

# Part 1: Getting Started with OSM

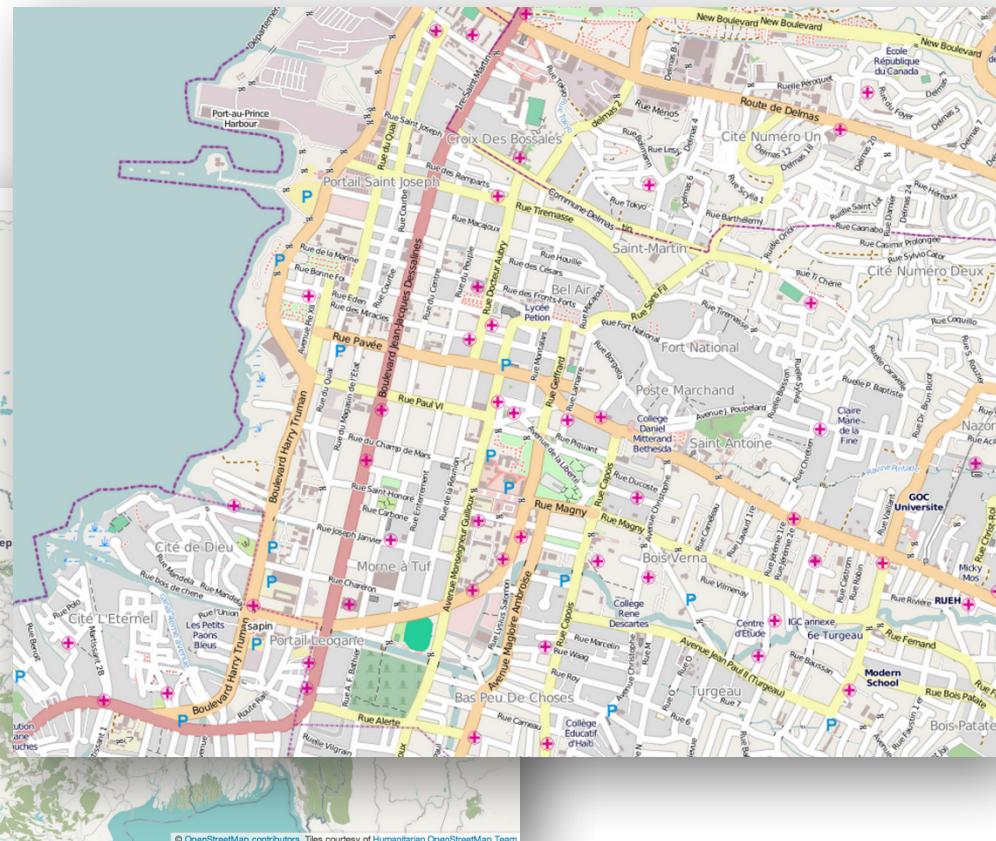
[TeachOSM.org](http://TeachOSM.org)

Maggie Cawley, Steven Johnson

# What is Open Street Map?



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



# Where/how do we collect data?

## ▪ Imagery

- Trace Features (no importing of names due to copyright)
- Sources
  - Purchased or donated Imagery
  - Bing

## ▪ Local Knowledge

- Augmenting already present vector data
- Using “Field Papers” to augment/validate traced work

## ▪ GPS

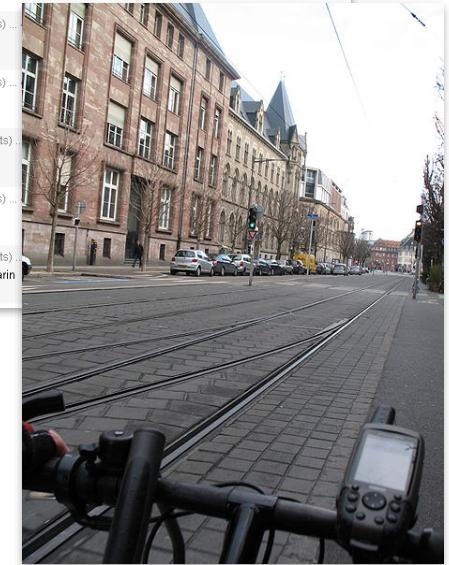
- Systematic ground surveys using a handheld GPS unit and a notebook, digital camera

### Public GPS traces tagged with Haiti

[RSS](#) | See just your traces, or upload a trace | See all traces

« Previous | Showing page 1 | Next »

