

# OpenStreetMap workshop

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van den Broecke

Middelburg  
2023-09-13

<https://osmws.osgeo.nl/>



**Ik hou van  
OpenStreetMap**



Samen de wereld in kaart brengen en de gegevens delen onder een open licentie.

[openstreetmap.org](http://openstreetmap.org)

Ondersteunende website  
voor deze workshop

[osmws.osgeo.nl](https://osmws.osgeo.nl)

content: <https://github.com/osgeonl/osmws.osgeo.nl>



Iedereen gebruikt  
OpenStreetMap



# Overzicht

Principes van  
OSM

Het OSM  
datamodel

Gereedschapp  
en

De organisatie  
achter OSM

Zelf aan de  
slag!

# De richtlijnen van OpenStreetMap

*Wat doen we en waarom doen we het zo?*

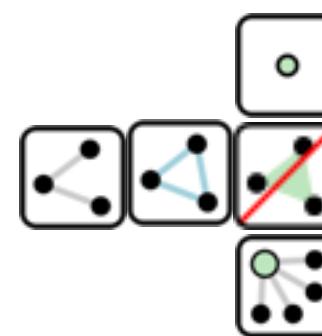


- Verifieerbaarheid: breng in kaart wat je kunt zien
- Kies de tags die het beste passen
- Je bent mede-eigenaar van de kaart
- Kopieer niet zomaar van andere kaarten
- Heb plezier!

# Het datamodel van OpenStreetMap

## Andere GIS

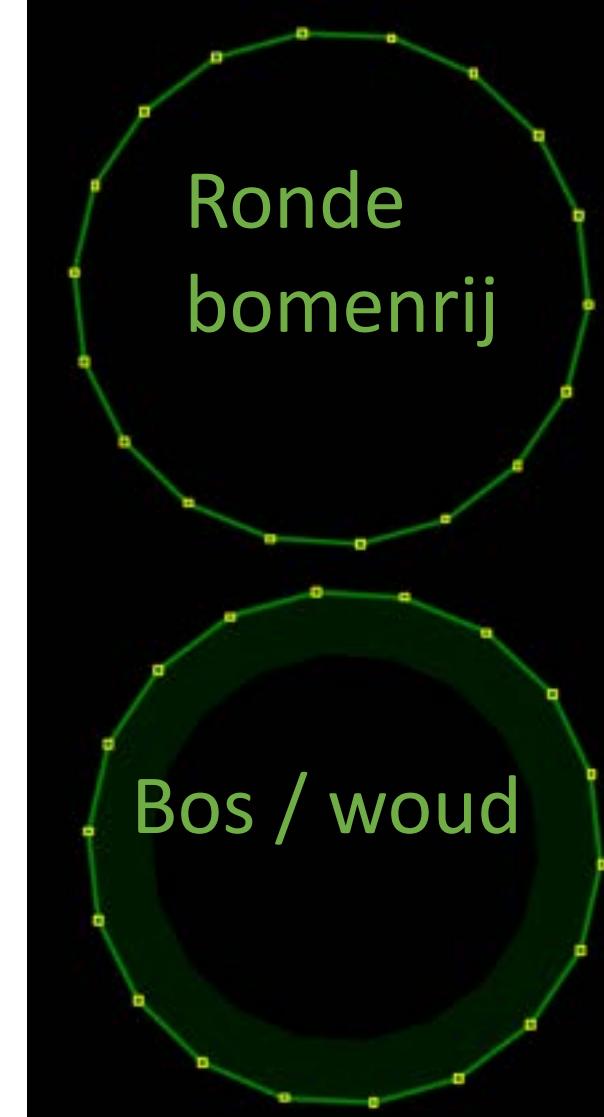
- Punten
- Lijnen
- Polygonen



## OSM

- Nodes
- Ways
- Relations

Over de [evolutie van het OSM datamodel](#) wordt nagedacht.

