

Backup 15 min showcase

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FOSDEM 2025

Download OpenStreetMap data for this region:

Europe

[one level up]

The OpenStreetMap data files provided on this server do **not** contain the user names, user IDs and changeset IDs of the OSM objects because these fields are assumed to contain personal information about the OpenStreetMap contributors and are therefore subject to data protection regulations in the European Union.

[Extracts with full metadata](#) are available to OpenStreetMap contributors only.

Commonly Used Formats

- [europe-latest.osm.pbf](#), suitable for Osmium, Osmosis, imposm, osm2pgsql, mkgmap, and others. This file was last modified 20 hours ago and contains all OSM data up to 2025-01-30T21:21:24Z. File size: 29.7 GB; MD5 sum: [d49a7ba190b055fa94591bf5e9d0c167](#).
- europe-latest-free.shp.zip is not available for this region; try one of the sub-regions.


Other Formats and Auxiliary Files


- [europe-latest.osm.bz2](#), yields OSM XML when decompressed; use for programs that cannot process the .pbf format. [Deprecated - not updated any more](#). MD5 sum: [7ab5e4054580e8082cae616184bd6c6c](#).
- europe-internal.osh.pbf The history file contains personal data and is available on the [internal server](#) only. See notice above for further information.
- [.poly file](#) that describes the extent of this region.
- [.osc.gz files](#) that contain all changes in this region, suitable e.g. for Osmosis updates
- [Taginfo statistics for this region](#)
- [raw directory index](#) allowing you to see and download older files

Sub Regions

Click on the region name to see the overview page for that region, or select one of the file extension links for quick access.



 Not what you were looking for? Geofabrik is a consulting and software development firm based in Karlsruhe, Germany specializing in OpenStreetMap services. We're happy to help you with data preparation, processing, server setup and the like. [Check out our web site](#) and contact us if we can be of service.

 Nicht das Richtige dabei? Die Geofabrik ist ein auf OpenStreetMap spezialisiertes Beratungs- und Softwareentwicklungsunternehmen in Karlsruhe. Gern helfen wir Ihnen bei der Datenaufbereitung, Datenkonvertierung, Serverinstallation und ähnlichen Aufgaben. [Besuchen Sie unsere Webseite](#) und sprechen Sie mit uns, wenn wir Ihnen helfen können.

```
[zverik@fedora prepare]$ mv ~/downloads/belgium-latest.osm.pbf .
[zverik@fedora prepare]$ osmium extract belgium-latest.osm.pbf -b 3.220548,51.166018,3.307666,51.215024 -o
assebroek.osm.pbf
[=====] 100%
[zverik@fedora prepare]$ ls -lh assebroek.osm.pbf
-rw-r--r--. 1 zverik zverik 2,6M янв 31 21:53 assebroek.osm.pbf
[zverik@fedora prepare]$ cp assebroek.osm.pbf ~/osm/graphhopper/
[zverik@fedora prepare]$ cp config.toml config-assebroek.toml
[zverik@fedora prepare]$ vim config-assebroek.toml
[zverik@fedora prepare]$ ./15minute.py -h
```

```
[openstreetmap]
relation_id = 2141311 # Assebroek
# Alternatives:
# way_id = 45453752
# bbox = [8.373212, 47.31758, 8.388319, 47.328053]

poi_area_buffer = 1000 # meters
building_buffer = 50 # meters
building_min_hole_area = 5000 # m2
simplify = 10 # meters

[layers]
# Lists of tags (as k=v) for each layer
shops = ['shop=convenience', 'shop=supermarket', 'shop=variety_store', 'shop=general']
health = ['amenity=clinic', 'amenity=hospital', 'amenity=doctors', 'amenity=pharmacy']
cafe = ['amenity=cafe', 'amenity=fast_food', 'amenity=restaurant', 'amenity=bar', 'amenity=pub']
community = ['amenity=library', 'amenity=social_centre', 'amenity=community_centre']
school = ['amenity=school', 'amenity=university', 'amenity=college']
childcare = ['amenity=kindergarten', 'amenity=childcare']
culture = ['amenity=theatre', 'amenity=cinema', 'amenity=event_venue', 'tourism=museum', 'tourism=zoo',
tourism=theme_park']
# transport = ['highway=bus_stop', 'railway=halt', 'railway=station']

[isochrones]
graphhopper = 'http://localhost:8989/isochrone'

# Name = [ profile name, distance in minutes]
bike = ['bike', 10]
foot = ['foot', 15]
foot10 = ['foot', 10]
```

```
[zverik@fedora prepare]$ ./15minute.py -h
usage: 15minute.py [-h] [-c CONFIG] [-a AREA] [-i INPUT] [-p POI] [-b BUILDINGS] [-B ALL_BUILDINGS] [-o OUTPUT]
[--coverage COVERAGE] [-O PACKAGE]
```