	<a href="#">Road.gpx</a> ... (424 points) ... 3 days ago <a href="#">more</a> / <a href="#">map</a> / <a href="#">edit</a> IDENTIFIABLE
	log base highway by wonderhook in Haiti, port-au-prince
	<a href="#">20100221.gpx</a> ... (17,662 points) ... 4 months ago <a href="#">more</a> / <a href="#">map</a> / <a href="#">edit</a> IDENTIFIABLE
	Carefour, Delmas & Petionville by FranBoon in Haiti
	<a href="#">20100221.gpx</a> ... (13,808 points) ... 4 months ago <a href="#">more</a> / <a href="#">map</a> / <a href="#">edit</a> IDENTIFIABLE
	Carrefour by FranBoon in Haiti
	<a href="#">20100220.gpx</a> ... (9,218 points) ... 4 months ago <a href="#">more</a> / <a href="#">map</a> / <a href="#">edit</a> IDENTIFIABLE
	Boutilliers again by FranBoon in Haiti
	<a href="#">20100219.gpx</a> ... (7,754 points) ... 4 months ago <a href="#">more</a> / <a href="#">map</a> / <a href="#">edit</a> IDENTIFIABLE
	Around by FranBoon in Haiti
	<a href="#">20100218.gpx</a> ... (5,657 points) ... 4 months ago <a href="#">more</a> / <a href="#">map</a> / <a href="#">edit</a> IDENTIFIABLE
	Around by FranBoon in Haiti
	<a href="#">20100216.gpx</a> ... (23,782 points) ... 4 months ago <a href="#">more</a> / <a href="#">map</a> / <a href="#">edit</a> IDENTIFIABLE
	Vivy Mitchel after a tour by FranBoon in Haiti
	<a href="#">20100216.gpx</a> ... (2,492 points) ... 4 months ago <a href="#">more</a> / <a href="#">map</a> / <a href="#">edit</a> IDENTIFIABLE
	return by FranBoon in Haiti
	<a href="#">20100215.gpx</a> ... (17,636 points) ... 4 months ago <a href="#">more</a> / <a href="#">map</a> / <a href="#">edit</a> IDENTIFIABLE
	Tabarre, Plaine, Carrefour Marin by FranBoon in Haiti



# 1 OSM Account Creation

**getting the show on the road**

# Create an Open Street Map Account

The image shows a split-screen view of the OpenStreetMap website. On the left, there is a map of Southeast Asia, specifically focusing on Vietnam, Laos, Cambodia, Thailand, Malaysia, Singapore, Indonesia, and the Philippines. The map includes place names like Hanoi, Phnom Penh, Bangkok, Kuala Lumpur, and Manila. On the right, there is a sign-up form titled "Sign Up". The form has fields for "Email Address", "Confirm Email Address", "Display Name", and "Password", each with an associated input field. To the right of the form is a decorative graphic of a globe with binary code and a key. Below the form, there is explanatory text: "Free and editable" and "Unlike other maps, OpenStreetMap is completely created by people like you, and it's free for anyone to fix, update, download and use." At the bottom, there is a note: "Not displayed publicly (see [privacy policy](#))".

OpenStreetMap

Search Where am I? Go

Lai Châu  
Hà Nội  
Cambodia  
Việt Nam  
Bình Phước  
Bình Dương  
Lóng Anh  
Brunei Darussalam  
Malaysia  
Kuala Lumpur  
Johor  
Singapore  
Riau  
Kepulauan Riau  
300 km  
200 mi

GPS Traces User Diaries Copyright Help About Log In Sign Up

View Edit History

## Sign Up

Email Address:

Confirm Email Address:

Not displayed publicly (see [privacy policy](#))

Display Name:

Your publicly displayed username. You can change this later in the preferences.

Password:

Confirm Password:

Free and editable

Unlike other maps, OpenStreetMap is completely created by people like you, and it's free for anyone to fix, update, download and use.

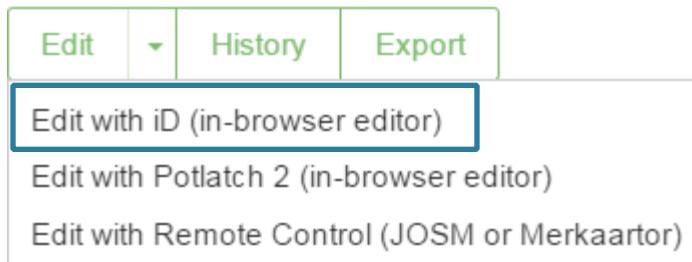
Sign up to get started contributing. We'll send an email to confirm your account.

# 2 iD Editor

the in browser editor

# iD Editor

1. Log in to OSM
2. Zoom into an area that is familiar to you (you will not be allowed Edit unless you are zoomed in far enough)
3. Click on the Edit button on the top left hand corner of the OSM map window, and choose iD Editor



1. Go through the iD Walkthrough tutorial (screenshot next slide)

**Help**

This is an editor for [OpenStreetMap](#), the free and editable map of the world. You can use it to add and update data in your area, making an open-source and open-data map of the world better for everyone.