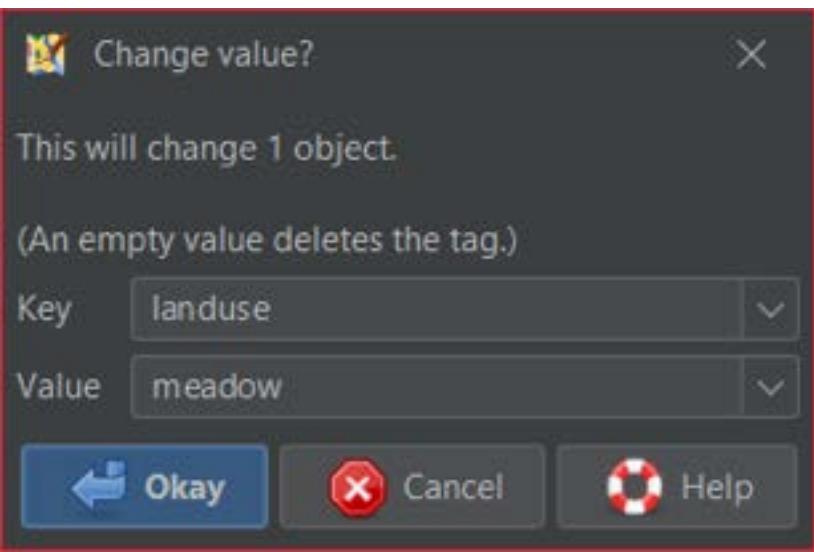


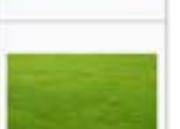
1.3 Healthcare
1.3.1 Entertainment, Arts & Culture
1.3.2 Others
1.4 Barrier
1.4.1 Unsa barriers
1.4.2 Access control on highways
1.5 Boundary
1.5.1 Boundary types
1.5.2 Attributes
1.6 Building
1.6.1 Accommodation
1.6.2 Commercial
1.6.3 Religious
1.6.4 Civic/Community
1.6.5 Agricultural/Plant production
1.6.6 Sports
1.6.7 Storage
1.6.8 Cars
1.6.9 Power/Technical buildings
1.6.10 Other Buildings
1.6.11 Additional Attributes
1.7 Craft
1.8 Emergency
1.8.1 Medical Rescue
1.8.2 Firefighters
1.8.3 Lifeguards
1.8.4 Assembly point
1.8.5 Other Structure
1.9 Geological
1.10 Healthcare
1.11 Highway
1.11.1 Roads
1.11.2 Link roads
1.11.3 Special road types
1.11.4 Paths
1.11.5 Cycleways
1.11.6 Bridges
1.11.7 Other Highway features
1.12 Hotels
1.13 Landuse
1.13.1 Common Landuse Key Values - Developed land
1.13.2 Common Landuse Key Values - Rural and agricultural land
1.13.3 Other Landuse Key Values
1.14 Leisure
1.15 Man_made
1.16 Military
1.17 Natural
1.17.1 Vegetation or surface related
1.17.2 Water related
1.17.3 Landforms related
1.18 Office
1.19 Place
1.19.1 Administratively declared places
1.19.2 Populated settlements, urban
1.19.3 Populated settlements, urban and rural
1.19.4 Other places
1.19.5 Additional attributes
1.20 Power
1.21 Public Transport
1.22 Railways
1.22.1 Tracks
1.22.2 Additional features
1.22.3 Stations and Stops
1.22.4 Other railways
1.23 Roads
1.24 Shop
1.24.1 Food, beverages
1.24.2 General store, department store, mall
1.24.3 Clothing, shoes, accessories
1.24.4 Discount store, charity
1.24.5 Health and beauty

# Tagging

Tags in OSM zijn zogenaamde key-value pairs.

De meeste tags zeggen iets inhoudelijks over een object. Sommige tags dienen alleen als metadata voor de mappers.



Other landuse key values [ edit source ]					
landuse	brownfield	<input type="checkbox"/> <input checked="" type="checkbox"/>	Braakliggend terrein		
landuse	cemetery	<input type="checkbox"/> <input checked="" type="checkbox"/>	<b>Begraafplaats.</b> Zie ook <a href="#">amenity=grave_yard</a> voor kerkhoven.		
landuse	conservation	<input checked="" type="checkbox"/>	Protected areas (deprecated) Alternate tagging of same thing: <a href="#">boundary=protected_area</a> , <a href="#">protected_area=*</a>		
landuse	depot	<input checked="" type="checkbox"/>	An area used as a depot for e.g. vehicles (trains, buses or trams). Consider using rather standard landuse tags like <a href="#">landuse=railway</a> , <a href="#">landuse=commercial</a> , <a href="#">landuse=industrial</a> , with subtag like <a href="#">industrial=depot</a> .	currently not rendered by OSM Carto	
landuse	garages	<input checked="" type="checkbox"/>	<b>Garageboxen</b> Aantal garages op een rij, meestal achter of temidden van huizen en eventueel toegankelijk via een <a href="#">highway=service</a>		
landuse	grass	<input type="checkbox"/> <input checked="" type="checkbox"/>	<b>Grasveld</b> Met landbouwfunctie (grazen en maaien) eerder <a href="#">landuse=meadow</a> .		



# iD – snel en makkelijk de kaart verrijken



OpenStreetMap Edit History Export

GPS Traces User Diaries Communities Copyright Help About Friendly Ghost

Edit feature

Point

Fields

Name: Middelburg-Centrum

Sources: CBS

Wikidata: Middelburg-Centrum

Description: Stadtteil von Middelbur...

Identifier: Q114619386

Add field: Description, Elevation (Meters), Fix Me...

