



Export Tool

Humanitarian OpenStreetMap Team

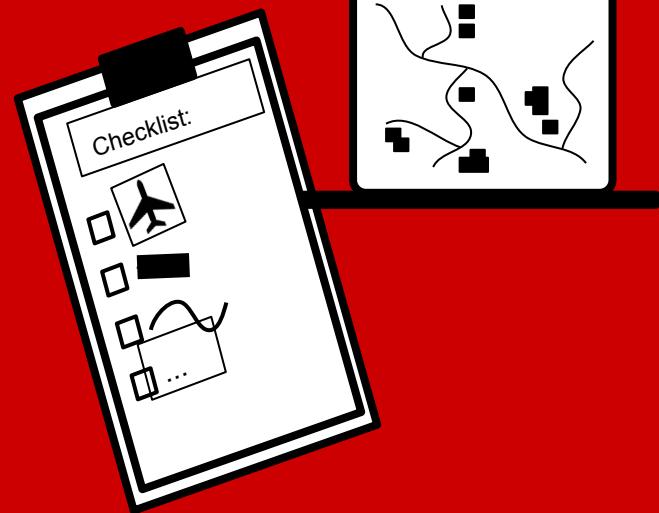
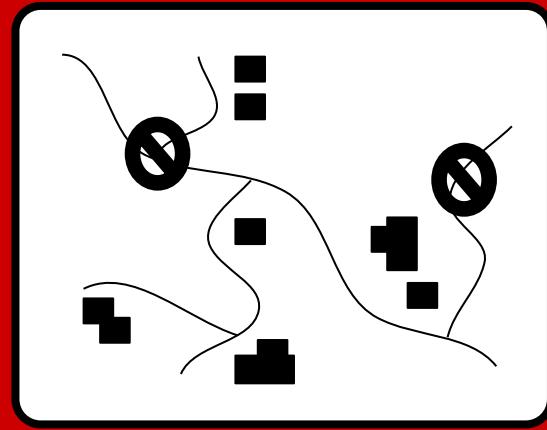
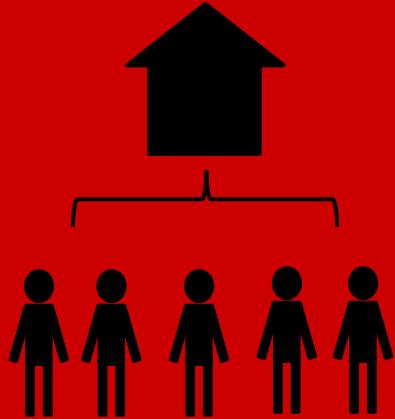
Mhairi O'Hara (@MapNut_)

What is the Humanitarian OpenStreetMap Team?



During a crisis, disaster or epidemic, maps are crucial to help responders

Maps Help



Identify areas of high population
(building density)

Navigate access routes and safe roads in affected areas

Locate suitable areas for response command posts, shelter and aid provision



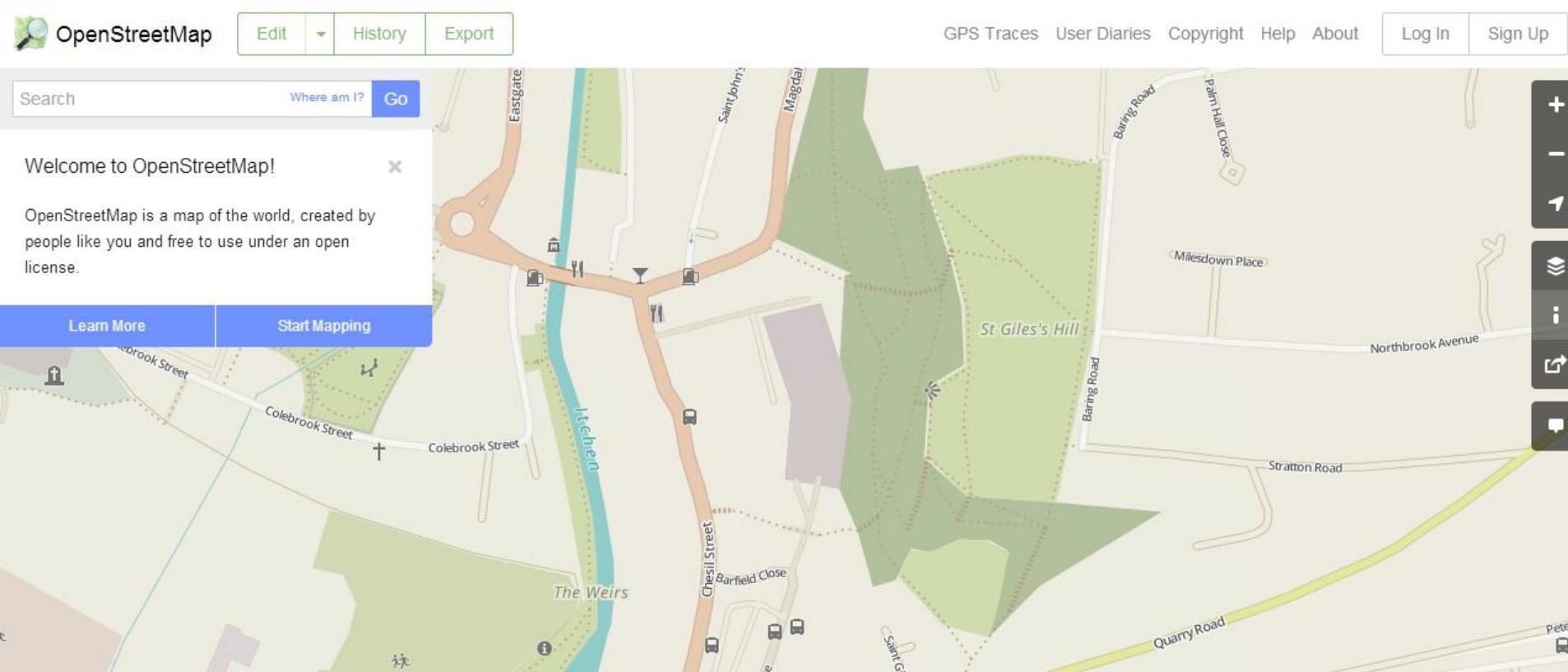
Gbarnga, Liberia

Not Everywhere is Mapped
– or has Accessible Maps

The Humanitarian OpenStreetMap Team helps solve this problem by coordinating public efforts

- to map and label areas affected by disasters

OpenStreetMap



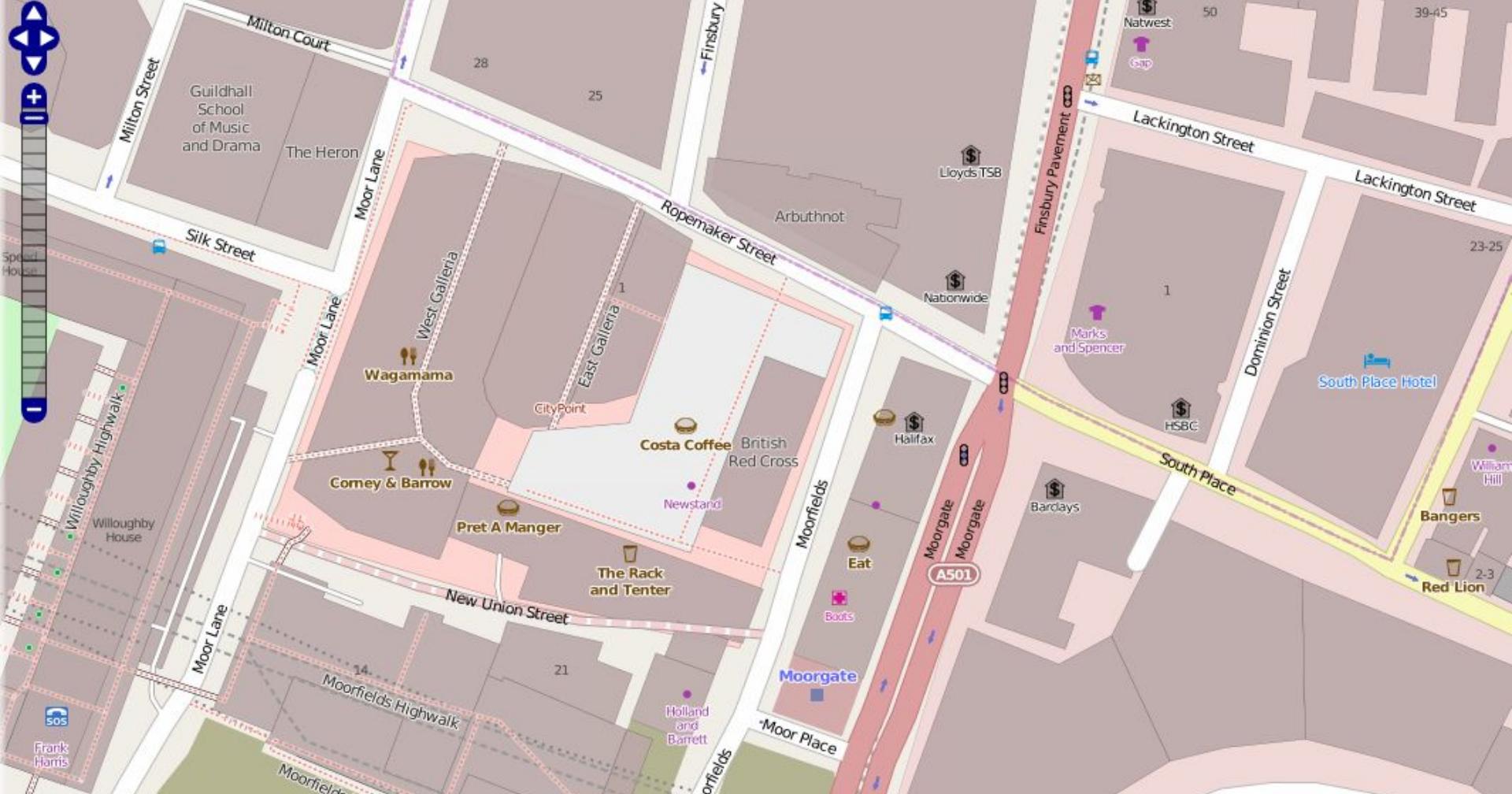
This collective mapping - or the 'crowdsourcing' of geographic information began in 2004

Created by people for the people – Wikipedia of Maps!



Open Database License (ODbL)

Can be used in apps, online maps, and printable maps for free – as long as the contributors are credited



So whilst it has many similarities to the mapping applications you use in your day-to-day life...

Everyone Creates, Updates and Maintains OSM Data



Whether at home, on a train, at a cafe with friends, or at a mapathon...

