

OPEN MAPPING EDUCATION SERIES

OPENSTREETMAP MODULES 1-5

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OPENSTREETMAP

MODULE 1

OSM BASICS I: ACCOUNT CREATION & INTERFACE



LEARNING OBJECTIVES

In this module, you will learn how to:

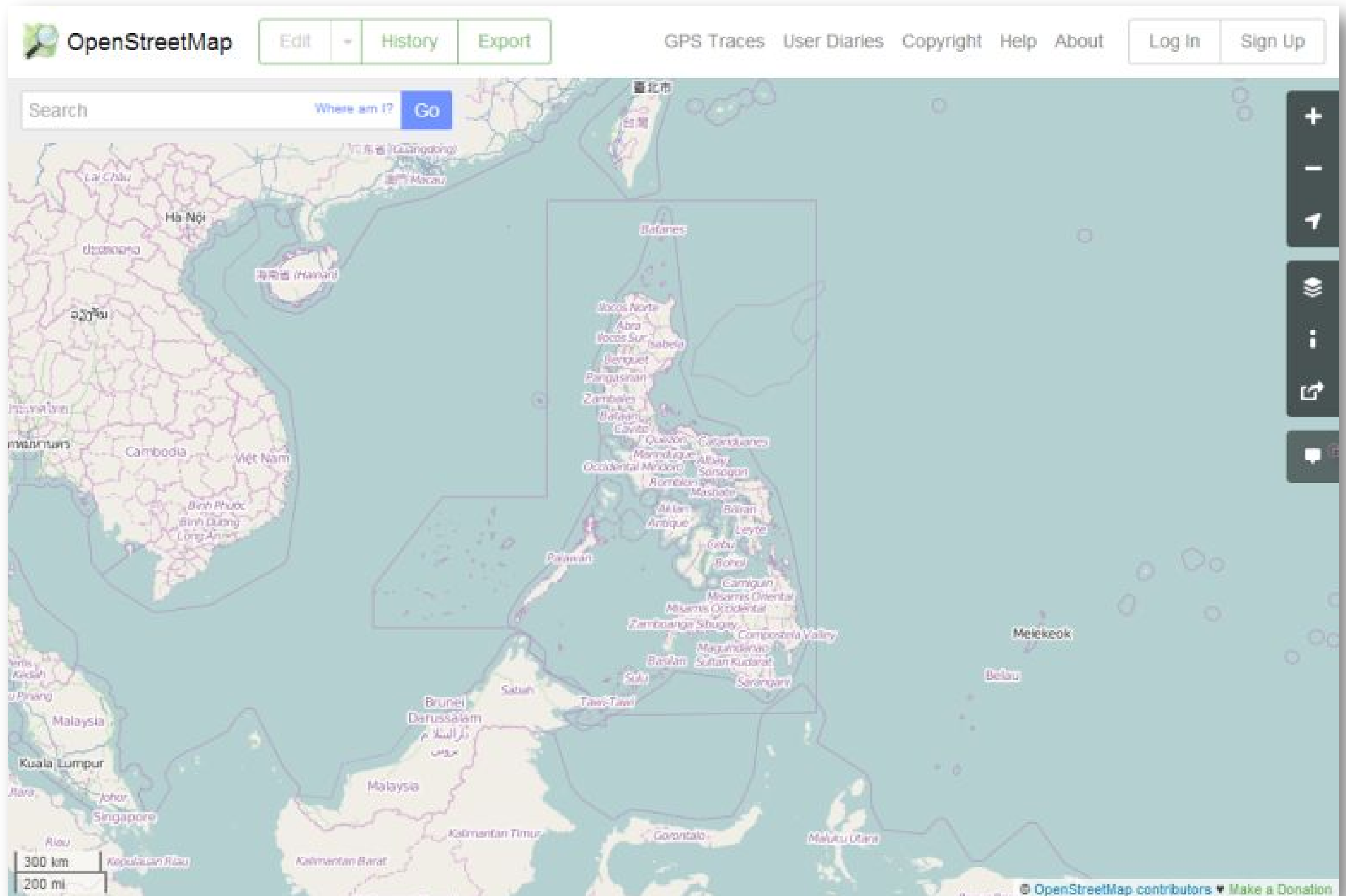
- Create an OpenStreetMap account. An account is necessary to identify your contributions and edits to OpenStreetMap.
- Master the OpenStreetMap interface
 - Search for places using Nominatim
 - Pan the map, zoom in, zoom out
 - Access help
 - Change map styles and background imagery