Tags (4)

name: Middelburg-Centrum

View on openstreetmap.org

Inspect Point Line Area Add Feature Undo / Redo Save

Bachtensteeg Nieuwe Burg Munttoren Koornmarkt Kooikerstraat Middelburg Nieuwe Kerk

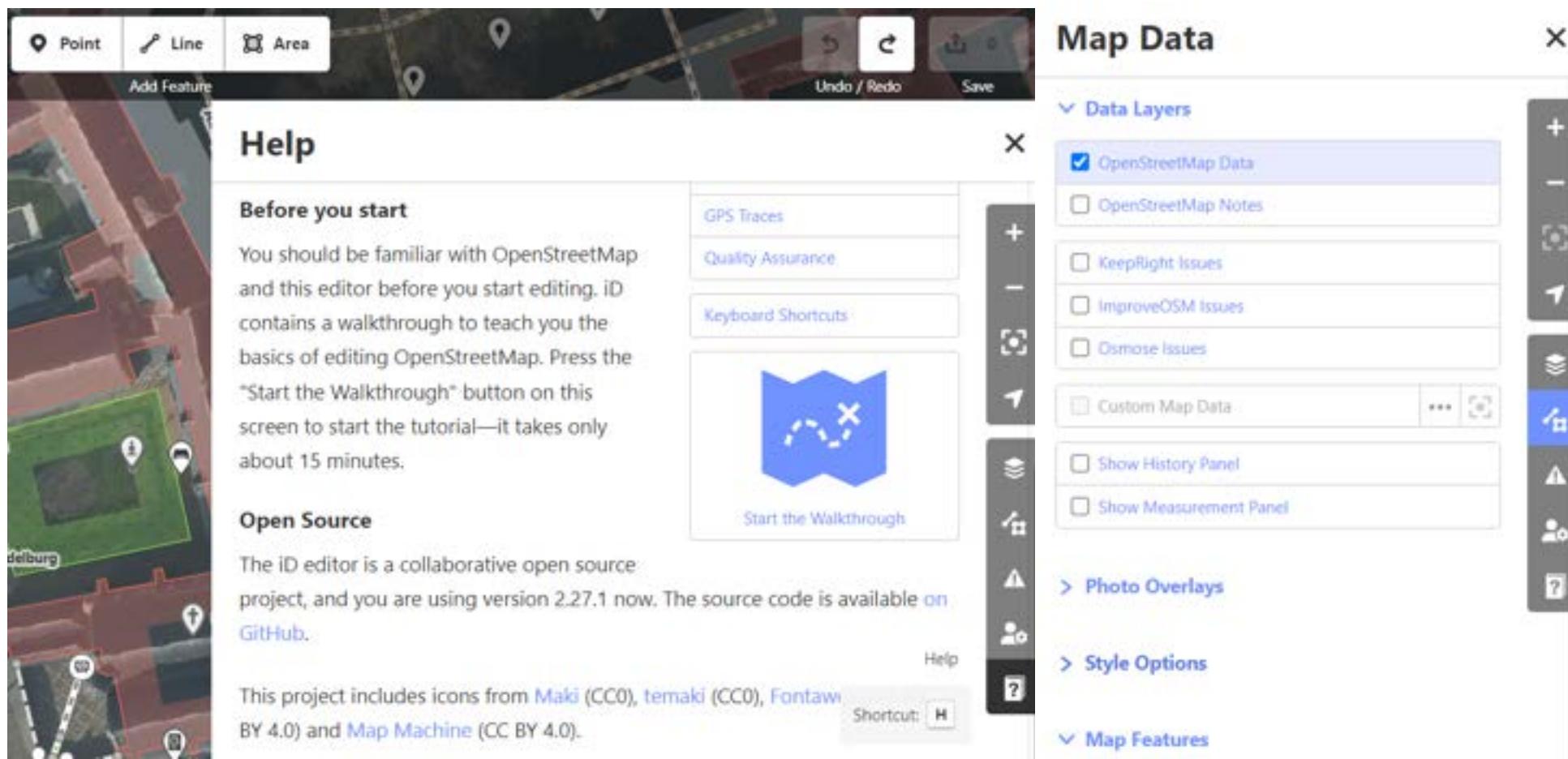
# Aan de slag met iD

Lijst met shortcuts: <https://wiki.openstreetmap.org/wiki/ID/Shortcuts>

Volg de walkthrough

Vind op de kaart een plek die je goed kent, en voeg daar iets toe wat nog ontbreekt.

Elke bewerking is belangrijk voor OSM



**Filter active**  
1291 objects hidden  
Close the filter dialogue to see all objects.

**Layers**

- [9] Data Layer 1
- [8] BGT Omtrekkenchete visualisatie (OSM OK)
- [7] BGT iconvisualisatie (OSM OK)(wmts)
- [6] DKK Kadasterkaart v4 grijs (OSM OK)(wmts)
- [5] BGT Standaard (OSM OK)(wmts)
- [4] AHN4 maanveld hillshade (OSM + Private Lic.)
- [3] AHN4 ruw hillshade (OSM + Private Licence)
- [2] NSO Satelliet LATEST mosaic (OSM OK)(wmts)
- [1] Luchtfoto Actueel Ortho HR (7.5 cm) Beeldm...