Ways to Contribute to OSM

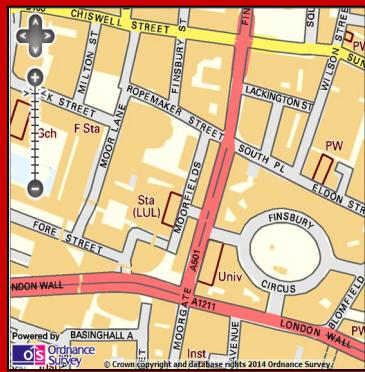


Image: Snapshot of Ordnance Survey Open Data

© Crown Copyright

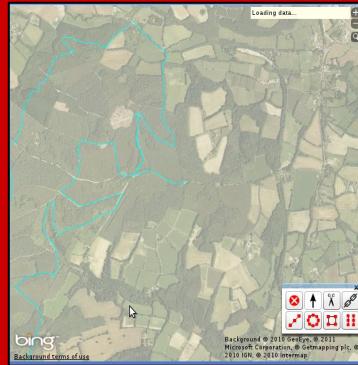


Image: HOT User/Apapadop



Image: HOT User/Tall Guy

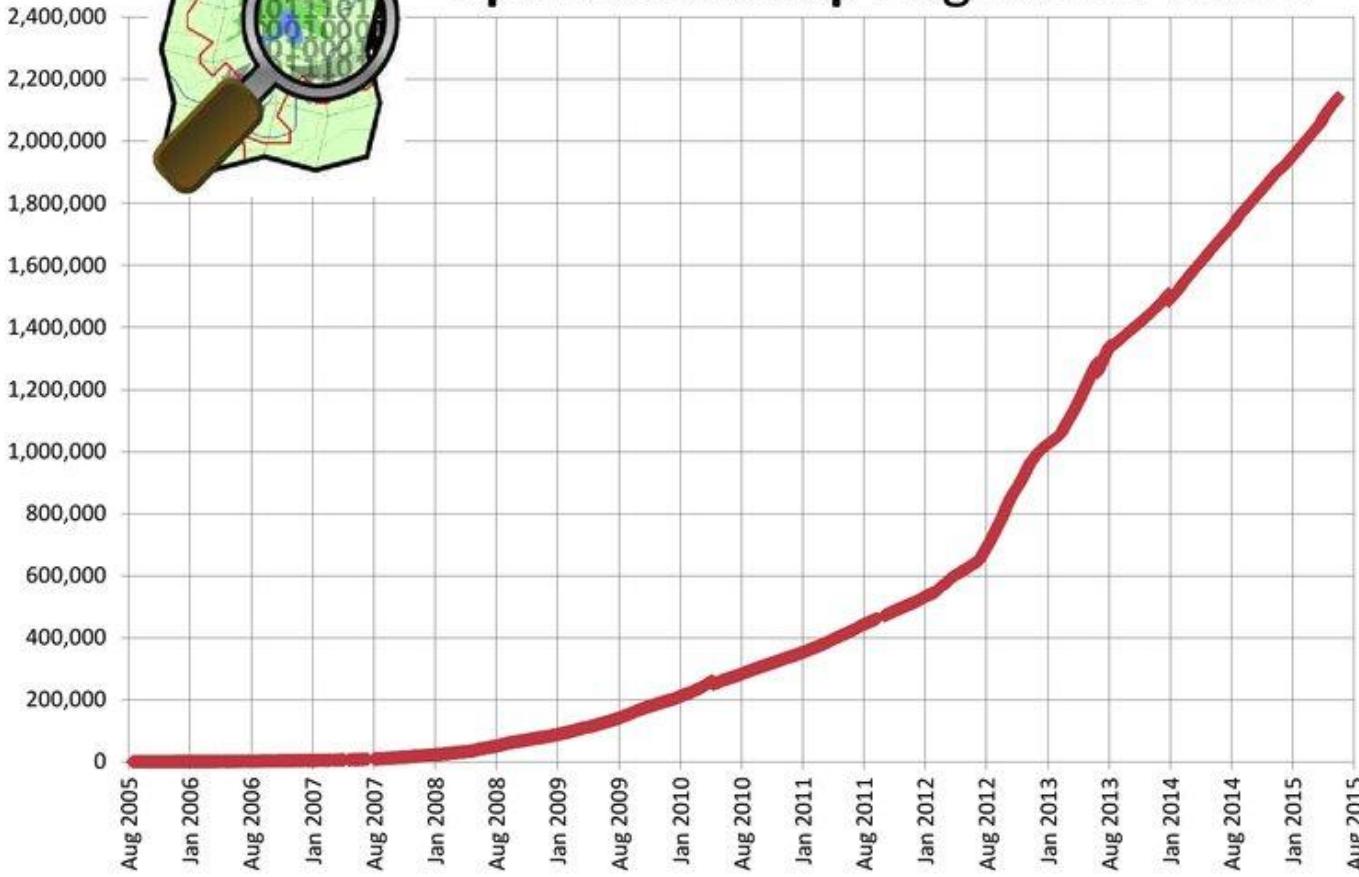
1. By adding open datasets to OSM

2. By adding GPS/GPX tracks to OSM

3. By digitising satellite imagery

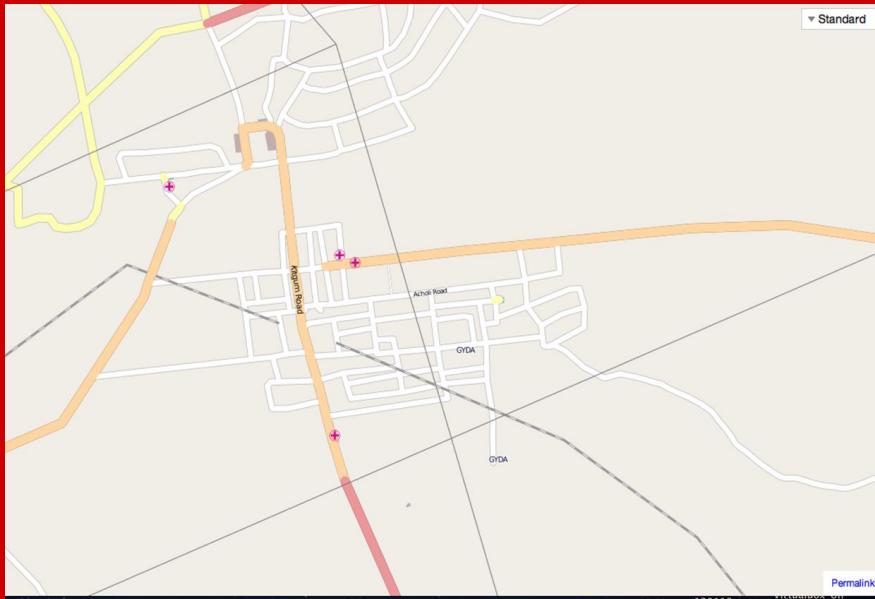


OpenStreetMap Registered Users



OSM now
has over 2
million
registered
users

Adding to the Map is Crucial for HOT



Gulu, Uganda before the Ebola crisis.

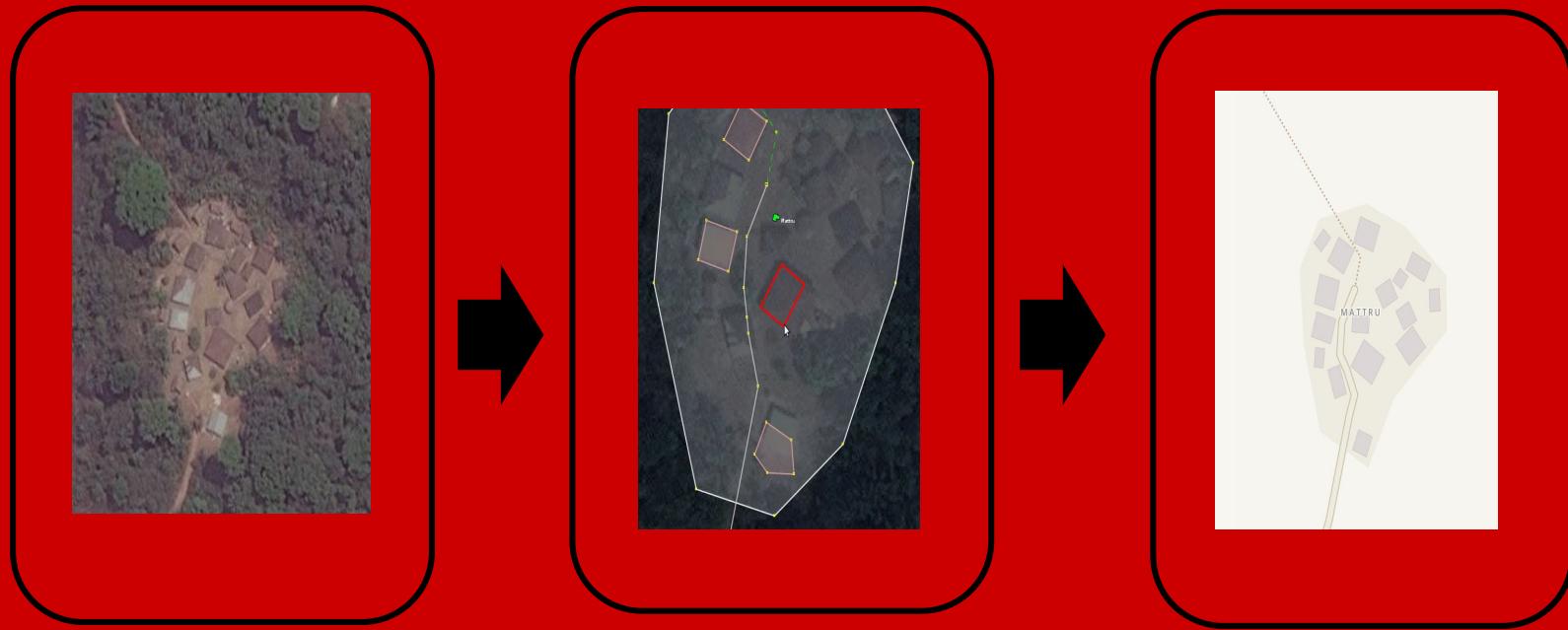


CNIGS (Haitian national mapping agency) office

Haiti's national mapping agency office and many maps were destroyed in the earthquake, which also killed 6 workers who were prominent Haitian geographers.

Often affected areas do not have adequate, up-to-date, or accessible data or maps

HOT responses predominantly require mappers to digitise satellite imagery



Obtain up-to-date satellite imagery for the area

Digitise roads, tracks, paths, building, open areas, waterways, etc

Upload the data and see the changes

HOT harnesses the OSM volunteer community and coordinates the mapping of affected areas



Disaster occurs!

