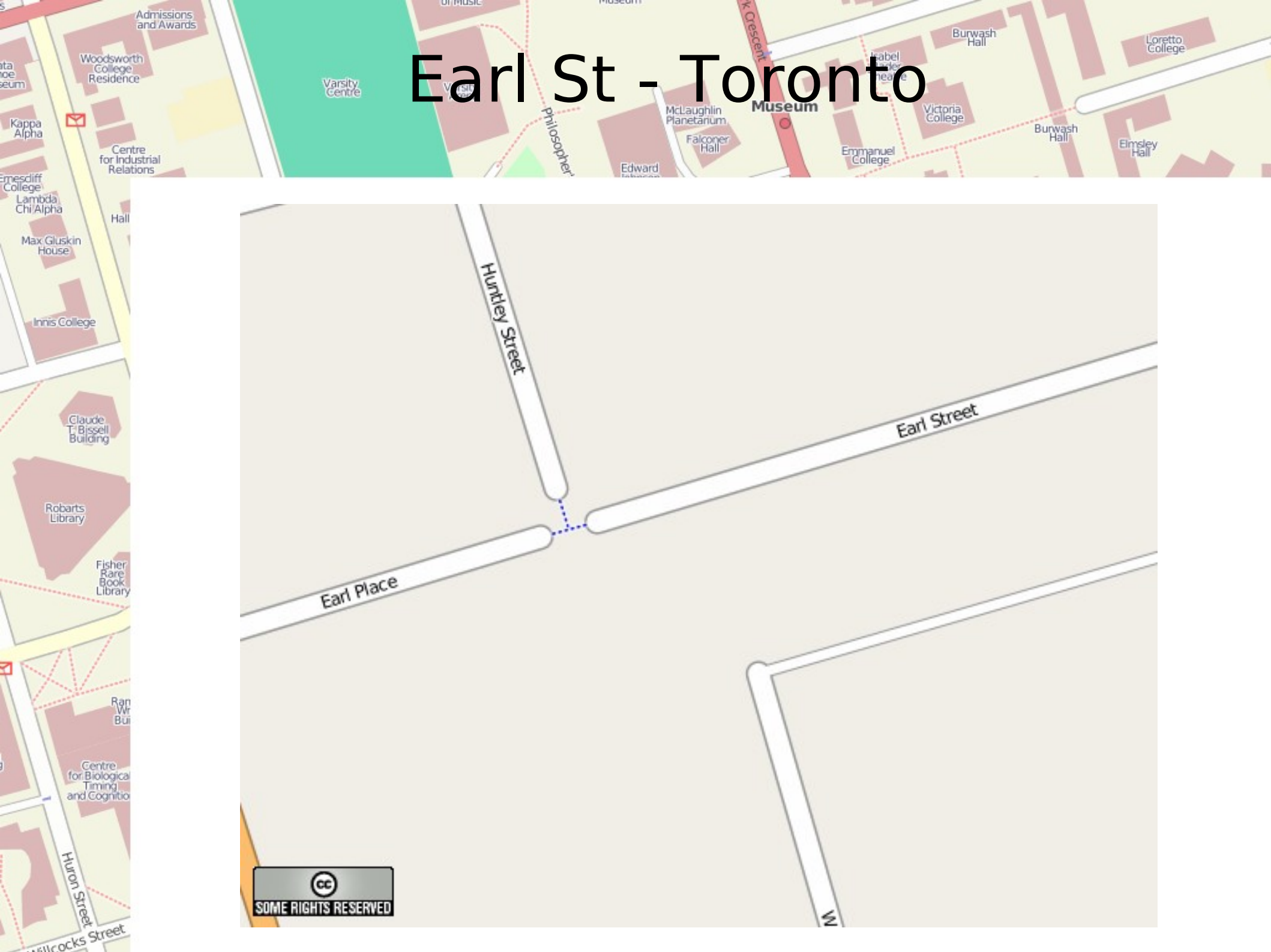
(c) A-Z maps. Bristol, UK

Earl St - Toronto