**Tags: 13 / Memberships: 1**

official_name	Onder, building 103
operator	Wageningen University
reftag	028910000024017
source	BAG, https://www.wageningencamp...
sourcedate	2017-11-01
start_date	2013
wheelchair	yes

**Member Of:**

- building <building>

**Actions:**

- Edit
- Delete
- Select in relation list
  - Select relation
  - Select relation (add)
  - Select members
  - Select members (add)
- Download with members
- Download members
- Download incomplete members
- Go to OSM wiki for relation help
- Go to Taginfo
- Go to Taginfo (Geofabrik NL)

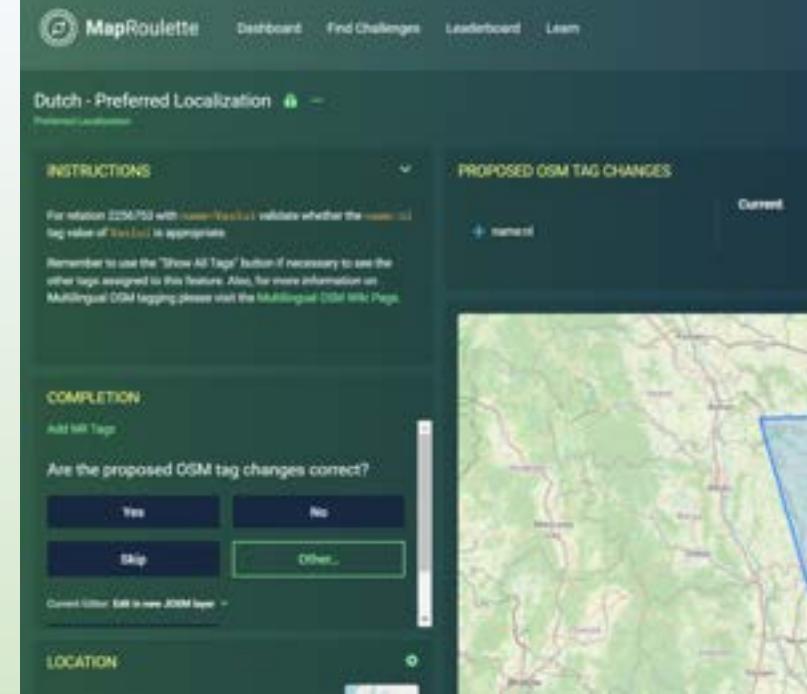
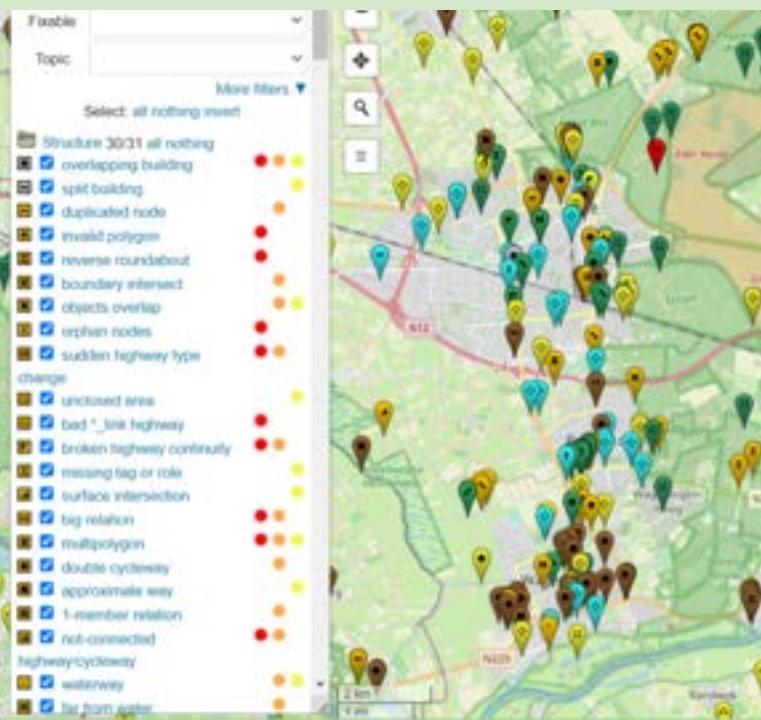
**Filter Hidden: 1291 Disabled: 0**

Move objects by dragging: Shift to add to selection (Ctrl to toggle); Shift-Ctrl to rotate selected; Alt-Ctrl to scale selected; or change selection

51.9848342 5.6669812 205.99 m 810025058 (9 nodes)

# Extra gereedschap

- Achavi
- MapRoulette
- Osmose
- OSM-revert



# Kwaliteitscontrole met Osmose

<https://osmose.openstreetmap.fr/>

The screenshot shows the Osmose web application interface for quality control of OpenStreetMap data. The top navigation bar includes links for 'Taal kiezen', 'meldingen per gebruiker', 'Statistieken', 'Export', 'Help', 'Vertraging: 15h', and 'Friendly\_Ghost (15018)'. On the left, there are filters for 'Ernst' (Severity), 'Herstelbaar' (Repairable), and 'Topic', along with a 'Meer filters' button. A legend on the far left lists various OSM errors with corresponding colored icons.

A central map view shows the area around Middelburg, with numerous error markers (green, yellow, brown) scattered across the terrain. A specific error is highlighted with a large green arrow pointing to its details:

**Weg kruist een kleine waterweg**  
way 472887448 josm iD edit  
highway = footway  
way 472887451 josm iD edit  
waterway = ditch  
osm-show ID-zone josm-zone details  
Melding gemeld op: 2023-09-12

On the right side of the screen, there are two detailed explanations of errors:

**i Weg kruist een kleine waterweg**  
Two features overlap with no shared node to indicate a physical connection or tagging to indicate a vertical separation.