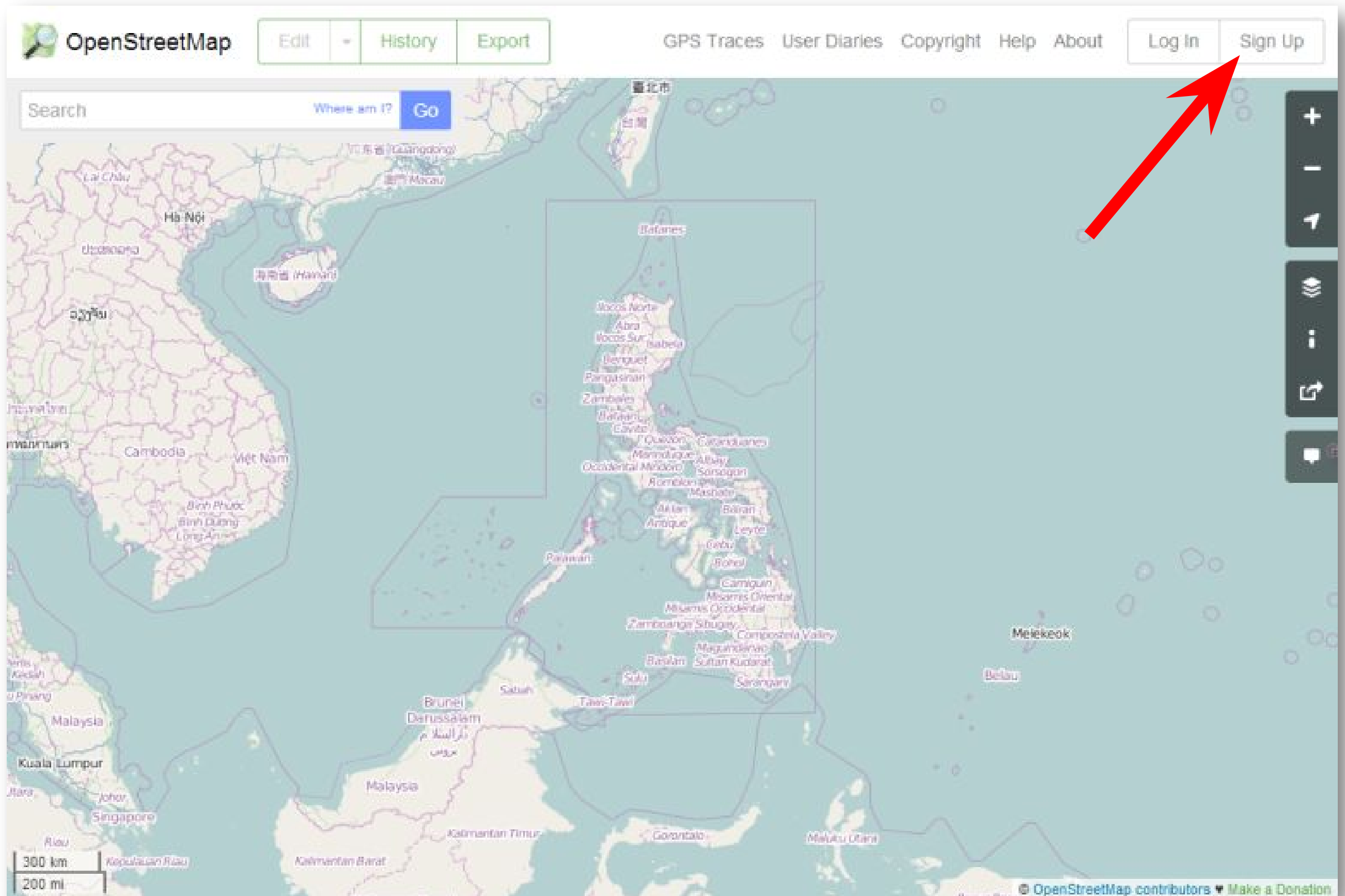
PART ONE - ACCOUNT CREATION



GO TO WWW.OPENSTREETMAP.ORG



CLICK 'SIGN UP'