Edits that you make on this map will be visible to everyone who uses OpenStreetMap. In order to make an edit, you'll need a [free OpenStreetMap account](#).

The [iD editor](#) is a collaborative project with [source code available on GitHub](#).

[Editing & Saving ▶](#)

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Help
<a href="#">Editing &amp; Saving</a>
<a href="#">Roads</a>
<a href="#">GPS</a>
<a href="#">Imagery</a>
<a href="#">Addresses</a>
<a href="#">Using the Inspector</a>
<a href="#">Buildings</a>
<a href="#">Relations</a>



[Start the Walkthrough](#)



# iD Editor

Use the (short) built-in walk-through to demonstrate how to trace

# Tagging features in OSM

- Tags describe the different geographic features. Tags are made up of **keys** and **values**
- The **key** describes a broad class of features (for example, **highways** or **names**).
- The **value** details the specific feature that was generally classified by the key (e.g. **highway=motorway**).
- You will be prompted to save a tag for each feature you trace
- For a comprehensive list of the most popular tags
  - Please visit: [http://wiki.openstreetmap.org/wiki/Map\\_Features](http://wiki.openstreetmap.org/wiki/Map_Features)

# 3

## OSM Tasking Manager

**collaborative mapping project interface**

# Tasking Manager

- Link: <http://tasks.teachosm.org/>

TeachOSM Tasking Manager

About en ▾ login to OpenStreetMap

## Projects

Search Sort by: High priority first

#2 Mapping für Rollstuhl Routenplanung in Heidelberg 0%

Created by shahmann - Updated 15 days ago - Priority: low



About the Tasking Manager

OSM Tasking Manager is a mapping tool designed and built for the Humanitarian OSM Team collaborative mapping. The purpose of the tool is to divide up a mapping job into smaller tasks that can be completed rapidly. It shows which areas need to be mapped and which areas need the mapping validated. This approach facilitates the distribution of tasks to the various mappers in a context of emergency. It also permits to control the progress and the homogeneity of the work done (ie. Elements to cover, specific tags to use, etc.).

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## TeachOSM Version

This version of the Tasking Manager is geared toward classroom instructors, or any other individuals leading a coordinated group in a team-mapping project.

**Instructors/Project leaders:** To request account privileges to create a mapping task, please email: [info@teachosm.org](mailto:info@teachosm.org)

Questions About Tasks, Mapping or HOT?

# OSM Tasking Manager

TeachOSM Tasking Manager

## Projects

 Search

Sort by: High priority first ▾

Your projects

#1 Kathmandu - Map all primary roads and buildings  
0%

Lorem ipsum dolor sit amet, consectetur adipisicing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua.



Updated about a month ago - Priority: medium - Draft

#2 Mapping für Rollstuhlroutenplanung in Heidelberg  
0%



Created by shahmann - Updated 15 days ago - Priority: low

- Log in with regular OSM account information
- On the main page and search for your assignment using a key word

# General Santos City, Philippines (GWU Mapathon)



Description Instructions Task **Users** Stats

## General Santos City, Philippines (GWU Mapathon)

Description Instructions Task **Users** Stats

[JOSM](#) [iD Editor](#) [Potlatch 2](#) [Walking Papers](#) [.osm](#) [.gpx](#)

You locked this task [Unlock it](#) ⏳ 93 min. left

[Mark task as done](#)

**Extra instructions**  
None

**History**  
Locked by RAHinton 0 minute ago

OSM changesets

A detailed map of a residential area in General Santos City, specifically the Toledo Subdivision. The map shows a grid of streets with names like Mabuhay Road, Yumang Street, Salvani Street, and Apparite Street. A specific area within the subdivision is outlined with a thick orange border. The map includes a legend at the bottom right indicating the status of different changesets: Total (140), Done (0), Validated (0), and Curr. worked on (1).

© OpenStreetMap contributors

# Selected Cell in iD



General Santos City, Philippines (GWU Mapathon)