**✓ Hoe te herstellen**  
Move a feature if it's in the wrong place. Connect the features if appropriate or update the tags if not.

**✗ Te vermijden valkuil**  
A feature may be missing a tag, such as `tunnel=*`, `bridge=*`, `covered=*` or `ford=*`. If a road or railway intersects a building, consider adding the `layer=*` tag to it. Warning:

**Weg kruist een kleine waterweg**  
[way 472887448 josm iD edit](#)  
`highway = footway`  
[way 472887451 josm iD edit](#)  
`waterway = ditch`  
[osm-show ID-zone josm-zone details](#)  
Melding gemeld op: 2023-09-12

# Statistieken

- How did you contribute?
- Taginfo & Taginfo NL
- OSMstats
- Streetcompleteness

**public**

Name: Friendly\_Ghost  
Registered: 2020-03-09  
Active contributor: Yes & Yes  
Mapping days: 881 (1%)  
Map changes: 1,177,229 (7.950)  
Reverted changes: 1,292 (0.1%)  
Discussed changesets: 135 (97)

Type? Super Mapper (Highly Active)

Recent changesets (details): Netherlands (206) Italy (159) United States (42)

Recent ranks: Netherlands #13 Vanuatu #14 Falkland Islands (Islas Malvinas) #17

OSM Notes: Closed w/ comment 11 (w/o 3), commented 23 and opened 19  
Changeset discussions: Participated in 349 and created 576 comments  
Rollbacks performed: Reverted 487 changesets w/ 9,805 changes of 322 contributors  
User blocks: 2

ID editor: Resolved issues=2, Ignored warnings=8  
Quality assurance: OSM! issues (details): routing=530, tagging=1993   
Osmose issues: Level 1=447, Level 2=5293, Level 3=9301

270 mapping days with 3,271 changesets in the last year

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## taginfo Database: Netherlands

SLEUTELS · TAGS · RELATIES · PROJECTEN · RAPPORTEN · OVER

### SLEUTELS

Deze tabel geeft alle tag sleutels weer die in de database bestaan of in een van de andere bronnen.

Pagina 1 van 577 JSON Geeft 1 tot 16 van 9224 items weer.

Sluitel	Objecten		Nodes		Wegen	
source	22 135 598	15.84%	9 626 267	87.48%	12 450 244	75.40%
source date	20 322 716	14.54%	9 471 528	86.08%	10 843 603	65.67%
building	10 905 316	7.80%	725	0.01%	10 896 977	65.99%
start_date	10 627 774	7.75%	29 443	0.27%	10 787 962	65.33%
ref:tag	10 613 403	7.74%	4 441	0.04%	10 801 563	65.41%
addr:street	9 556 784	6.84%	9 497 520	86.31%	59 025	0.36%
addr:housenumber	9 554 493	6.84%	9 496 018	86.30%	58 255	0.35%
addr:city	9 549 470	6.83%	9 496 510	86.30%	52 743	0.32%
addr:postcode	9 339 975	6.68%	9 290 002	84.43%	49 771	0.30%
highway	2 582 576	1.85%	189 831	1.73%	2 391 542	14.48%
landuse	1 836 695	1.31%	124	0.00%	1 782 298	10.79%
name	1 500 913	1.14%	274 827	2.50%	1 286 130	7.79%
natural	945 304	0.88%	486 289	4.42%	444 759	2.69%

**Buildings**

**61.23%**  
of all buildings in Utrecht have data about what kind of building they are.

**4.22%**  
of all buildings in Utrecht do have data about how many levels they have.

**0.53%**  
of all buildings in Utrecht do have data about what shape their roof is.  
Current users: 300,000 (2023-02-22)