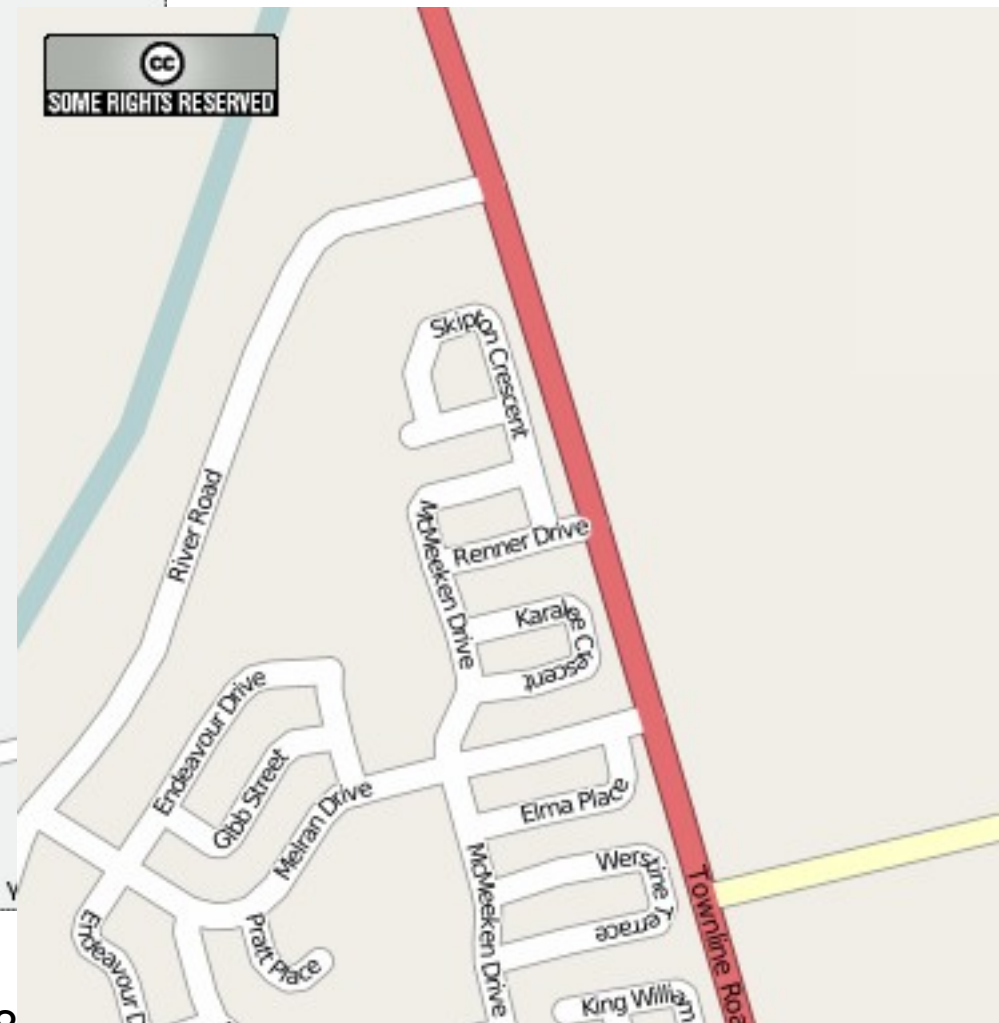
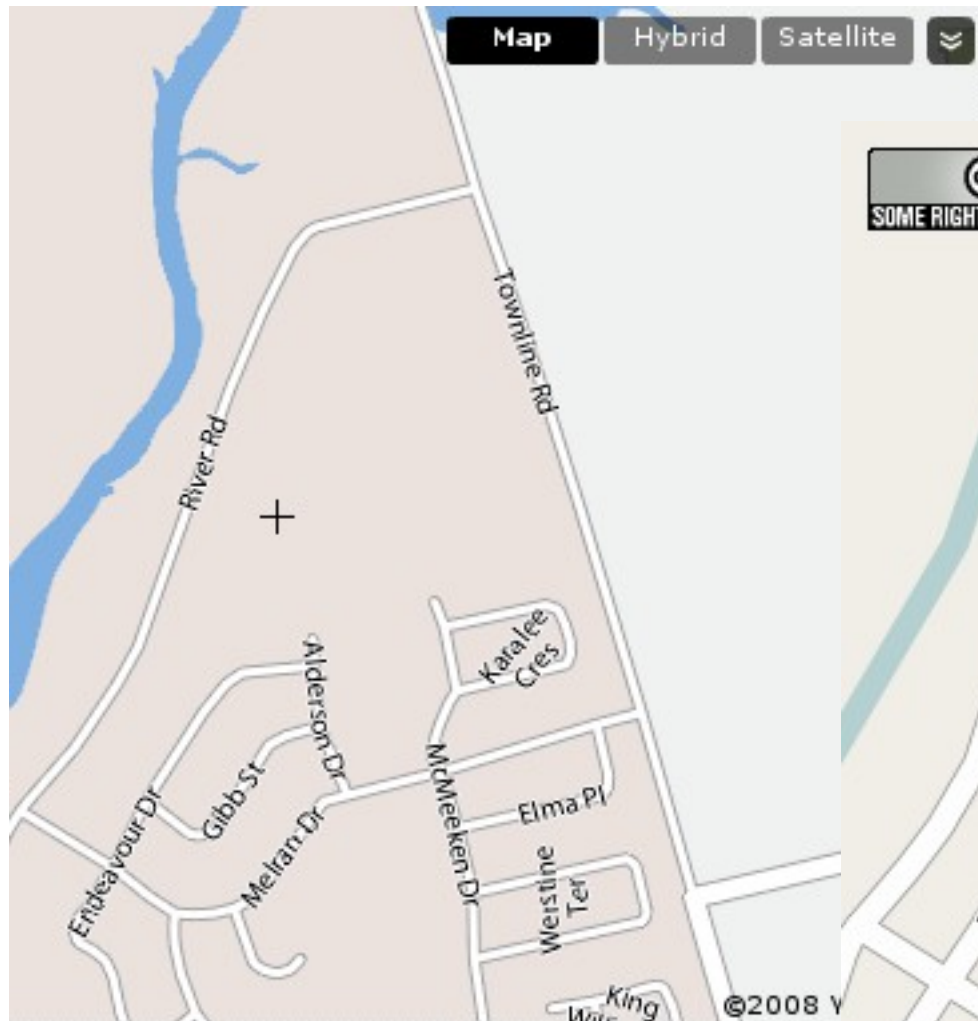