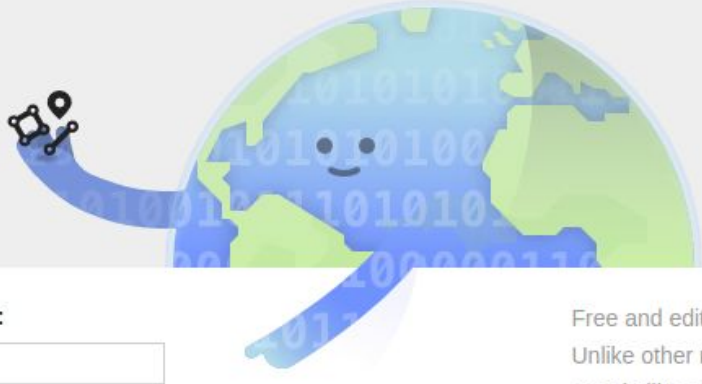
SIGN UP

- Enter your email address
- Choose a unique username
- Choose a password
- Click 'Sign Up'
- Check your email

Congratulations!

You are now a part of the global OpenStreetMap community!

Sign Up



Email Address:

Confirm Email Address:

Your address is not displayed publicly, see our [privacy policy](#) for more information

Display Name:

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

Password:

Confirm Password:

[Alternatively, use a third party to login](#)

Sign Up

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.