HOT asks OSM
community to
help map
affected area

Across the globe
the HOT-OSM
community map

Tasking Manager

OSM Tasking Manager

About

English ▾

mataharimhairi ▾

#892 - Ebola Outbreak, Guinea, Kindia Prefecture, Road network and settlements (Archived)

Edit Export

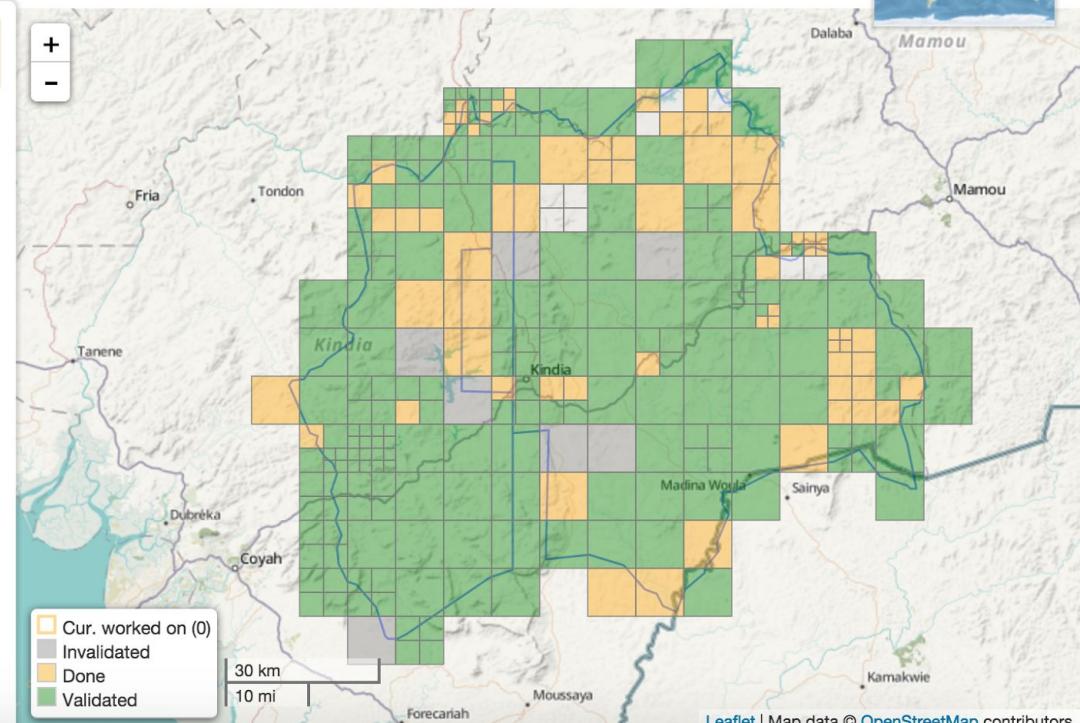
Description Instructions Contribute Activity Stats

⚠ This project was archived.

- Author: HOT
- Requesting organization: MSF
- Priority: High
- Imagery: Bing

The number of people affected by the Ebola epidemic has fallen sharply in recent weeks and the prevention teams visit different villages to assure that precaution measures will be maintained. To meet the needs of these teams, MSF / CartONG are asking to produce the base map for the prefecture of Kindia in Guinea.

↗ Instructions



Coordinate the mapping of key features in areas of interest in OSM



Humanitarian
arm (or branch)
of
OpenStreetMap



Page Discussion

Read View source View history

Search



2014 West Africa Ebola Response

Available languages — 2014 West Africa Ebola Response

Help

• English • español • français

Other languages — Help us translate this wiki

- Afrikaans • Alemannisch • asturianu • azərbaycanca • Bahasa Indonesia • Bahasa Melayu • Bân-lâm-gú • Basa Jawa • Baso Minangkabau • bosanski • brezhoneg • català • čeština • corsu • dansk • Deutsch • eesti • Esperanto • euskara • Frysk • Gaeilge • Gàidhlig • galego • Hausa • hrvatski • Igbo • interlingua • Interlingue • isiXhosa • isiZulu • íslenska • italiano • Kiswahili • Kreyòl ayisyen • Kréyòl gwadloupéyen • Kurdî • latviešu • Lëtzebuergesch • lietuvių • magyar • Malagasy • Malti • Nederlands • Nedersaksies • norsk bokmål • norsk nynorsk • occitan • Oromoo • o'zbekcha/ўзбекча • Plattdüütsch • polski • português • português do Brasil • română • shqip • slovenčina • slovenščina • Soomaaliga • suomi • svenska • Tiếng Việt • Türkçe • Vahcuengh • Wolof • Yorùbá • Zazaki • српски / srpski • беларуская • български • қазакша • македонски • монгол • русский • тоҷикӣ • українська • Ελληνικά • Հայերեն • ქართული • නෙපාලී • මරාති • හින්දි • අසමীয়া • বাংলা • ପ୍ରତ୍ୟାମି • ଗୁଜରାତୀ • ଓଡ଼ିଆ • ତମିନ୍ଦ୍ରା • ତେଲଗୁ • କନ୍ଧୁଡ଼ • ମଲଯାଳମ୍ • ଚିଙ୍ଗାରୁ • ତୈଥ୍ • ປົົ້ມໝາວ້າວ້າ • ດ້ວ • ກາສຳຊູ້ • ພິບພະນະກົມ • ຂູ່ຈາກ • ຂາຍ
- 日本語 • 中文 (简体) • 吴语 • 粤語 • 中文 (繁體) • فارسی • سندھی • پښتو • العربية • اردو • עברית • ייִדיש

General Information

2014 West Africa Ebola Response is an activation of the Humanitarian OSM Team to provide base-map data to assist the response to this disease outbreak.



Humanitarian
OpenStreetMap
Team

Nowadays, anyone can consult free OpenStreetMap Online maps, Routing services or even bring the Map on their Smartphone. For crisis like this Ebola Outbreak, thousand of contributors from around the world digitize rapidly the data from Satellite imagery to support the humanitarian organizations that deploy in the affected countries.

Our goal is to contribute to humanitarian relief by providing rapidly a detailed and accurate map (i.e., road network, villages, buildings, etc.) to support the humanitarian organizations. These services help locate people at risk rapidly, and facilitate the delivery of goods and services to remote areas. The various epidemiological services also can use these maps to monitor the situation.

- Blog Updates 

Activation OSM Wiki Page



Mapathon

OpenStreetMap
Togo

Before



After

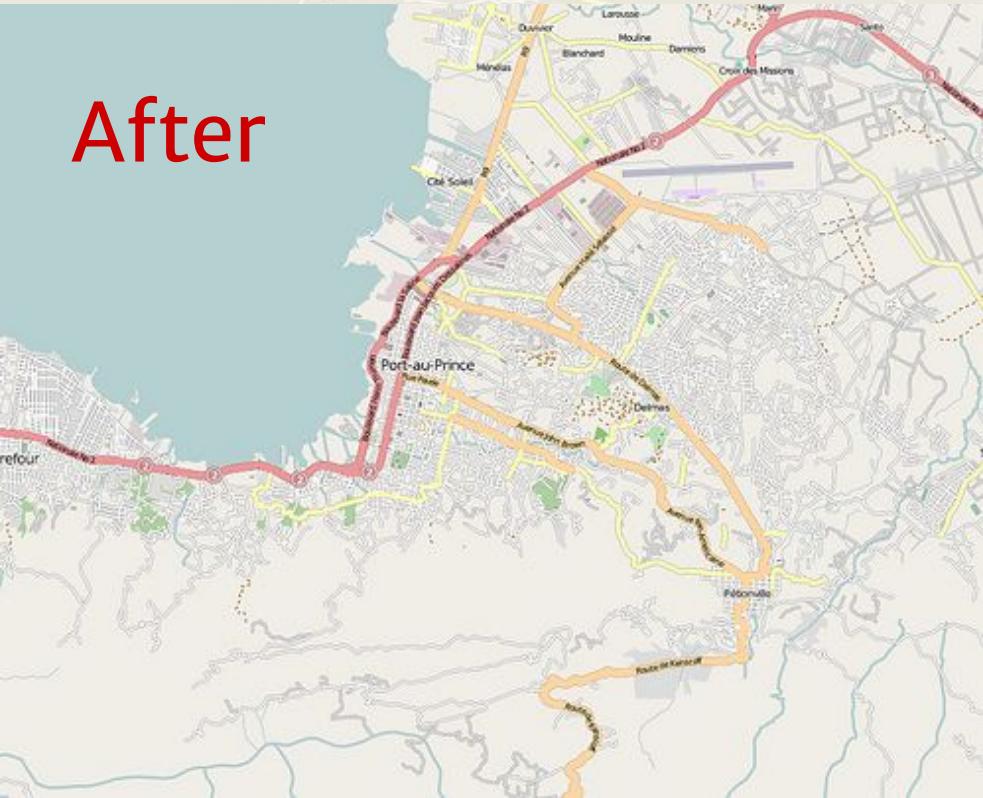


Gueckedou, Guinea
(Within 5 days, 244 volunteers mapped
90,000+ buildings)

Before



After



Port-au-Prince, Haiti
(2 days after the
earthquake)

Before



After

Gulu, Uganda
(HOT/American Red
Cross Mapathon)

So who is involved?



Create the data

Community of
enthusiast mappers,
GIS professionals,
engineers running
the OSM servers



Coordinate the data

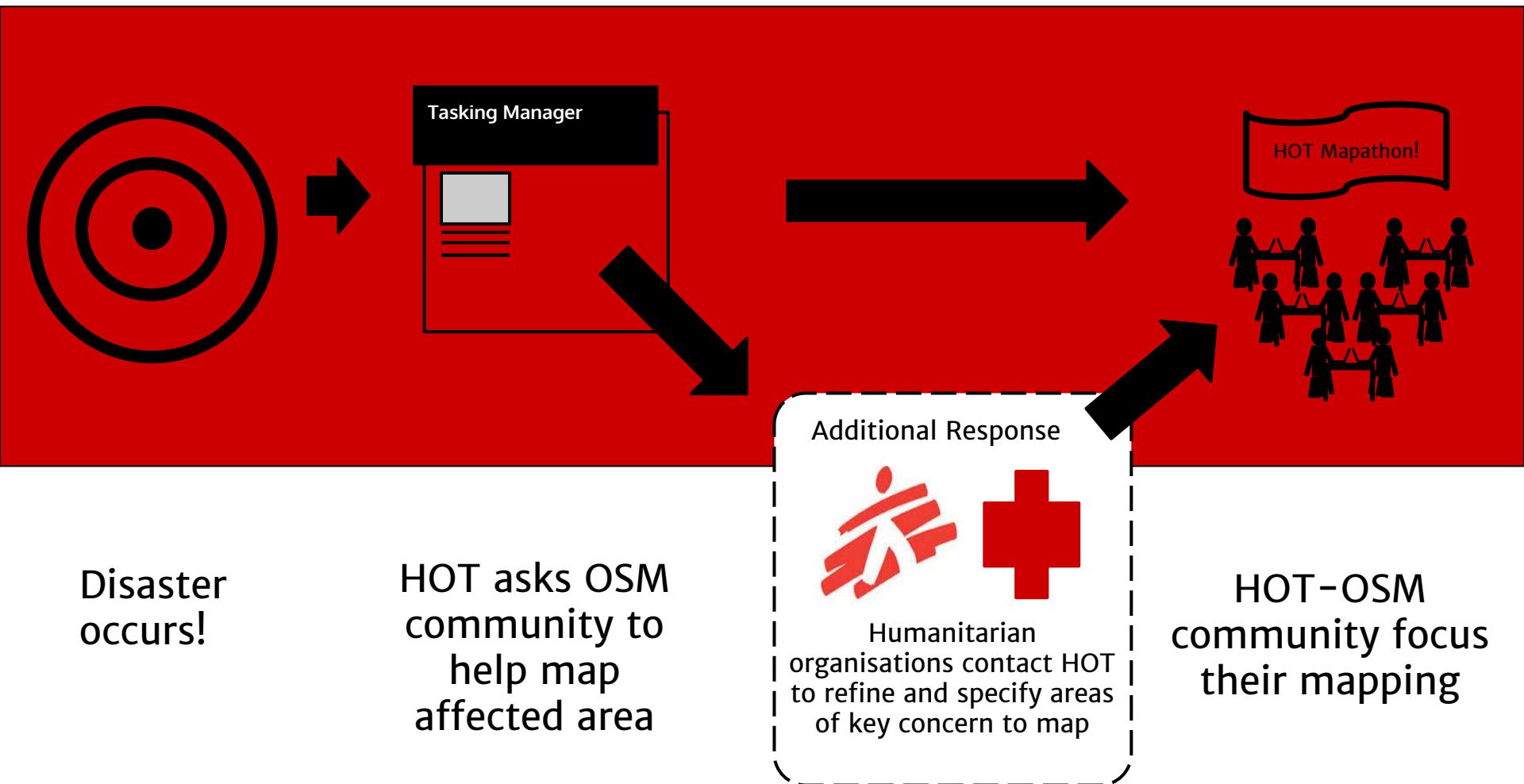
HOT is the bridge
between the OSM
community and the
humanitarian
organisations who use
the data



Use the data

Humanitarian
organisations who are 'in
the field' during the
response use OSM data
on ground to support
their other activities

Humanitarian organisations request priority areas to be mapped



A dark, high-contrast aerial photograph of a city, likely Mamou, Guinea. The image shows a dense network of streets and buildings, appearing as small white and grey dots against a dark background. The overall texture is grainy and lacks fine detail due to the low contrast.