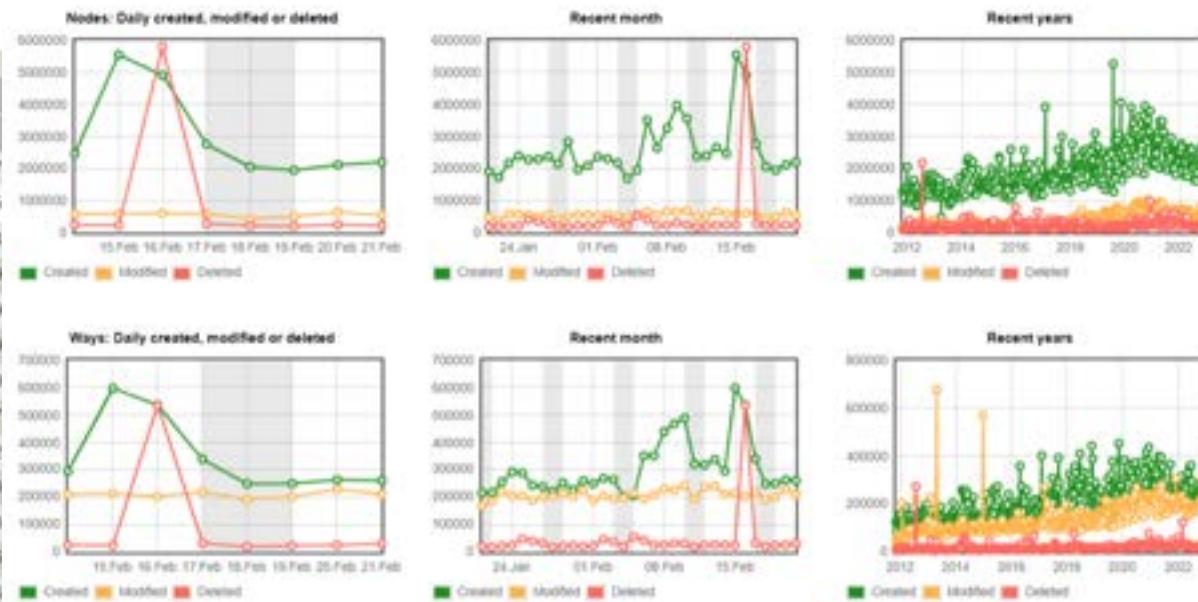
**Ways and streets**

**40.85%**  
of all ways in Utrecht do have data about what kind of surface they have.

OSMstats About Trends Members Elements Countries Changesets Boards Date: 22 2 2023

Latest Node: 10987039235 Way: 1148669244 Relation: 15521831 (Changeset: 132901350 @ 2023-02-22 21:55:59 UTC)