Downloads and prepares data for a 15-minute city assessment

options:

- h, --help show this help message and exit
- c, --config CONFIG TOML configuration file name, default=config.toml
- a, --area AREA JSON file for the area polygon (not downloaded if exists)
- i, --input INPUT OSM file for extracting buildings and POI
- p, --poi POI Storage for POI
- b, --buildings BUILDINGS
GeoJSON storage for buildings
- B, --all-buildings ALL_BUILDINGS
GeoJSON with all buildings merged into a single polygon
- o, --output OUTPUT GeoJSON with isochrones by layer
- coverage COVERAGE GeoJSON with non-covered buildings by layer
- O, --package PACKAGE
Export JSON for the display tool with everything

```
[zverik@fedora prepare]$ ./15minute.py -c config-assebroek.toml -i assebroek.osm.pbf -p assebroek-poi.json
-b assebroek-buildings.geojson
```

```
4,2M янв 31 21:58 assebroek-buildings.geojson
2,6M янв 31 21:53 assebroek.osm.pbf
68K янв 31 21:58 assebroek-poi.json
592M янв 31 21:50 belgium-latest.osm.pbf
```



```
[zverik@fedora prepare]$ ./15minute.py -p assebroek-poi.json -b assebroek-buildings.geojson -c config-assebroek.toml -O assebroek.json  
[zverik@fedora prepare]$ ls -lh assebroek.json  
-rw-r--r--. 1 zverik zverik 305K янв 31 22:06 assebroek.json
```