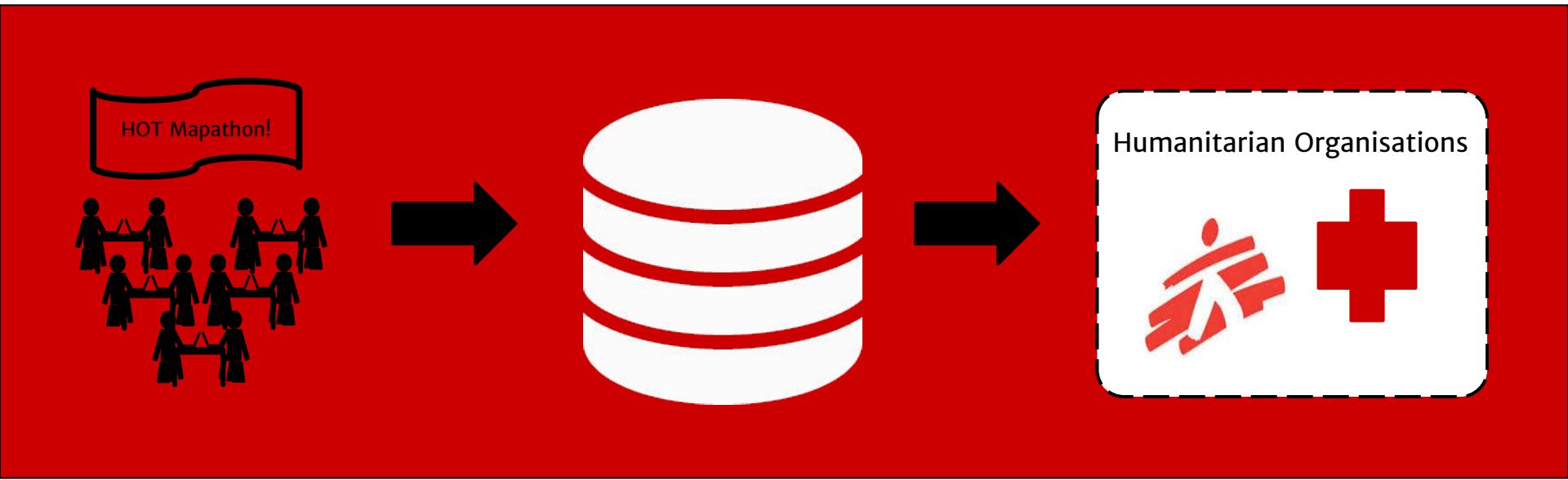
Mamou,
Guinea

29 hours

68
contributors

20,105
buildings

Once areas are mapped, data is used by organisations to respond



HOT-OSM
community
map areas

Map data is
held in the
OSM database

Organisations use
OSM data to plan
and coordinate their
response efforts

How do we get the data out of OpenStreetMap?