Still wrong on 10 Feb 2009

Earl St - Toronto

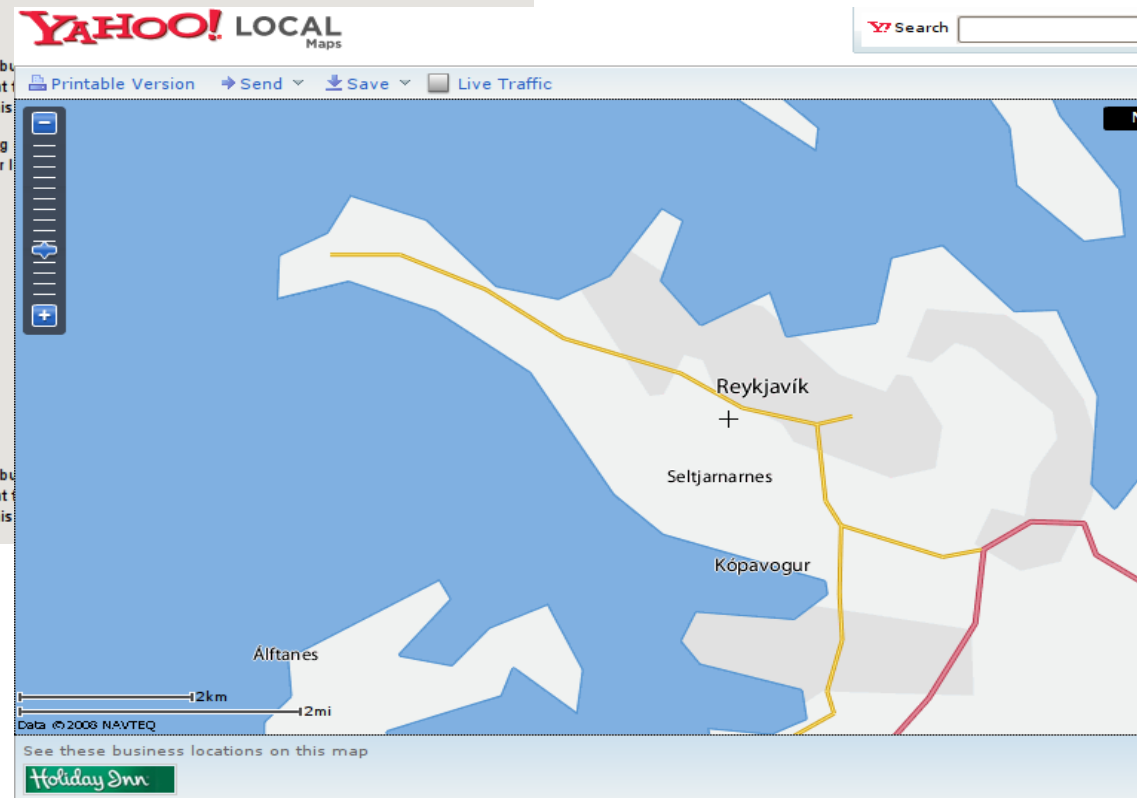
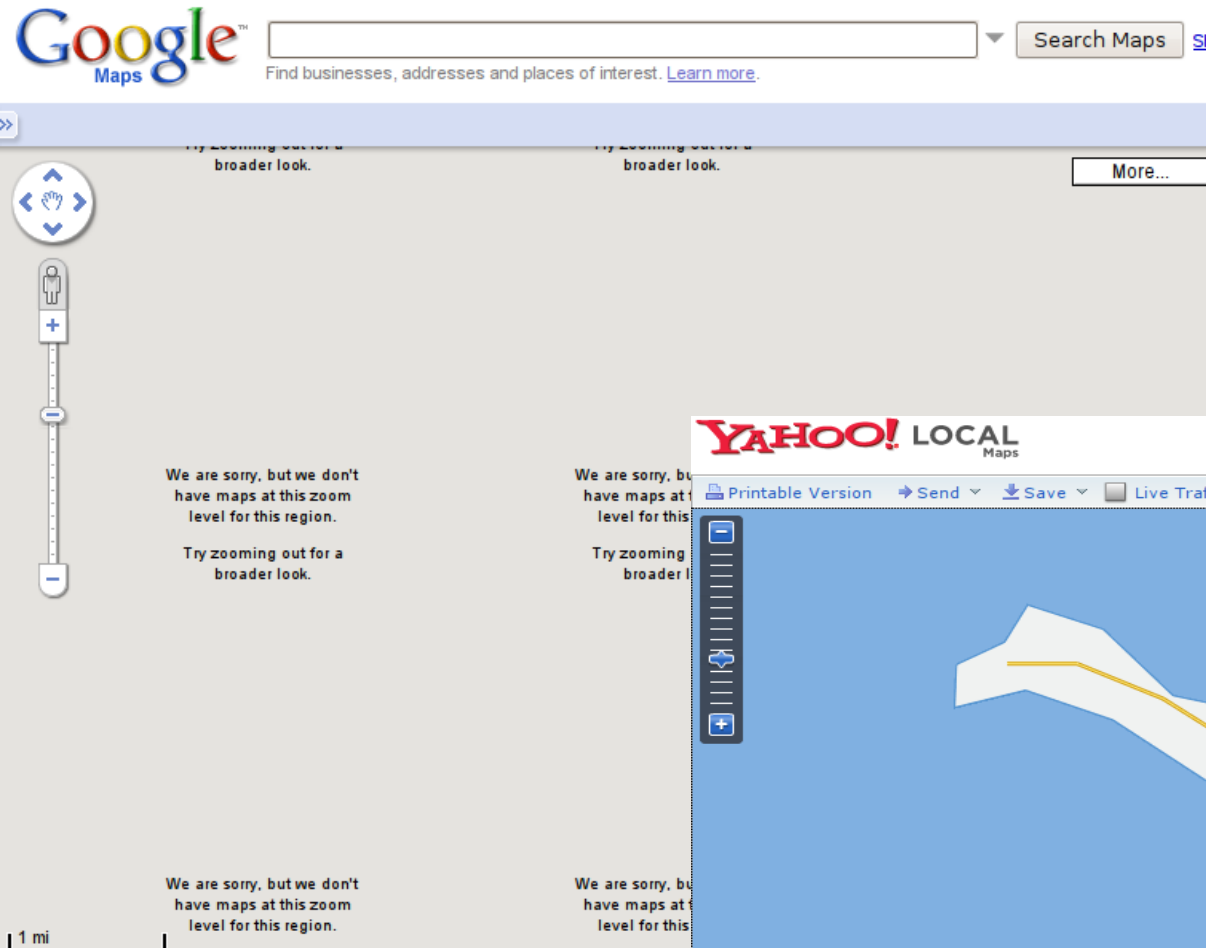