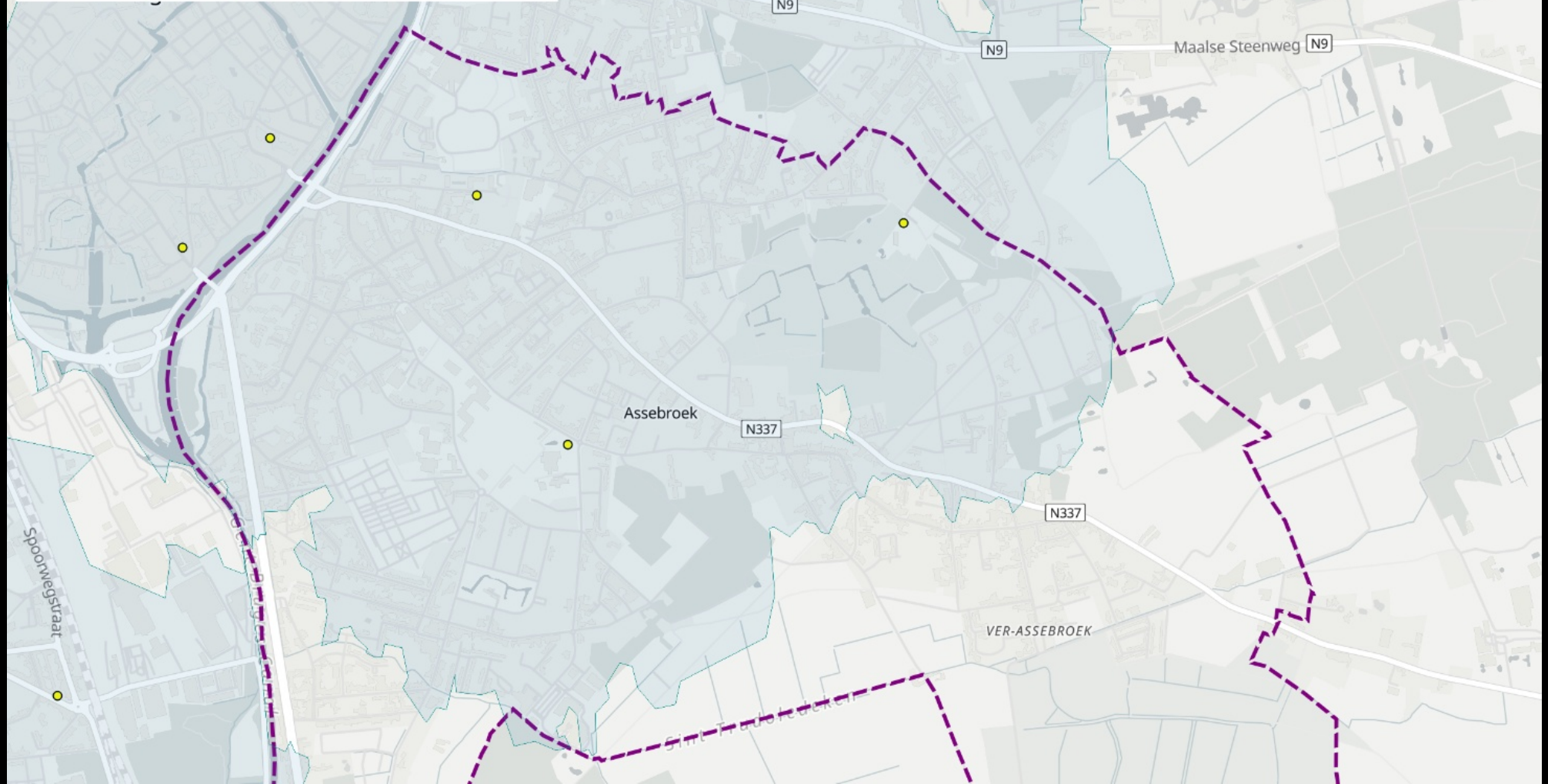

7%2C3.2237947741991055] INFO c.g.resources.IsochroneResource - Building contour z=600000.0
2025-01-31 22:06:39.341 [pool-2-thread-4 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.2043506884783
7%2C3.2237947741991055] INFO c.g.resources.IsochroneResource - took: 0.007587402, visited nodes:2719
2025-01-31 22:06:39.349 [pool-2-thread-5 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.2057733501426
64%2C3.2228448028115526] INFO c.g.resources.IsochroneResource - Building contour z=600000.0
2025-01-31 22:06:39.350 [pool-2-thread-5 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.2057733501426
64%2C3.2228448028115526] INFO c.g.resources.IsochroneResource - took: 0.006330999, visited nodes:2540
2025-01-31 22:06:39.358 [pool-2-thread-6 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.2131422388349
55%2C3.23372948092007] INFO c.g.resources.IsochroneResource - Building contour z=600000.0
2025-01-31 22:06:39.358 [pool-2-thread-6 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.2131422388349
55%2C3.23372948092007] INFO c.g.resources.IsochroneResource - took: 0.005277194, visited nodes:2074
2025-01-31 22:06:39.362 [pool-2-thread-11 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.189278089550
33%2C3.245186903596934] INFO c.g.resources.IsochroneResource - Building contour z=600000.0
2025-01-31 22:06:39.363 [pool-2-thread-11 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.189278089550
33%2C3.245186903596934] INFO c.g.resources.IsochroneResource - took: 0.0019218, visited nodes:712
2025-01-31 22:06:39.369 [pool-2-thread-13 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.213198114610
485%2C3.2340436190109756] INFO c.g.resources.IsochroneResource - Building contour z=600000.0
2025-01-31 22:06:39.369 [pool-2-thread-13 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.213198114610
485%2C3.2340436190109756] INFO c.g.resources.IsochroneResource - took: 0.003784709, visited nodes:1988
2025-01-31 22:06:39.383 [pool-2-thread-14 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.2143159%2C3.
2489072] INFO c.g.resources.IsochroneResource - Building contour z=600000.0
2025-01-31 22:06:39.383 [pool-2-thread-14 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.2143159%2C3.
2489072] INFO c.g.resources.IsochroneResource - took: 0.00190605, visited nodes:805
2025-01-31 22:06:39.388 [pool-2-thread-2 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.2144741%2C3.2
491919] INFO c.g.resources.IsochroneResource - Building contour z=600000.0
2025-01-31 22:06:39.388 [pool-2-thread-2 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.2144741%2C3.2
491919] INFO c.g.resources.IsochroneResource - took: 0.002008051, visited nodes:734
2025-01-31 22:06:39.392 [pool-2-thread-12 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.1933137%2C3.
2482582] INFO c.g.resources.IsochroneResource - Building contour z=600000.0
2025-01-31 22:06:39.393 [pool-2-thread-12 - GET /isochrone?profile=foot&reverse_flow=true&time_limit=600&point=51.1933137%2C3.
2482582] INFO c.g.resources.IsochroneResource - took: 0.001842962, visited nodes:820

```
[zverik@fedora prepare]$ cp assebroek.json ../
display/      .git/          .gitignore    LICENSE       .mypy_cache/  prepare/      README.md
[zverik@fedora prepare]$ cp assebroek.json ../display/
[zverik@fedora prepare]$ cd ../display/
[zverik@fedora display]$ ls
assebroek.json  index.html  tallinn15.json
[zverik@fedora display]$ python -m http.server
Serving HTTP on 0.0.0.0 port 8000 (http://0.0.0.0:8000/) ...
127.0.0.1 - - [31/Jan/2025 22:08:18] "GET / HTTP/1.1" 200 -
```