HOT-OSM
community map
areas

Map data is held
in the OSM
database

Organisations use
OSM data to plan and
coordinate their
response efforts

OpenStreetMap Tools



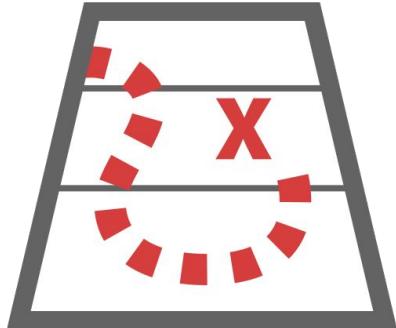
Overpass
Turbo



JOSM



QGIS



1. Disaster
Mapping



2. Technical
Projects



3. Community
Development



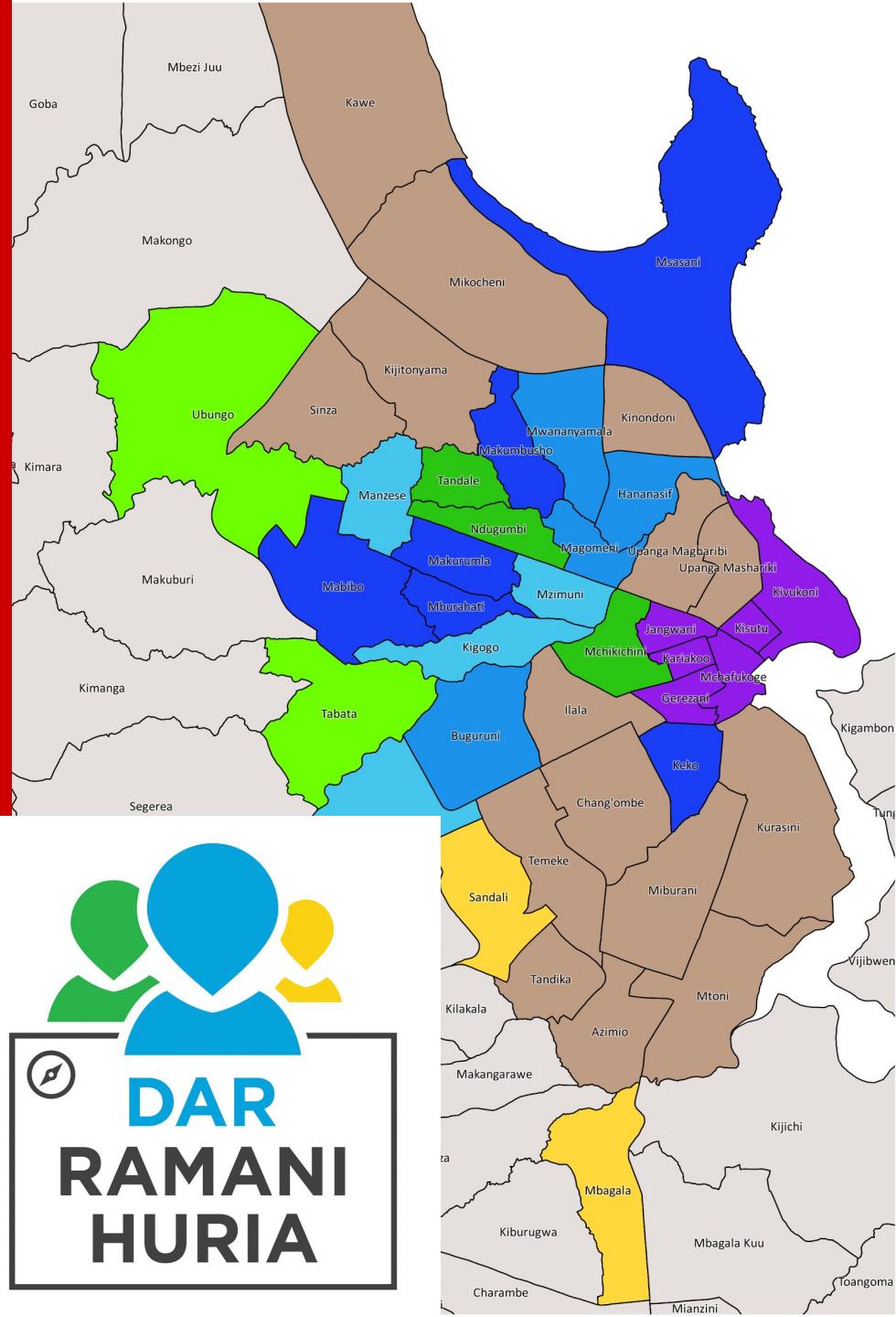
Dar es Salaam, Tanzania

**19 wards mapped, home to
over 1 million people**

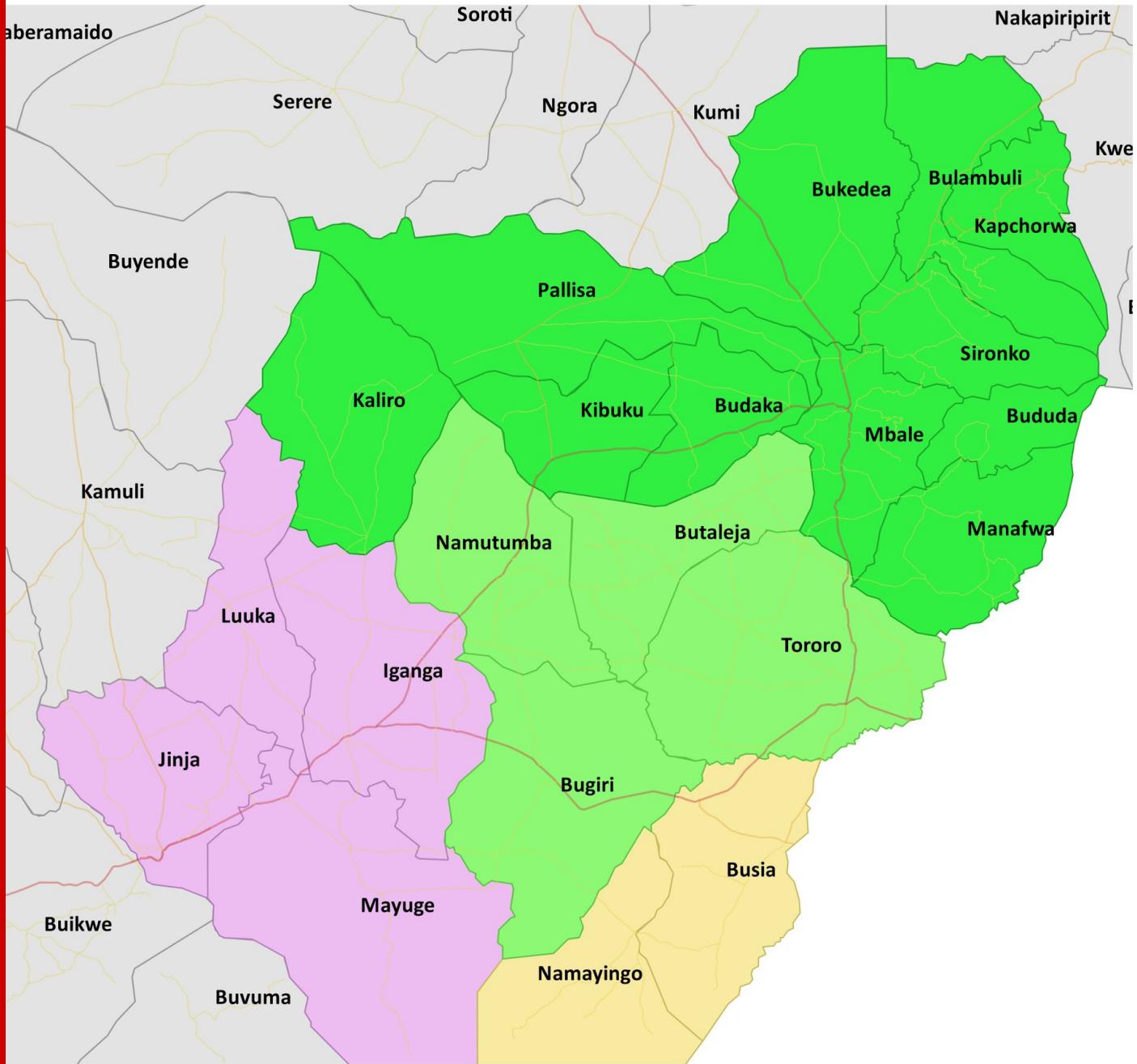
over 500 km of waterways

250000 buildings

1200 school buildings



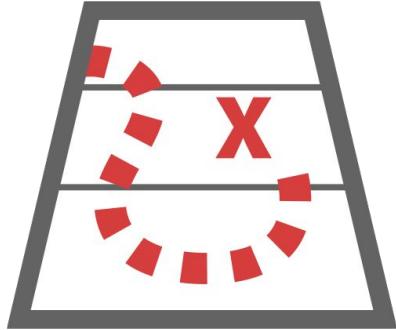
Eastern, Uganda





Financial Services





1. Disaster
Mapping



2. Technical
Projects



3. Community
Development

Technical Projects



HOT Indonesia
Curriculum



Tasking Manager

1. Tasking Manager

2. Data Analysis

3. Export Tool

4. OpenAerialMap

A grayscale aerial photograph of a city, showing a dense network of streets, buildings, and green spaces. The perspective is from above, looking down at the urban landscape.

OpenAerialMap

The open collection of aerial imagery.

[Access beta now](#)

**What is
OpenAerialMap?**

Why OAM?

Join the Project

openaerial.org
<https://github.com/hotosm/OpenAerialMap>



Fresh Humanitarian Maps

Download up-to-date humanitarian maps for GIS analysis or for use in GPS devices and Smartphones.

This platform allows you to create custom OpenStreetMap (OSM) exports for various HOT regions. You can specify an area of interest and a list of OSM feature tags for the export. There are a number of file formats available for exporting the data in, which includes Esri SHP, Garmin IMG, Google KMZ, OSM PBF and SQLite SQL. The OSM data available from the Export Tool is updated at one minute intervals.

How to Get Started

You can view and search through existing HOT exports at our [Exports](#) page. It is not required to have an account to view or search existing exports, however if you would like to create a new export

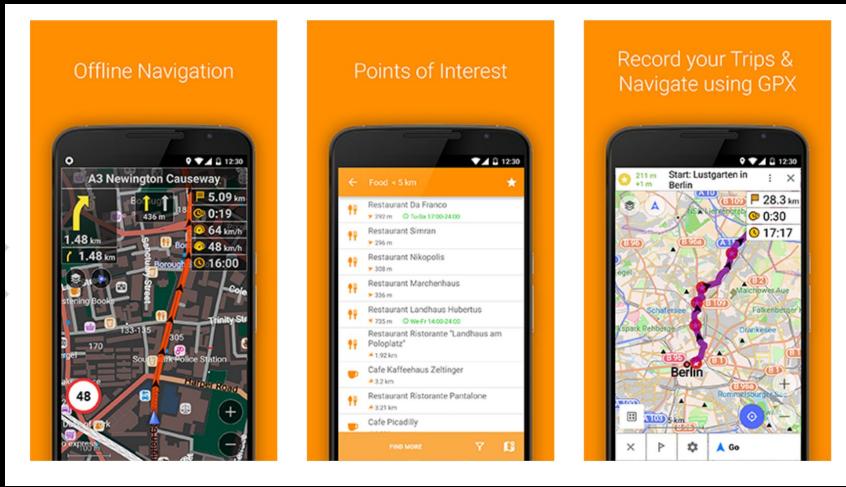


[Login to OpenStreetMap](#)

If you don't have an OpenStreetMap account you can register for one [here](#).

[Login to OpenStreetMap](#)

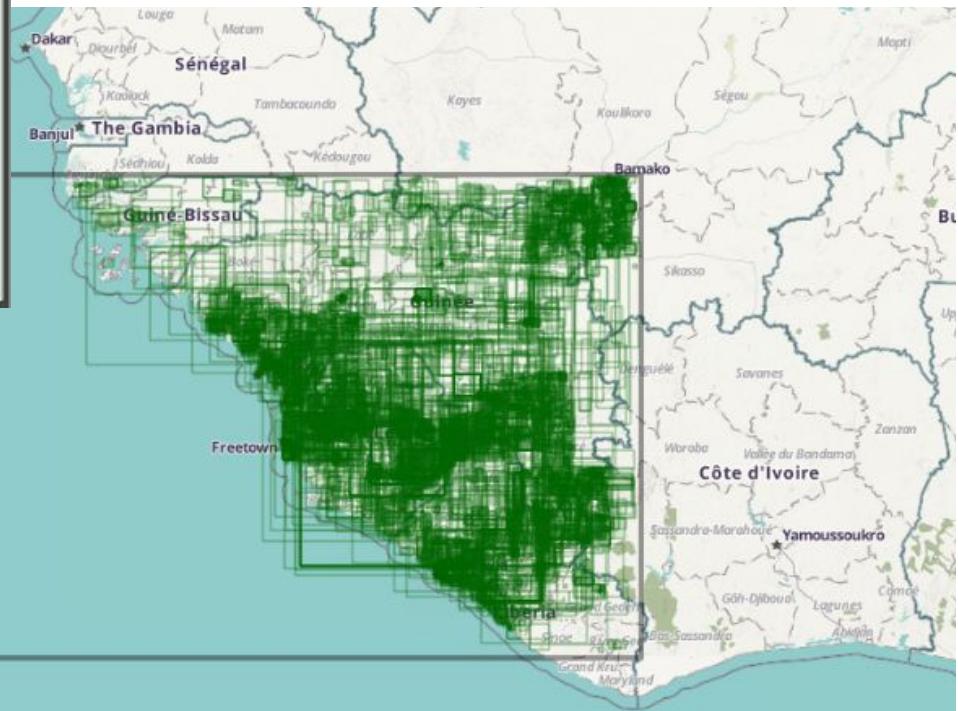
HOT Export Tool
<http://export.hotosm.org/>



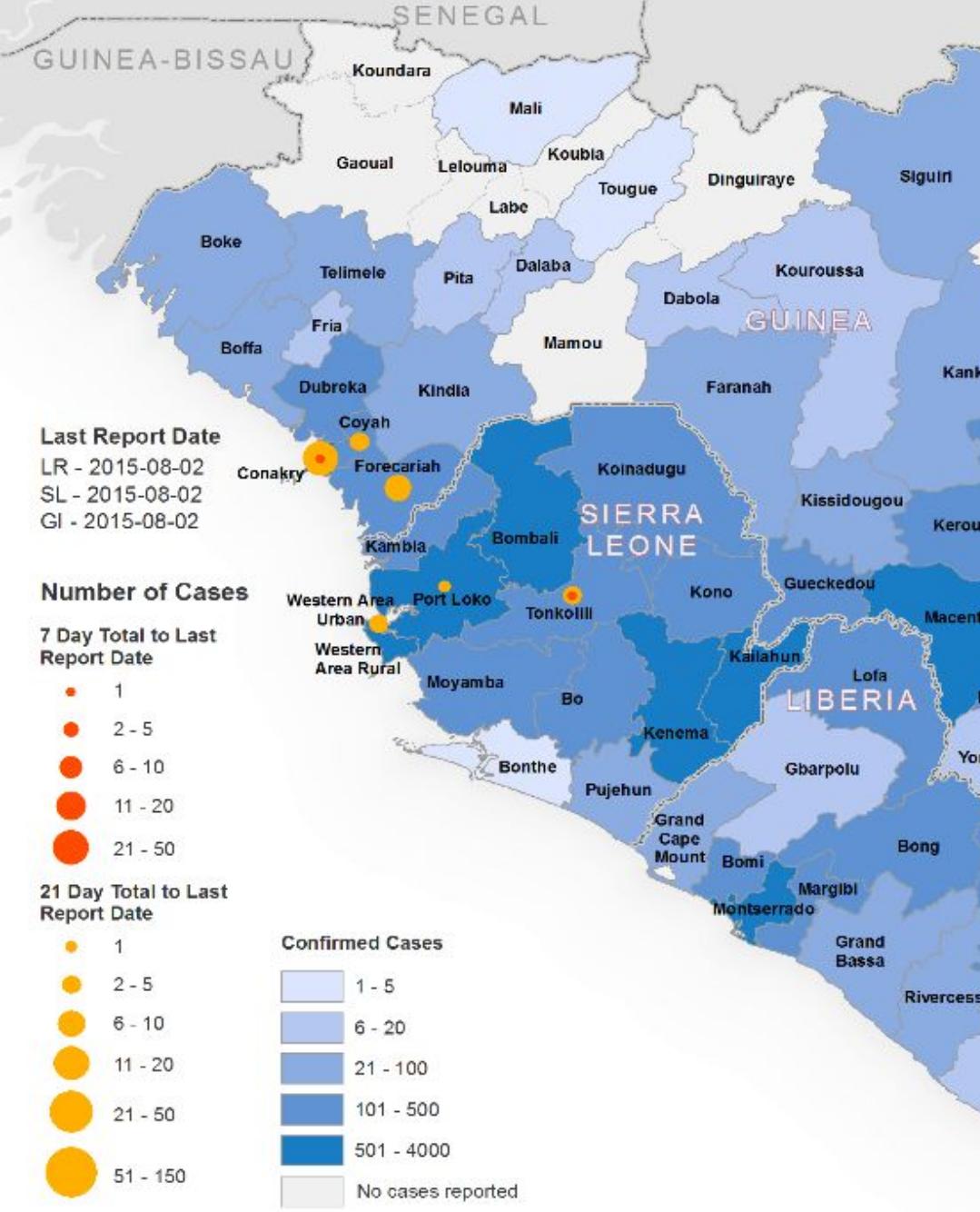
OSM data in different file formats

THE WILLIAM AND FLORA
HEWLETT
FOUNDATION

2014
2015
2016



Hewlett Foundation
Grant towards the West Africa Ebola Epidemic



Western Africa Ebola Epidemic

More than 11,000 victims
from 2014 - 2015

Situation report
5 August 2015
Courtesy World Health Organization (WHO)