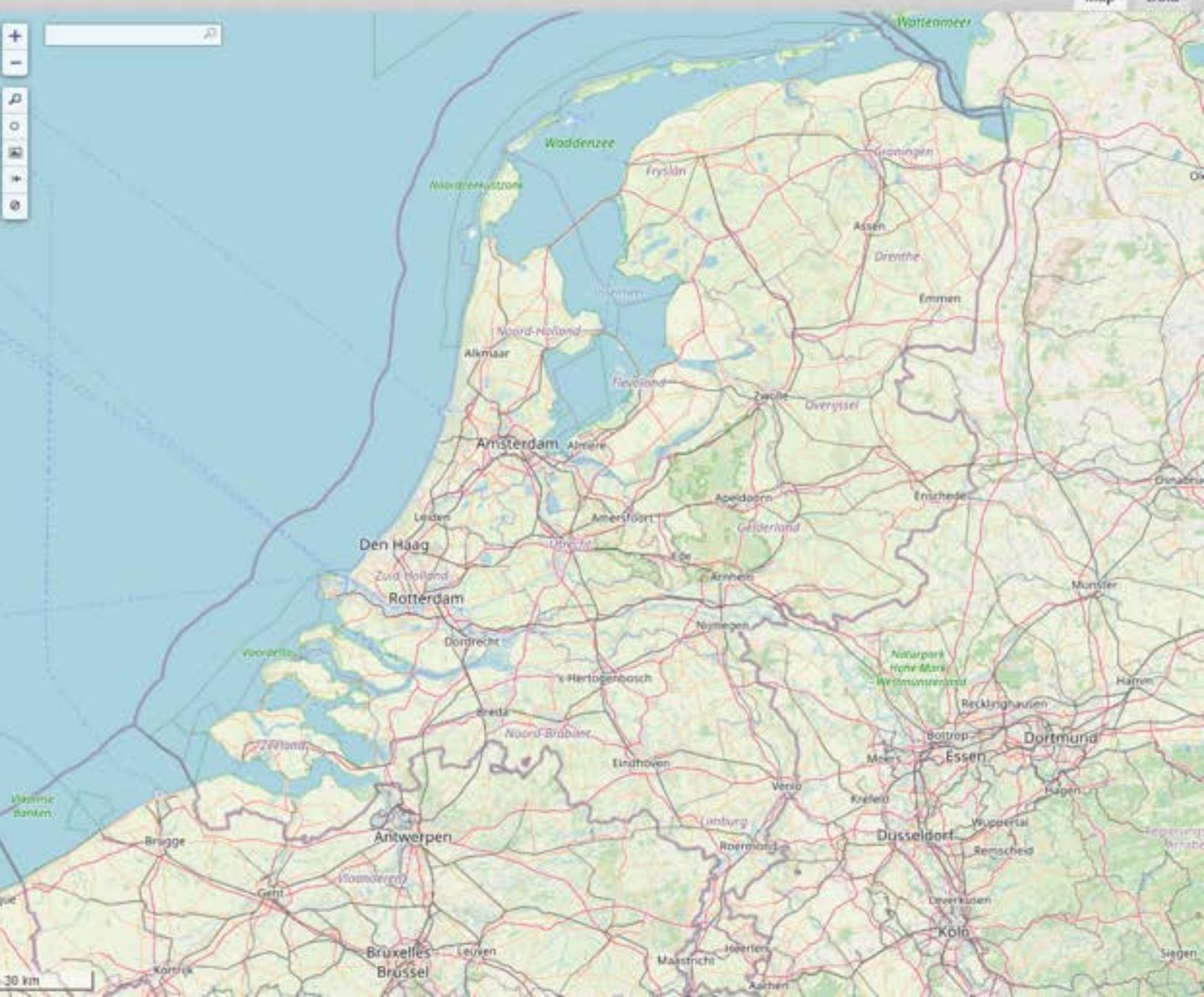
Report run @ Feb, 22nd 2023 3:03am CET

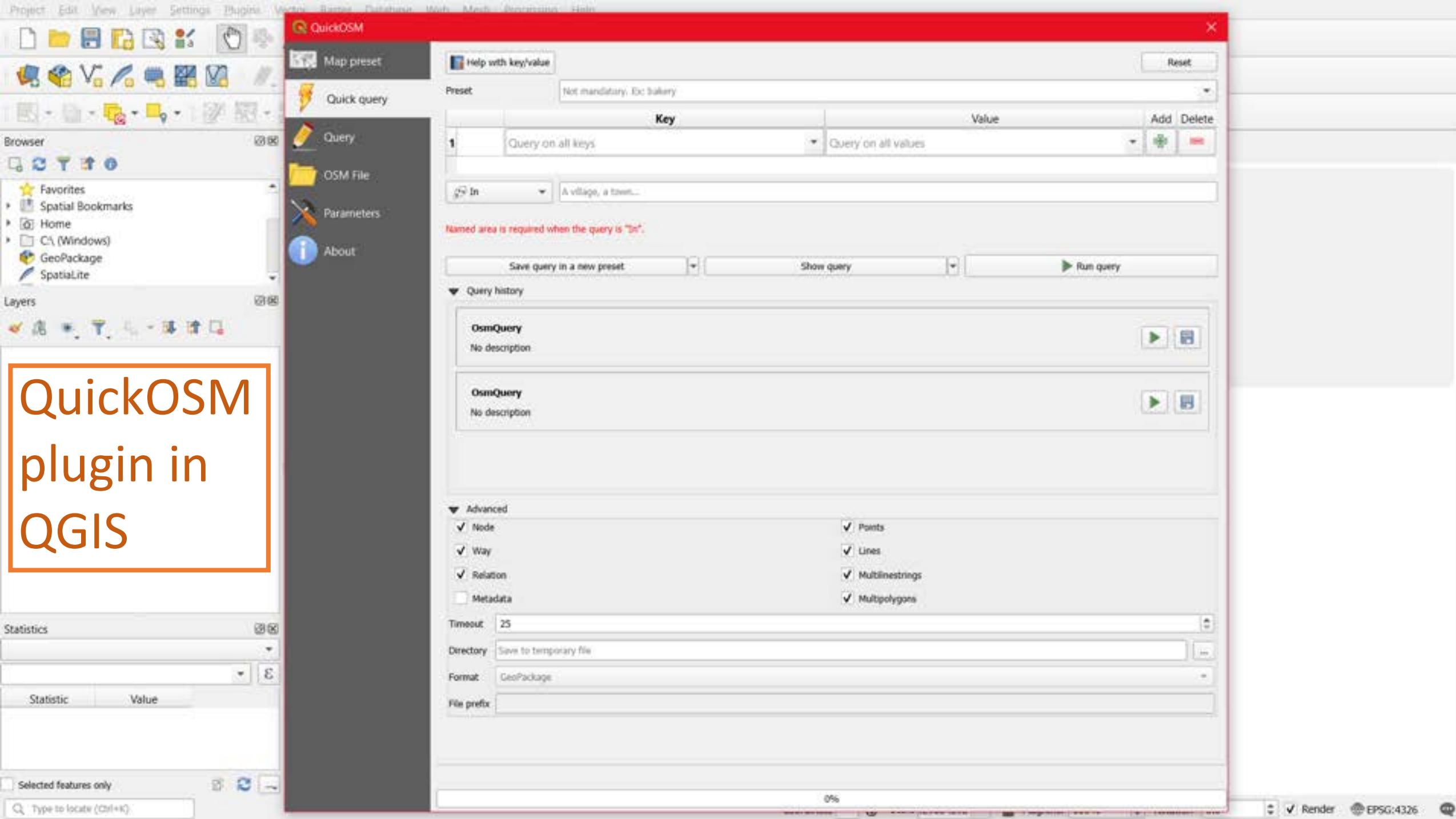


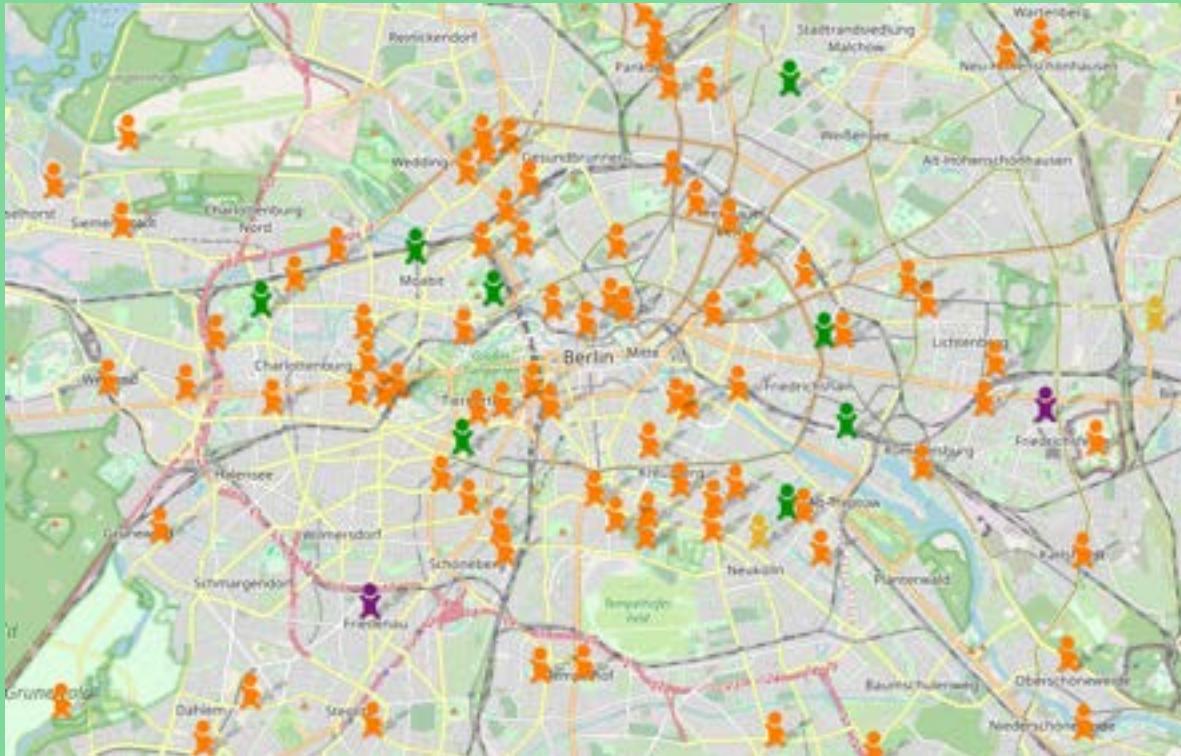
```
1 /*
2 This query looks for nodes, ways and relations
3 with the given key/value combination.
4 Choose your region and hit the Run button above!
5 */
6 [out:json][timeout:1125];
7 // gather results
8 {
9   // query part for: "building=unclassified"
10  way["building"="unclassified"]({{bbox}});
11  relation["building"="unclassified"]({{bbox}});
12 }
13 // print results
14 out meta;
15 >;
16 out skel qt;
```

# Overpass QL en Overpass Turbo

- Zoek gericht naar OSM data
- Download geojson, xml, csv en andere bestandstypen