Skipton Crescent - Cambridge



Yahoo screen capture: 25 Sept 2008
Still wrong 10 Feb 2009

Commercial viability vs. population



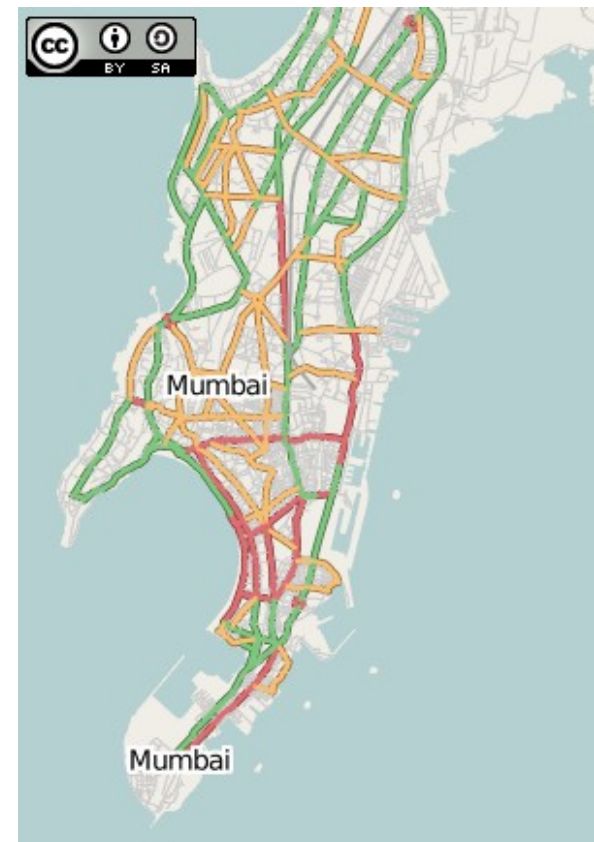