PART TWO - THE INTERFACE

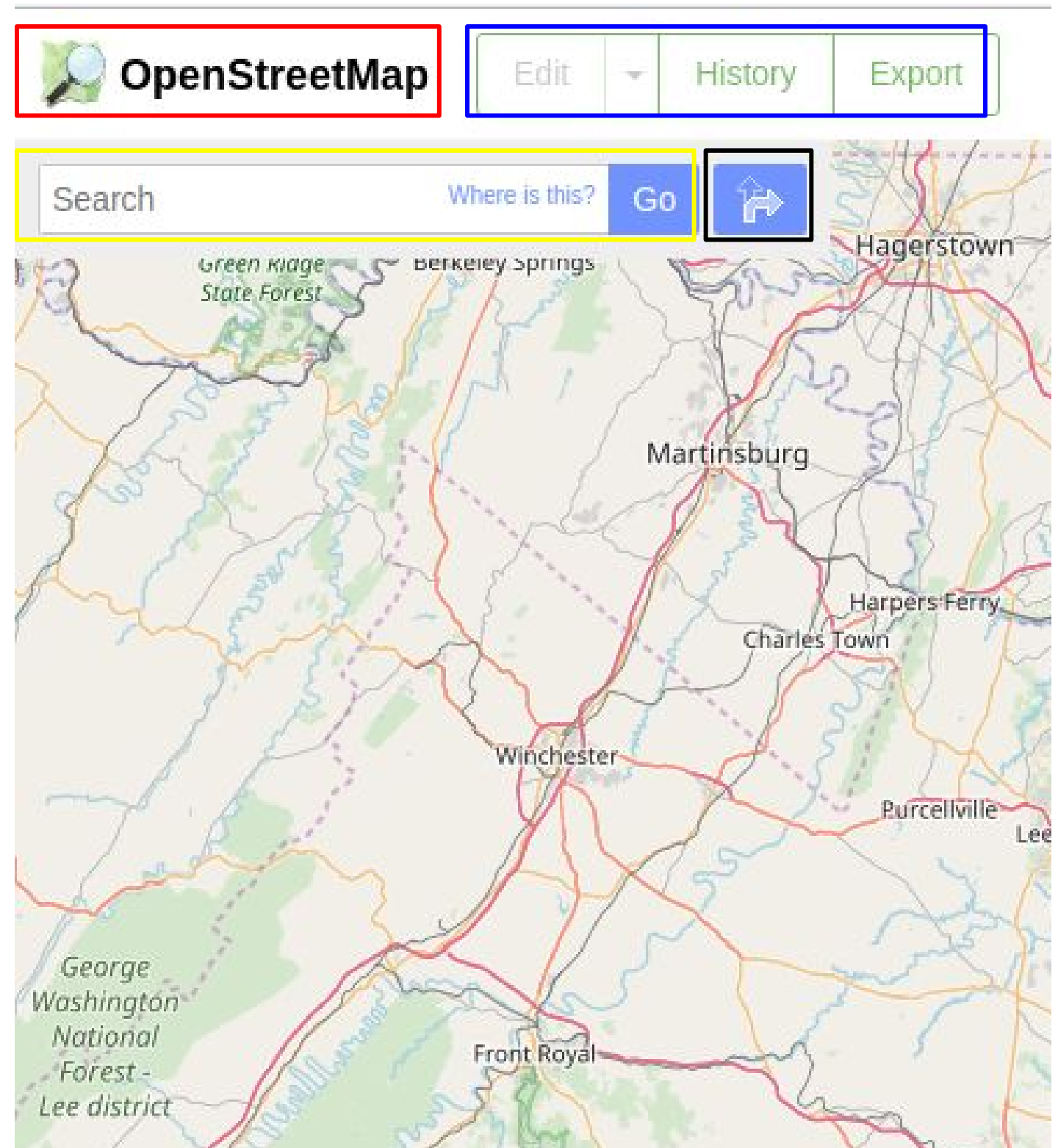


THE OPENSTREETMAP INTERFACE

- Navigate to www.openstreetmap.org

CONTROLS

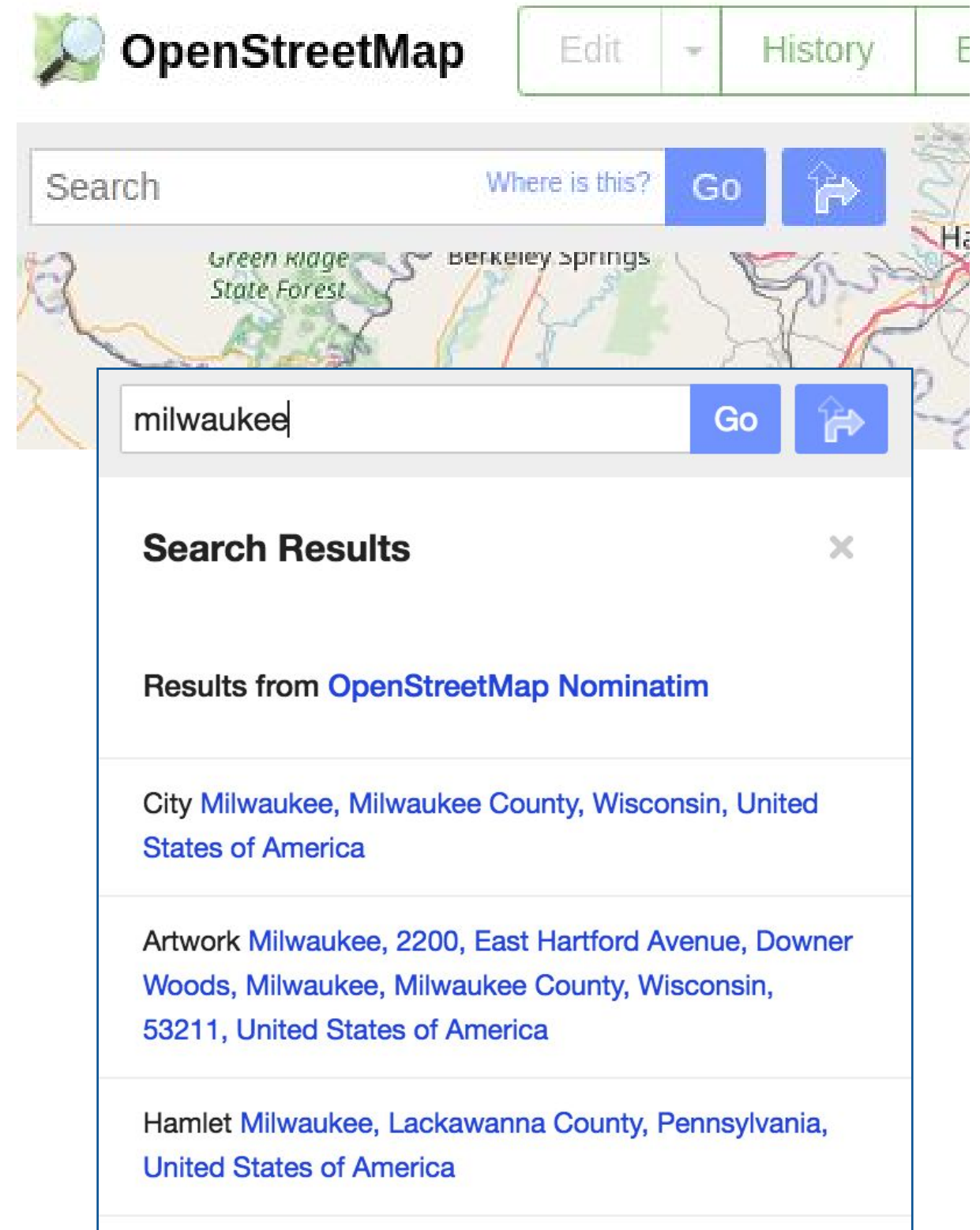
- OSM logo / Home button
- Edit / History / Export
- Search Box
- Directions button



SEARCH BOX

FIND A PLACE ON THE MAP

- Locate the search box near the upper left corner
- Use the search box to enter a placename, then hit 'return'.
- For example, the figure below shows result for places named 'Milwaukee'.
- Try searching for places near you or places you've visited.