Layers: cafe shops health culture community childcare school

Profile: bike foot foot10

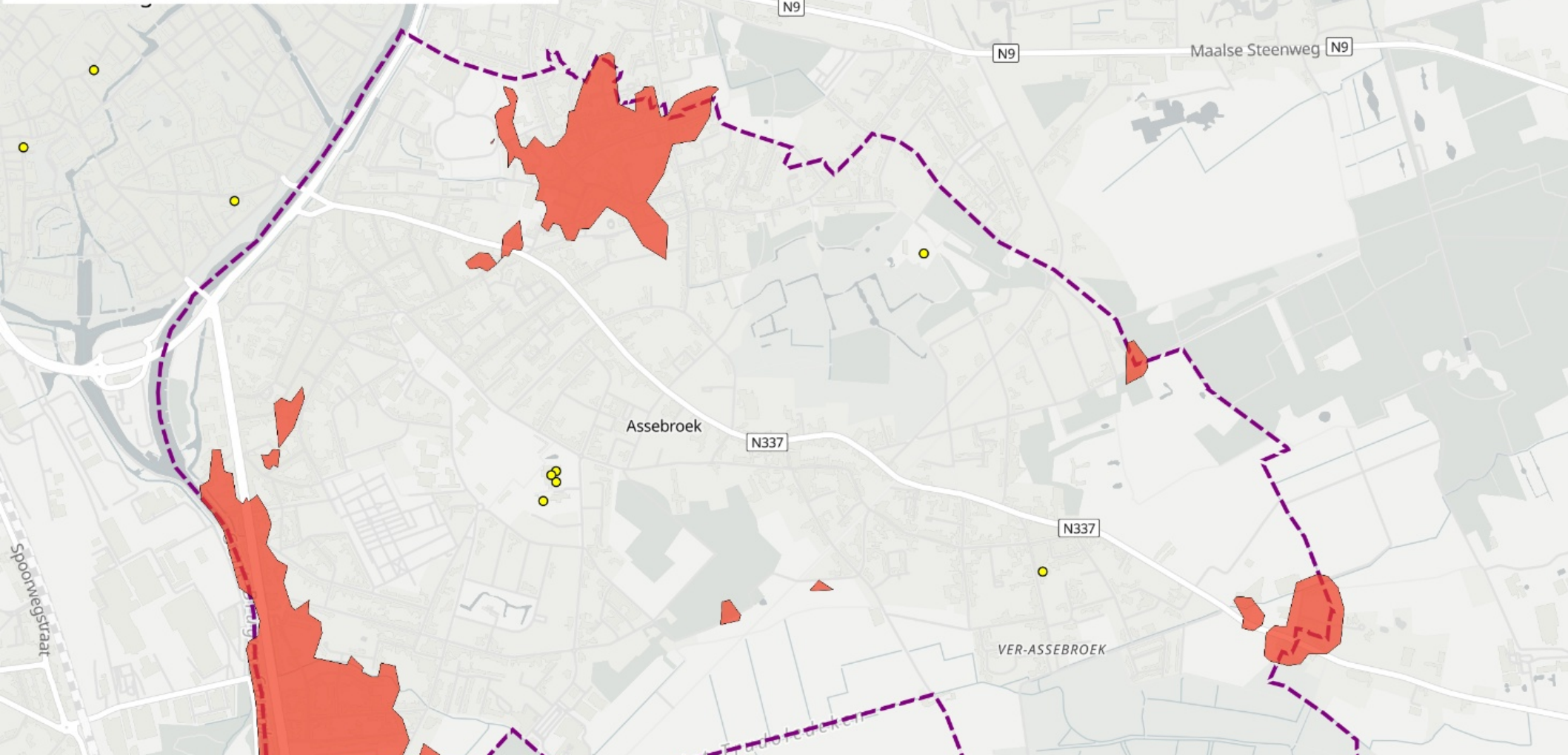
Multiple layers Isochrones



Layers: cafe shops health culture community childcare school

Profile: bike foot foot10

Multiple layers Isochrones



Layers: **cafe** shops health culture **community** childcare school

Profile: bike **foot** foot10

Multiple layers Isochrones