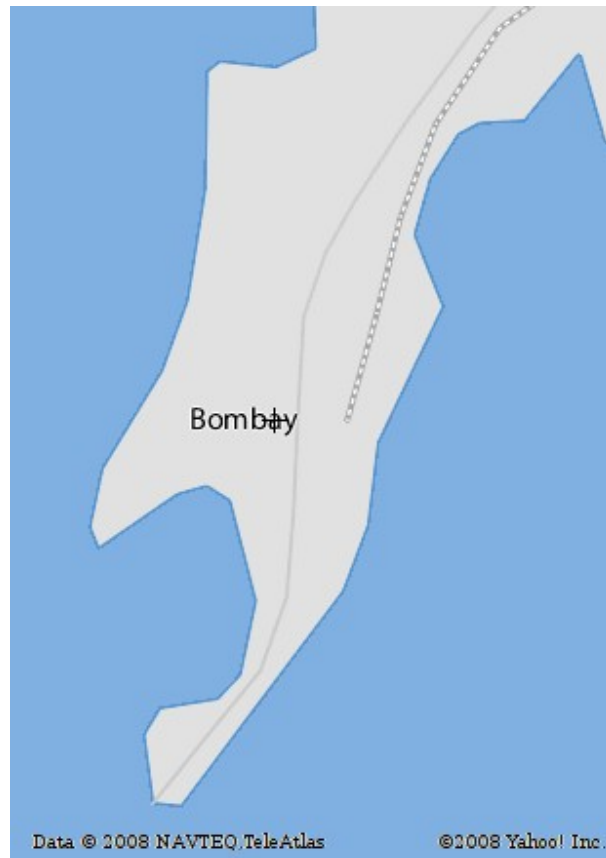
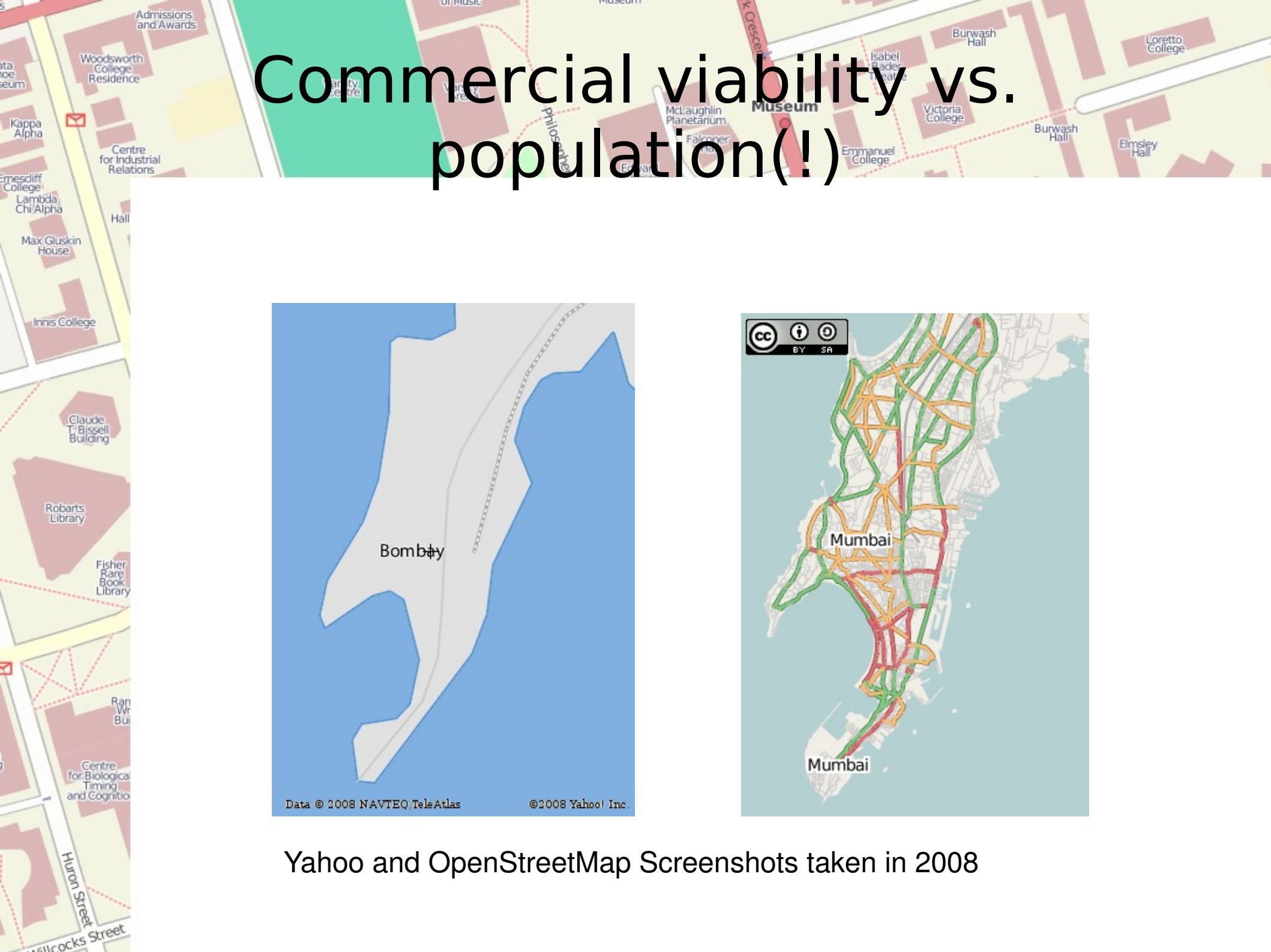
Google and Yahoo screenshots taken on 8 February 2009. Yahoo and Google trademarks belong to Yahoo and Google.