Photo: John Moore, Getty Images | Appeared in PBS NewsHour article 10/14/2014



Job Jakarta

Runs

State	Download	Created At
✓	OSM source file (.pbf) [1.7MB] SQLite file [12.8MB] ESRI Shapefile (zipped) [3.1MB] Google Earth (KMZ) file [2.2MB] Garmin map (EXPERIMENTAL; compressed) [924.7KB] job log file (log.txt) [9.2KB]	2015-08-09 16:50

Area



Min. Longitude	106.7717
Min. Latitude	-6.2232
Max. Longitude	106.8871

Export Tool V1. 2012
Developed by HOT + Geofabrik, with funding
from USAID and the World Bank



Describe Export

File Formats

Tree Tag

Preset File

Export Details

Name

Description

Project

Coordinates



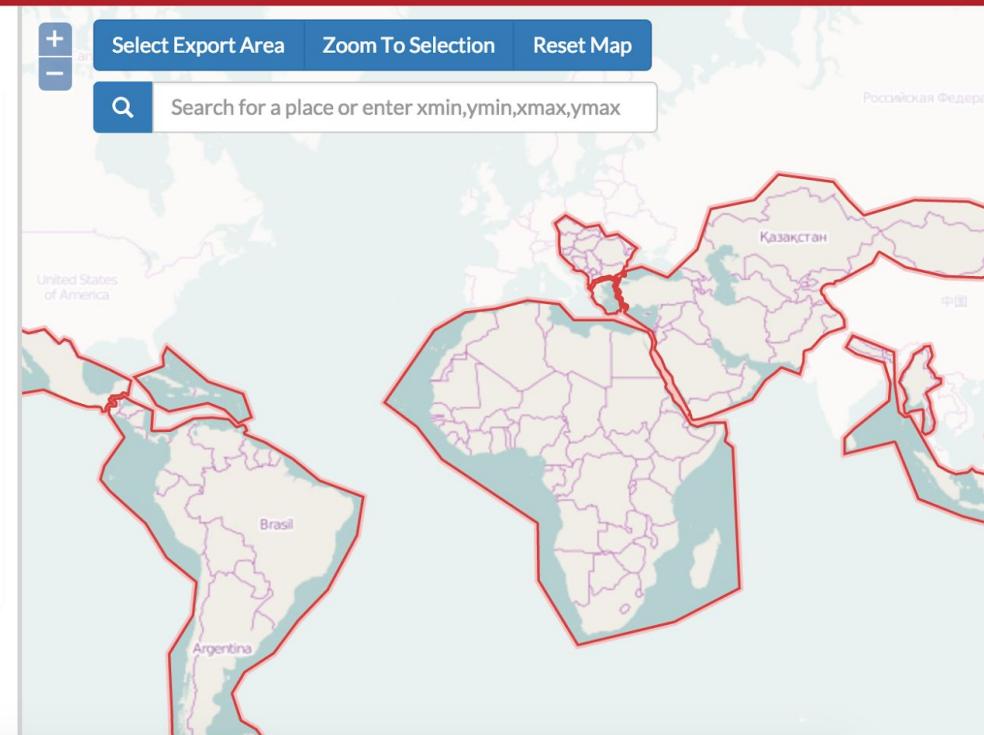
Select Export Area

Zoom To Selection

Reset Map



Search for a place or enter xmin,ymin,xmax,ymax



3 Main Sections:
Create, Exports + Presets



OSM Export Tool

Create Exports Presets Help About mataharimhairi -

Describe Export

File Formats

Tree Tag

Preset File

Export Details

Name

Mbale

Description

Detailed Town Mapping Plan

Project

#MapUganda

Coordinates



Select Export Area

Zoom To Selection

Reset Map



Mbale

Mbale, Eastern Region, Mbale, Uganda

Mbale, Vihiga, Kenya

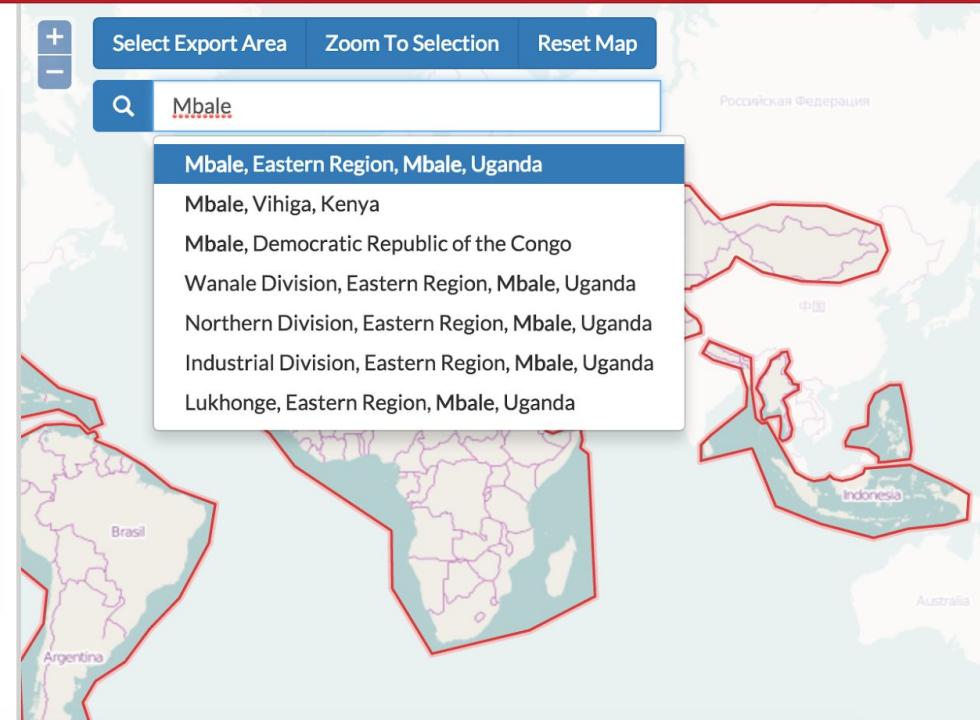
Mbale, Democratic Republic of the Congo

Wanale Division, Eastern Region, Mbale, Uganda

Northern Division, Eastern Region, Mbale, Uganda

Industrial Division, Eastern Region, Mbale, Uganda

Lukhonge, Eastern Region, Mbale, Uganda



Create: Describe Export Tab
Enter name, description, project
+ select area of interest



OSM Export Tool

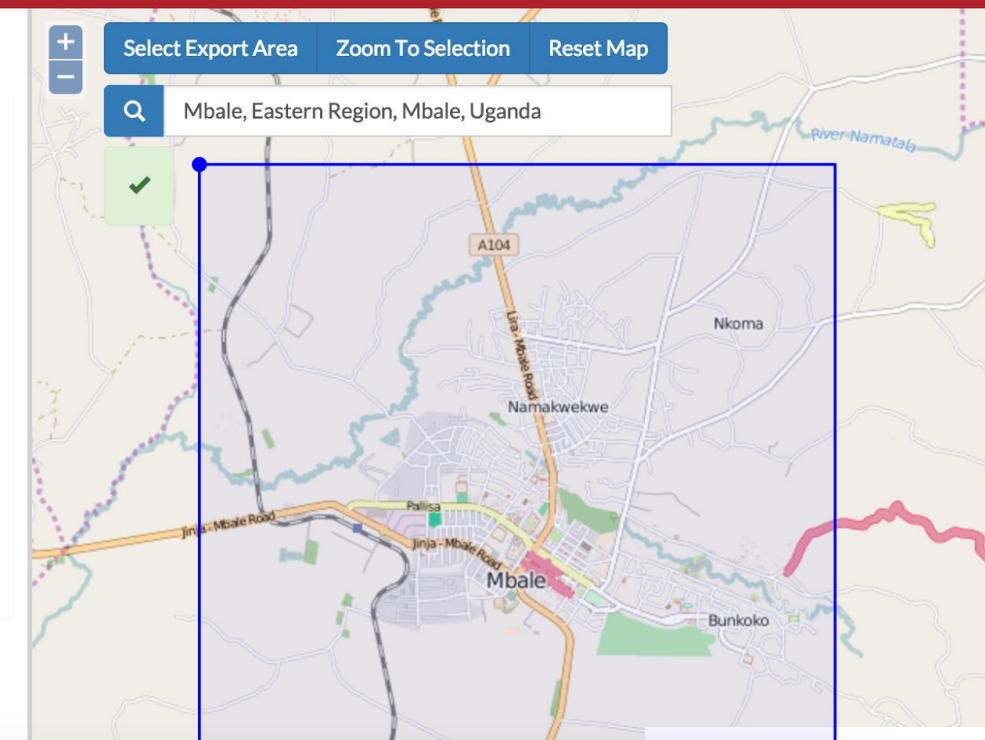
Create Exports Presets Help About mataharimhairi ▾

Describe Export File Formats Tree Tag Preset File Export Details

Select Export Formats:

More than one export format can be selected. Please note that there are two Esri Shapefile options, as the Thematic Schema provides the data in a set of themed geometry tables (points, lines and polygons), whereas the OSM Schema provides all attributes in layers grouped by geometry type

- Esri SHP (OSM Schema)
- Esri SHP (Thematic Schema)
- Garmin Map
- Google Earth KMZ
- OSMAnd OBF
- SQLite SQL



Create: File Formats Tab
Select format OSM data will be exported to



OSM Export Tool

Create Exports Presets Help About mataharimhairi ▾

Describe Export File Formats Tree Tag Preset File Export Details

Select from either the HDM or OSM data models.

Features can only be selected from one tree, either from the HDM or the OSM data model. Feature tags can not be mixed between the two. Deselect the HDM Tree to enable the OSM Tree.

Humanitarian Data Model

Buildings

Transportation

Barriers

Transportation means

Other road objects

Obstacles

Roads

Unclassified

Service roads

Roads under construction

Secondary Link

OSM Data Model

Water

Relations

Sports

Highways

Facilities

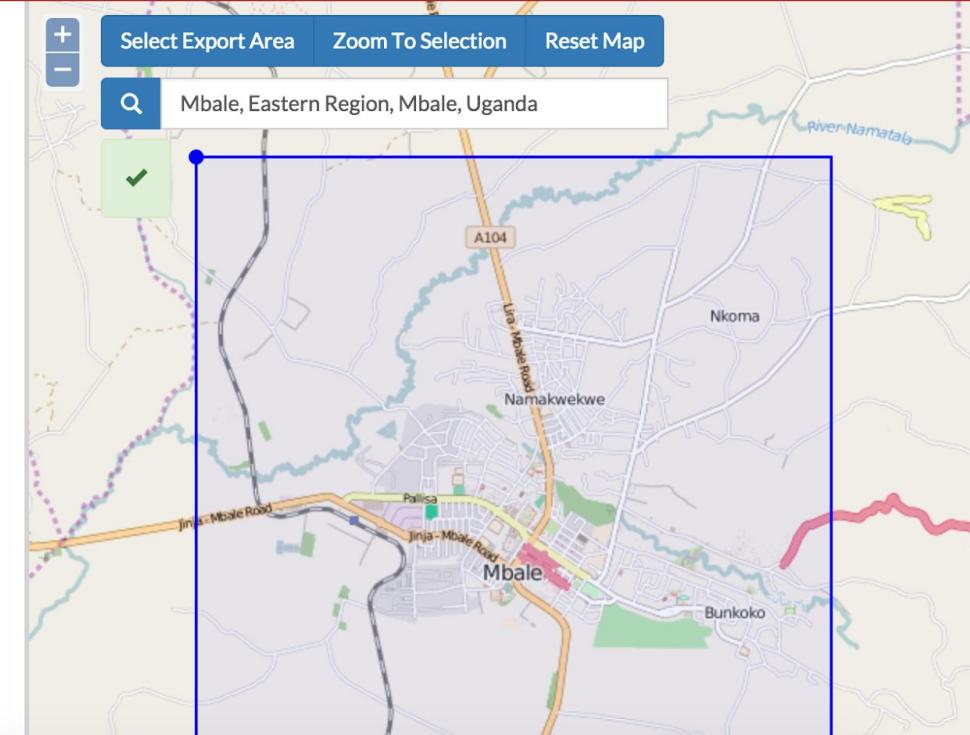
Shops

Man Made

Annotation

Transport

Geography



Create: Tree Tag Tab
Select features to export from either
the HDM or OSM Data Model



OSM Export Tool

Create Exports Presets Help About mataharimhairi ▾

Describe Export File Formats Tree Tag Preset File Export Details

Upload a preset file

Use this form to either upload a [JOSM Preset](#) configuration file, or to select a previously published preset configuration. Only one preset file can be selected at a time. Any selections of features you have made from the HDM Data Model or the OSM Data Model will be cleared.