Description Instructions Task Users Stats

↗ JOSM iD Editor Potlatch 2 Walking Papers .osm .gpx

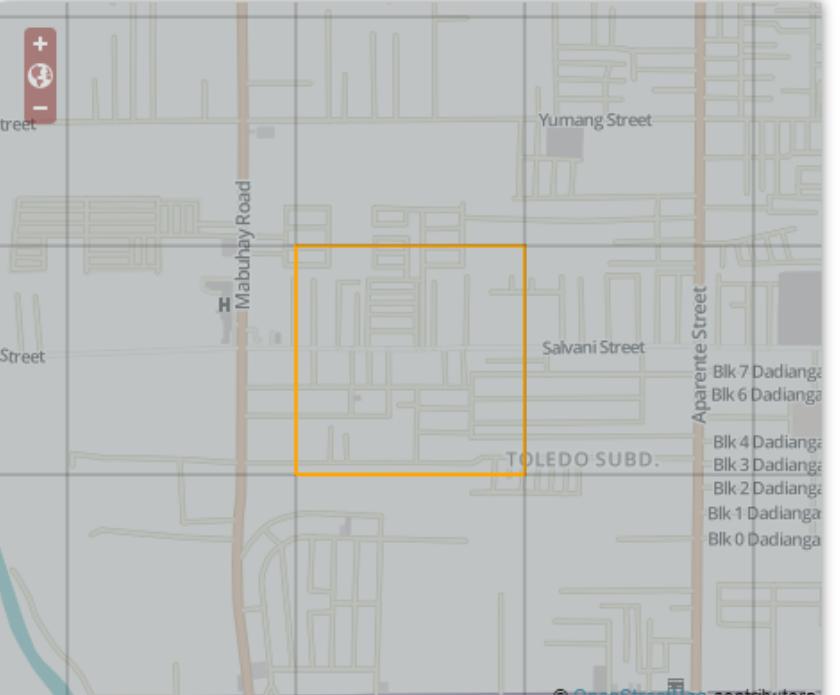
You locked this task [Unlock it](#) 93 min. left

[✓ Mark task as done](#)

**Extra instructions**  
None

**History**  
 Locked by RAHinton 0 minute ago

OSM changesets



Total (140) Done (0) Validated (0) Curr. worked on (1)

Radio Mindanao Network Digos - Makar Road

# Tracing Examples: Low Density Areas

**Low Density Areas:** Small footways are clearly visible surrounding the main building. Footways often do not connect so it is acceptable to add dead end lines. Only connect paths when their intersection is clearly visible.



# Tracing Examples: Medium Density Areas

**Medium Density Areas:** Here is a visible alley between buildings which is easy to identify due to the wide space between buildings and its color, texture and shape. In reality alleys do not always connect with other alleys/roads and the tracing should represent the reality of what a user can positively identify in the image.



# Tracing Examples: High Density Areas

**High Density Areas:** Study the image below of a high density area and look for logical roads and alleys by identifying building shadows and empty spaces. These features should be collected if a user is able to accurately determine their location. It is better to not collect an alley then to collect one which does not exist.



# Mapping for Resilience Tracing Guide

- An online Tracing Guide was developed for our last event
  - It has illustrated examples and tagging information
  - A tracing guide does not have to be this sophisticated to be useful, it can be a word document, but the content here is perfect
- Link: <http://hotosm.github.io/tracing-guides/guide/kulna.html#>



# Editing and tagging

- **SAVE** your edits after every few pieces of infrastructure to avoid mapping conflicts
- **TAG** every piece of infrastructure
- Add a commit message:
  - Example: #YourOrganization tracing source: Bing
  - It's a good idea to maintain an **Edit Log** document
    - Note interpretation issues (with screen shots)
    - Workflow frustrations
    - This helps improve student workflow and user experience

# Marking Complete with Tasking Manager

- When you have completed your chosen cell, make sure to mark it as **DONE** in Tasking Manager, with a note to describe the work you did
  - (this can be a repeat of the commit message with any additional detail you think might help)
- If you've done all you can do in a cell and it is not complete, Unlock it!
- **DO NOT** mark an incomplete cell as complete

# Tracking your Work: Overpass Turbo

<http://overpass-turbo.eu/>

The screenshot shows the Overpass Turbo interface. On the left, there is a code editor containing an OSM query script. On the right, there is a map of General Santos City, Philippines, with various geographical features and subdivisions labeled.

**OSM Query Script:**

```
1 {{user=namehere}}
2
3 <osm-script output="json">
4   <union>
5     <query type="node">
6       <user name="{{user}}"/>
7       <bbox-query {{bbox}}/>
8     </query>
9     <query type="way">
10       <user name="{{user}}"/>
11       <bbox-query {{bbox}}/>
12     </query>
13   </union>
14   <print mode="body"/>
15   <recurse type="down"/>
16   <print mode="skeleton"/>
17 </osm-script>
18
```

**Map Labels:**

- Junction to Q.T. Santos Elementary School
- Adobtal Subdivision
- Junction to Divine Mercy Center
- Barangay Ligaya
- Purok Naval
- Toledo Subd.
- Guinoo Subdivision
- Dadiangas South
- Rajah Buayan Airbase
- General Santos City International Airport

A scale bar indicating 3 km is visible at the bottom left of the map.

# Overpass Turbo

- With overpass turbo you can run Overpass API queries and analyze the resulting OpenStreetMap data interactively on a map.
- <http://overpass-turbo.eu/>
  - Navigate to the area your are working
  - Click the Wizard button
  - Use the following syntax to search for your OSM edits:
  - **user: your\_osm\_name**