Reykjavik, Iceland



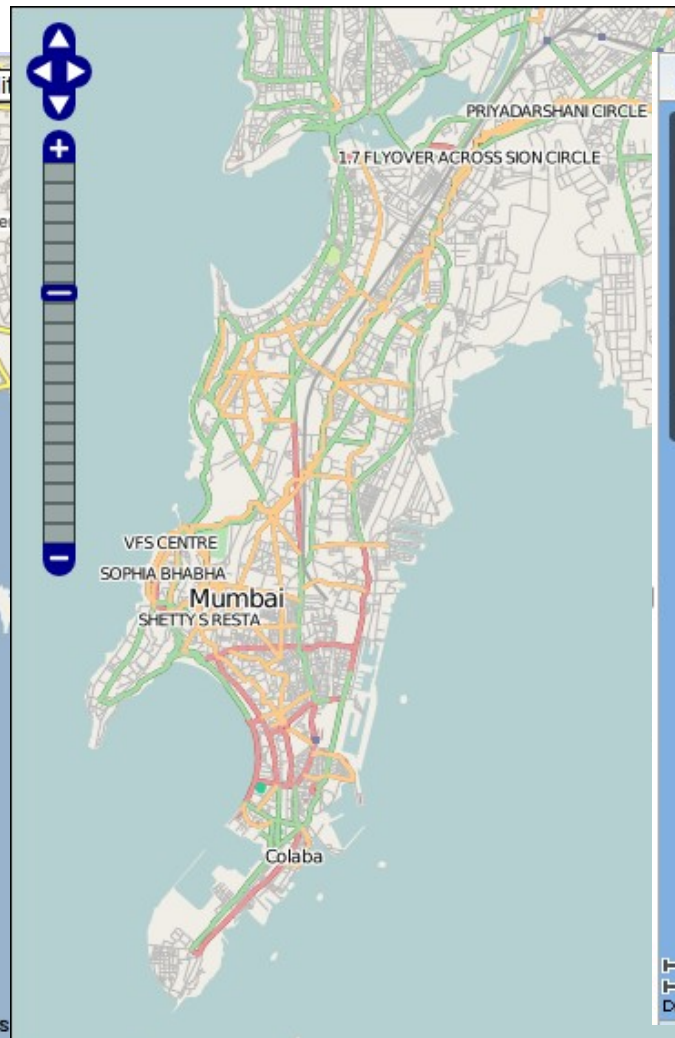
<http://openstreetmap.org/?lat=64.1311&lon=-21.9077&zoom=12&layers=B000FTF>

Commercial viability vs. population(!)