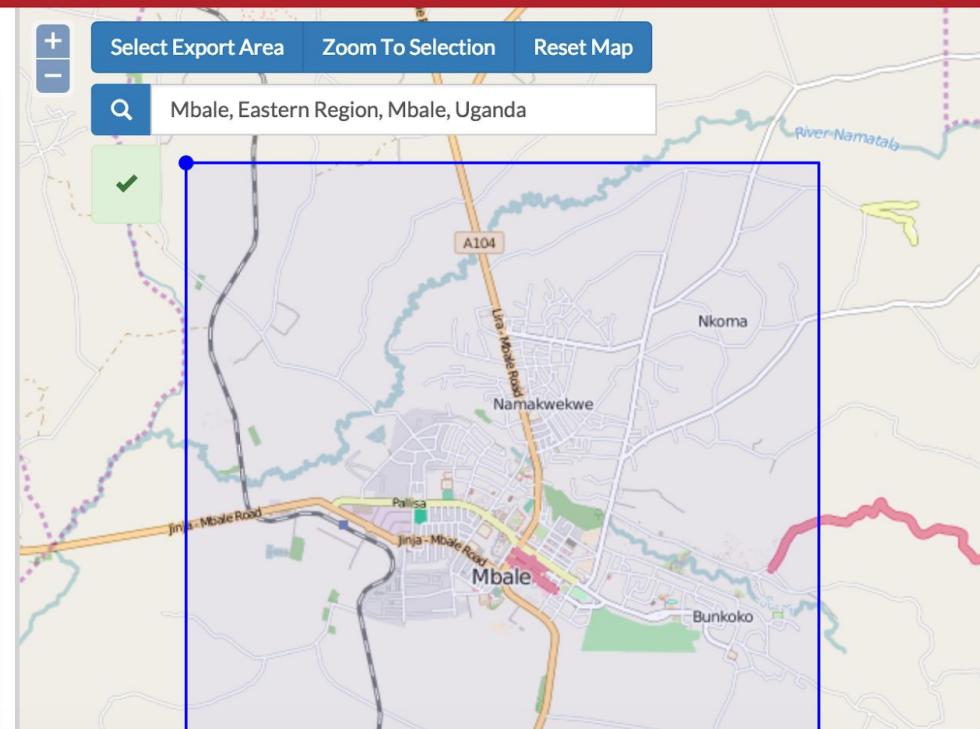
Preset name:

Publish this preset globally.

+ Upload Preset

Select a stored preset

Filename	Type	Status
mbale_preset.xml	PRESET	false



Create: Preset File Tab
Either upload or select a stored preset
to filter OSM features during export



Describe Export File Formats Tree Tag Preset File Export Details

Export Details

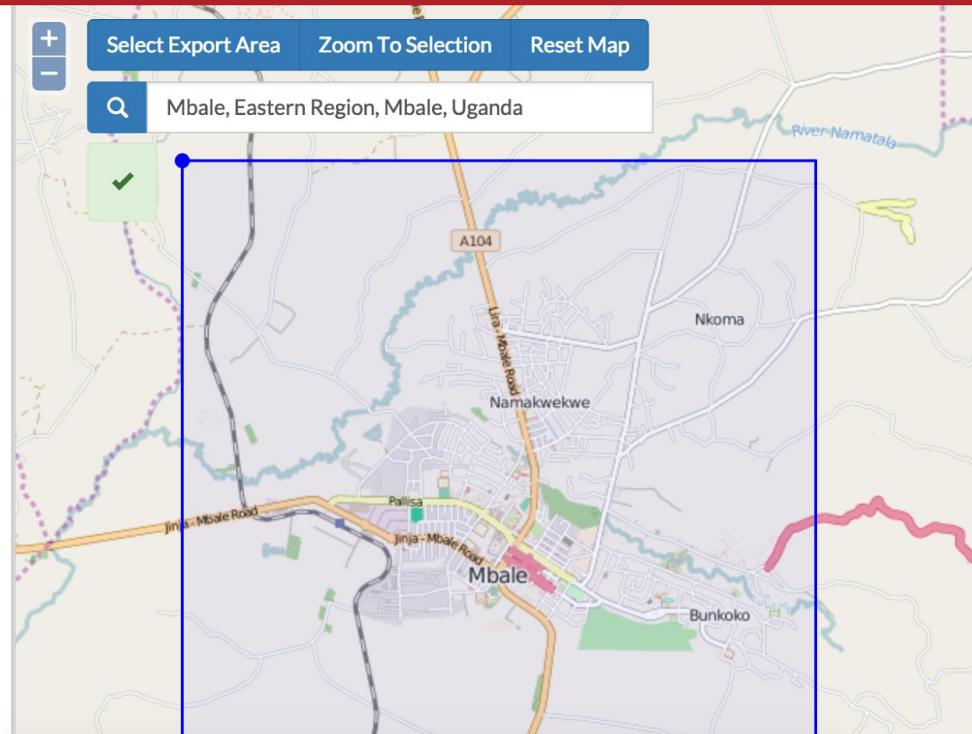
Name: Mbale
Description: Detailed Town Mapping Plan
Activation: #MapUganda
Export formats:

- Esri SHP (OSM Schema)
- Esri SHP (Thematic Schema)

Export Options

- Save feature selection locally
 Publish feature selection globally
 Publish export globally

Create Export



Create: Export Summary Tab
Save and publish feature selection
+ export either privately or publicly

Export Details

Job Id:	c281ee22-351a-43b0-875af96a5fa36fb5
Name:	Mbale
Description:	Detailed Town Mapping Plan
Project:	#MapUganda
Region:	Africa
Area:	49 sq km
Created:	12:44:00 pm, January 22nd 2016
Created By:	mataharimhairi
Published:	Publicly
Export Formats:	ESRI Shapefile Format ESRI Shapefile Format (Thematic)



Data is copyright [OpenStreetMap](#) contributors, [ODbL 1.0](#) licensed.

[Features](#)[Rerun Export](#)[Clone Export](#)[Delete Export](#)

Export Runs

12:44:54 pm, January 22nd 2016

Run Id: 4f42075f-5cee-4918-b573-defe282c31a9

Status:

COMPLETED

Run by: mataharimhairi

Started : 12:44:00 pm, January 22nd 2016

Finished: 12:44:54 pm, January 22nd 2016

Duration: a minute

Download:	File	Duration	Size
	OpenStreetMap (PBF) File	0:00:00	0.025 MB
	ESRI Shapefile (SHP)	0:00:00	0.057 MB
	Thematic ESRI Shapefile (SHP)	0:00:13	0.052 MB
	Custom JOSM Preset (XML)	0:00:01	0.009 MB

Export Details
Links to exported data files
Rerun, clone or delete export option



OSM Export Tool

Create Exports Presets Help About mataharimhairi ▾

Filter Exports

Search for name, description, event or username

Start Date: 2015-12-27 01:12

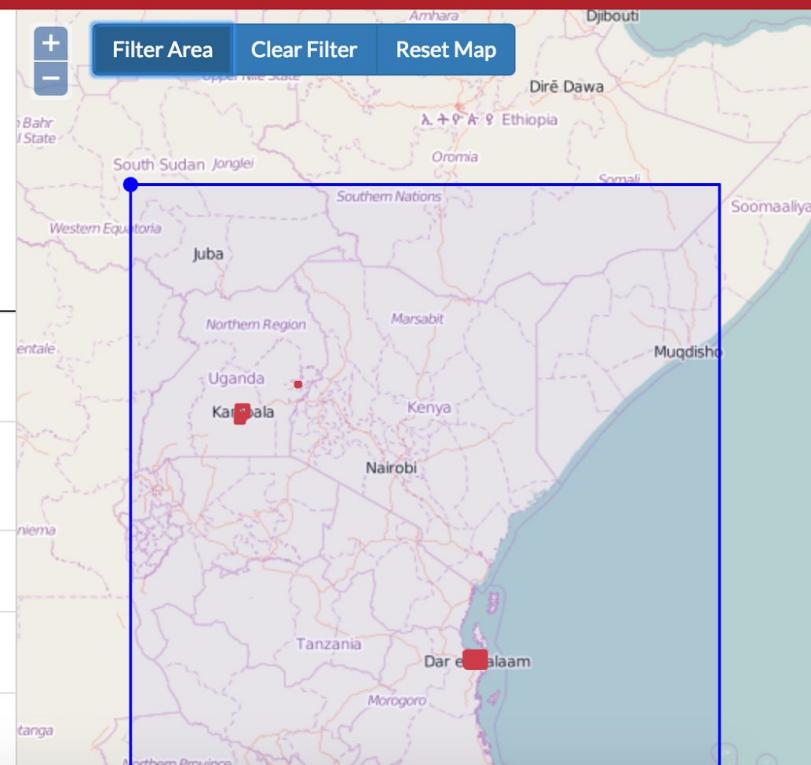


End Date: 2016-01-27 01:01



Reset Form

Name	Description	Project	Created	Region	Owner	
Dar es Salaam	Ramani Huria	Community Mapping For Flood Resilience	2016-01-25	Africa	paulevance	
Dar es salaam	Ramani Huria	Community mapping for flood resilience areas	2016-01-25	Africa	paulevance	
Mbale	Detailed Town Mapping Plan	#MapUganda	2016-01-22	Africa	mataharimhairi	
Mbale	Detailed Town Mapping Plan	#MapUganda	2016-01-22	Africa	mataharimhairi	
Dar Flood Prone zone	Ramani Huria	Community Mapping For Flood	2016-01-18	Africa	paulevance	



Exports
Filter + access saved exports



OSM Export Tool

Create Exports Presets Help About mataharimhairi ▾

▼ Filter Presets

Name Type Created Download Configuration Owner

yogyakarta	PRESET	2016-01-26	yogyakarta_preset.xml	Tyasfk		Delete
Jogja	PRESET	2016-01-26	jogja_preset.xml	RLinggarMeisar		<input type="checkbox"/> Publish this preset publicly
GitHub Issue #74-TreeTag	PRESET	2016-01-24	github_issue_74treetag_preset.xml	mataharimhairi		Delete
GitHub Issue #74-TreeTag	PRESET	2016-01-23	github_issue_74treetag_preset.xml	mataharimhairi		Delete
Test Preset	PRESET	2016-01-23	test_preset_v1.xml	mataharimhairi		Delete

My Presets

Display presets per page

Displaying 1-5 of 20 results

[Next >](#)

[Upload Preset](#)

Upload a preset file

Use this form to upload a **JOSM Preset** configuration file.