- Hulpmiddel voor systematiche kaartbewerkingen







De mappers om je heen

## Het OSM ecosysteem

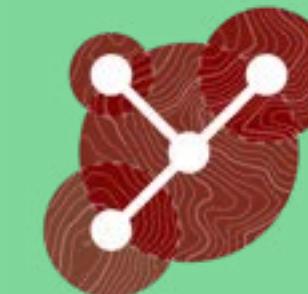
- Decentrale gemeenschappen
- Besluiten op basis van consensus
- Geen “oplossing voor alles”



# OpenStreetMap Foundation



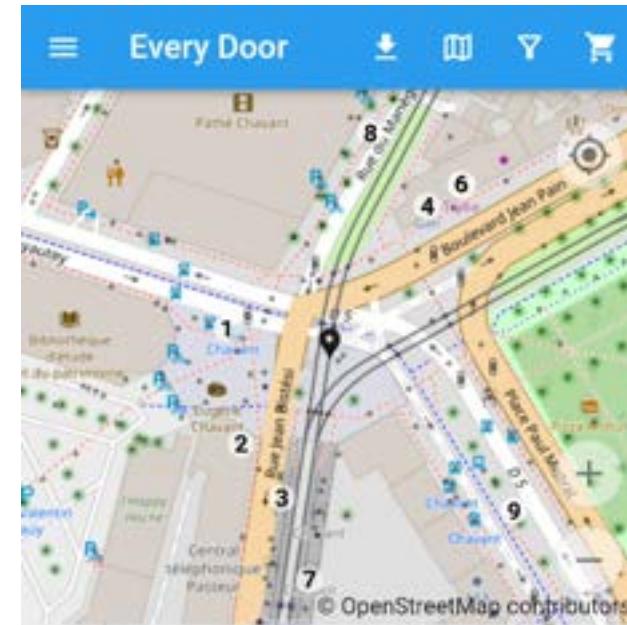
Humanitarian  
OpenStreetMap  
Team



weekly  
**OSM**



# StreetComplete en Every Door





Einde

Bedankt voor de aandacht

Dank aan de organisatoren  
van de FOSS4G-NL



Samples Legend

Fork me on GitHub

Change

Nederlands (Nederland), Nederlands, Engels (Verenigde Staten), Engels of Duits  
© OpenMapTiles © OpenStreetMap contributors