Yahoo and OpenStreetMap Screenshots taken in 2008

Mumbai, India



Google, Yahoo and OpenStreetMap Screenshots taken 8 February 2009

<http://openstreetmap.org/?lat=18.9697&lon=72.8416&zoom=12&layers=B000FTF>

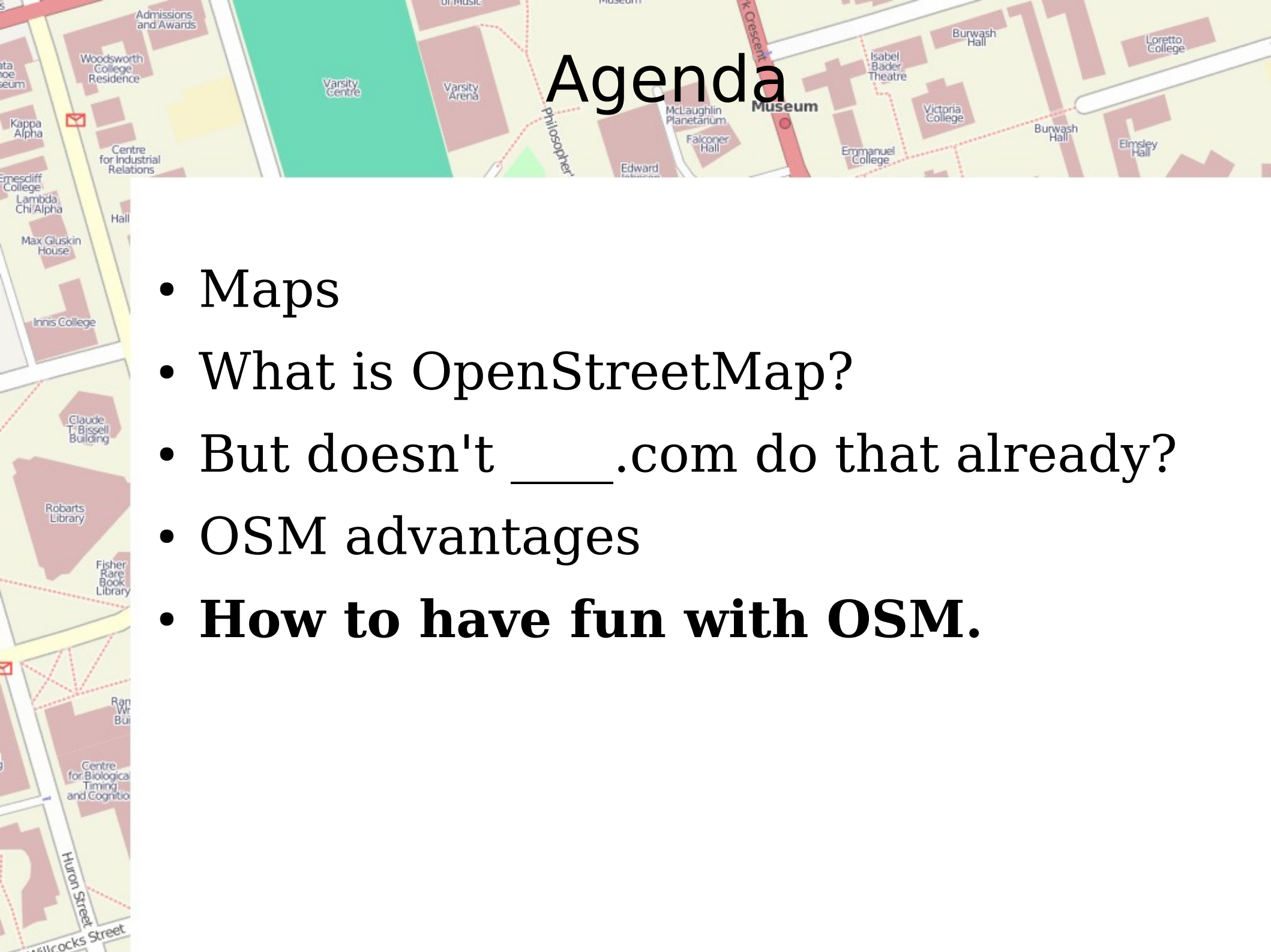
Generous license



Wanna server, Kid?