Preset name:

Publish this preset publicly

Presets

Filter + access saved presets

This XML file does not appear to have any style information associated with it. The document tree is shown below.

```
▼<presets xmlns="http://josm.openstreetmap.de/tagging-preset-1.0">
  ▼<group name="OSM Data Model">
    ▼<group name="Highways">
      ▼<group name="Waypoints">
        ▼<item name="Motorway Junction" type="node">
          <key key="highway" value="motorway_junction"/>
        </item>
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          <key key="highway" value="give_way"/>
        </item>
        ▼<item name="Turning Circle" type="node">
          <key key="highway" value="turning_circle"/>
        </item>
        ▼<item name="Turning Loop" type="node">
          <key key="highway" value="turning_loop"/>
        </item>
        ▼<item name="Services" type="node,closedway,relation">
          <key key="highway" value="services"/>
        </item>
        ▼<item name="Passing Place" type="node">
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        </item>
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          <key key="highway" value="crossing"/>
        </item>
        ▼<item name="City Limit" type="node">
          <key key="traffic_sign" value="city_limit"/>
        </item>
        ▼<item name="Traffic Signal" type="node">
          <key key="highway" value="traffic_signals"/>
        </item>
```

XML Preset File



Help Documentation

The Export Tool allows users to create custom OpenStreetMap (OSM) exports for selected HOT regions in various data file formats. The OSM data available for download is updated at one minute intervals. This help documentation will assist users in navigating the site, and use the available functionality effectively to generate OSM exports.

Main Pages

The OSM Export Tool has three main sections; an area to create new exports (Create), an area where existing exports are stored and can be re-run (Exports), and an area where preset files are stored and can be accessed (Presets). The following links will take the user step by step through the each section, providing guidance for the available functions:

- [Create](#)
- [Exports](#)
- [Presets](#)

File Formats

Help Documentation



International
Red Cross and
Red Cresent

Using
OpenStreetMap
to coordinate
their
volunteers



OSM Data on Garmin Devices



Medecins Sans Frontieres heading out
(Doctors Without Borders)



Moving the
right people,
medicine, and
equipment to
the right
place at the
right time

Ebola outbreak officially ended in Sierra Leone
in November; Guinea in December, and Liberia
on 14 January 2016

World Health Organisation



Export Tool Architecture



This repository Search

Pull requests Issues Gist



hotosm / osm-export-tool2

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Code

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Wiki

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Graphs

Settings

Export customised OSM data in various file formats <http://export.hotosm.org/> — Edit

330 commits

1 branch

2 releases

7 contributors

Branch: master

New pull request

New file

Find file

HTTPS

<https://github.com/hoto>



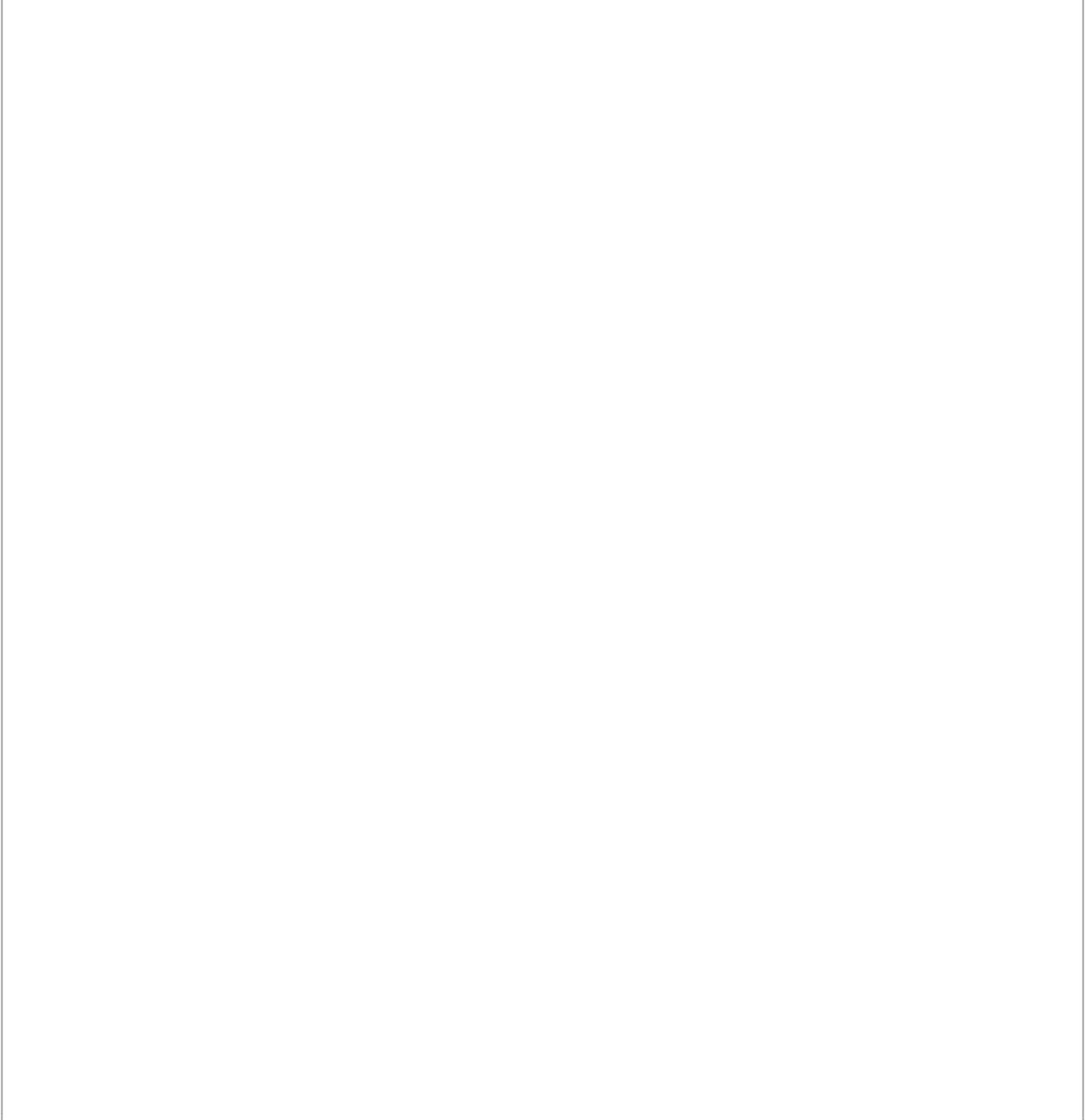
Download ZIP

mataharimhairi Merge pull request #111 from waffle-iron/master ...

Latest commit 2fd7147 7 days ago

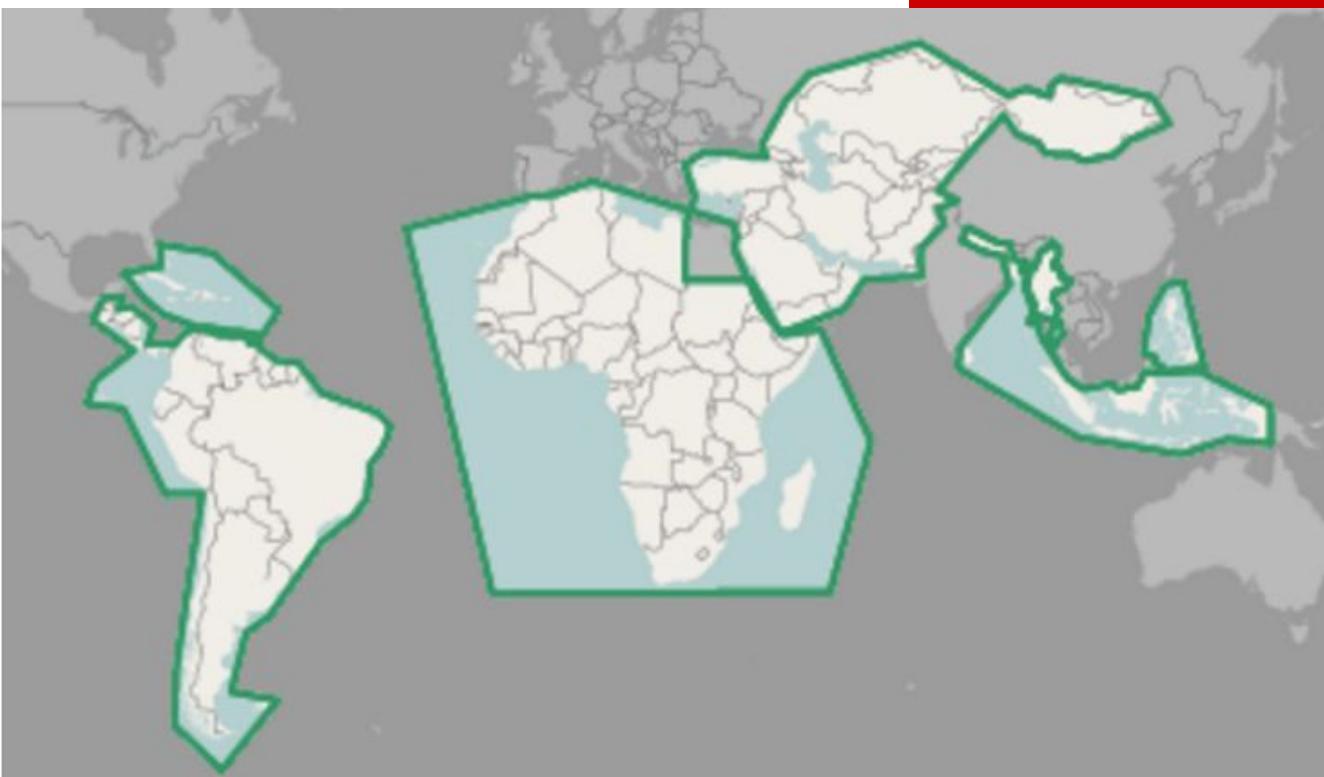
.tx	Adding tx for javascript files.	4 months ago
api	Fix for #99.	3 months ago
core	Updating inline code documentation.	3 months ago
doc	Fix for #78. Updating locales.	4 months ago
jobs	Fix for #103.	3 months ago
locales	Fix for transifex issue.	3 months ago
scripts	Fix flake8 E265	4 months ago

GitHub Repository
<https://github.com/hotosm/osm-export-tool2/>



GitHub Issues

- Additional File Formats
i.e. MapsMe
- Open Tool to Export all Regions



Get Involved

HOT Mailing List
hot@openstreetmap.org

HOT Technical WG
techwg@hotosm.org

<https://hotosm.org/>

HOT Summit 2016



State of the Map
Brussels, Belgium