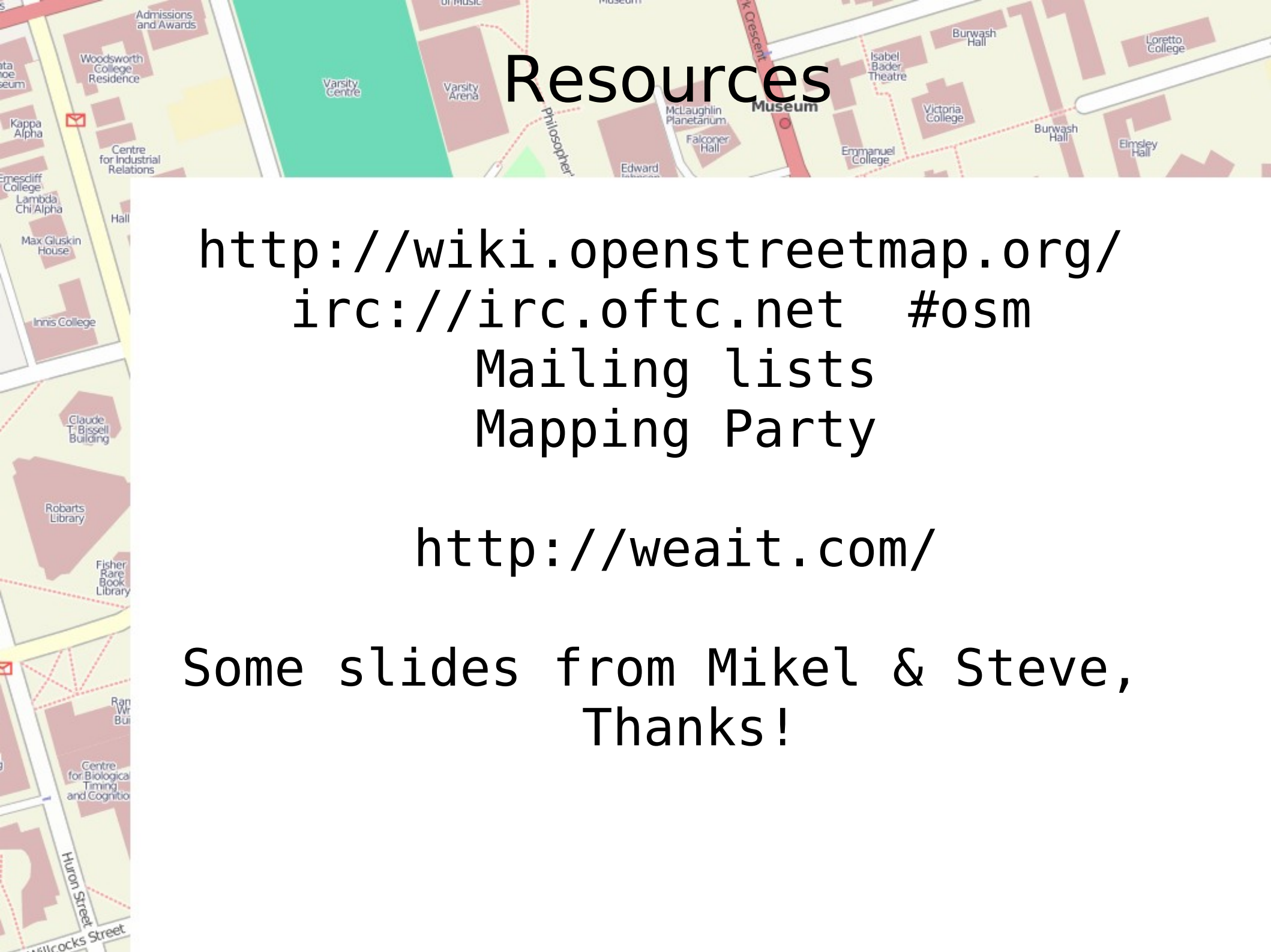


<http://wiki.openstreetmap.org/wiki/Image:OSM-Servers-Aug08-Install-After.jpg>



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Resources

<http://wiki.openstreetmap.org/>
[#osm](irc://irc.oftc.net)

Mailing lists
Mapping Party

<http://weait.com/>

Some slides from Mikel & Steve,
Thanks!



Introduction to OSM |
Richard Weait |

Presentation cc-by Richard Weait <http://weait.com>
OSM Map Data cc-by-sa <http://OpenStreetMap.org/>