ABOUT: THE OSM GAZETTEER

The OpenStreetMap search function relies on a gazetteer. A gazetteer is a list of place names and the corresponding geographical coordinates of the place. When used with a map, a gazetteer functions like an index of places.

For more information, see the Nominatim entry on the OpenStreetMap wiki. Also, repeat your search using the web version of Nominatim. Make sure to click on, 'Details' to find out more details about your area of interest



Main Page
The map
Map Features
Contributors
Help

Page

Discussion

Read

Nominatim

Available languages — *Nominatim*

• Deutsch • **English** • français • português • русский • 한국어 • 日本語 • 中文 (简体) • 中文 (繁體)

Other languages — [Help us translate this page](#)

Nominatim (from the Latin, 'by name') is a tool to search OSM data by name and address and to generate:
nominatim.openstreetmap.org.

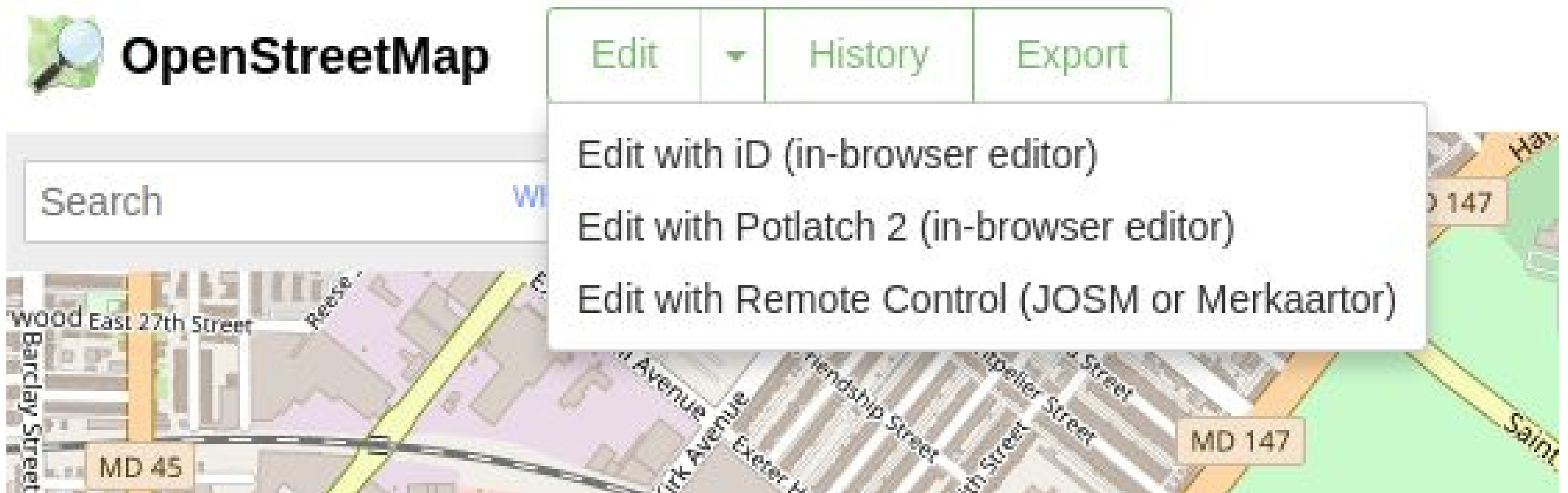


EDIT BUTTON

Clicking on the Edit dropdown arrow presents 3 editing options:

- Edit with iD
- Edit with Potlatch
- Edit with Remote Control

You will learn to edit with iD in the following module. Stay tuned!



HISTORY BUTTON

- Click History to reveal additions and changes to the map in the area shown in your map window
- Click a changeset to reveal additional information about the edit.

Changeset: 55817019

waterways

Closed about 19 hours ago by [Gumeg](#)

Tags

created_by	JOSM/1.5 (13265 ru)
source	Bing

Discussion

[Log in to join the discussion](#)

Ways (2)

[152477492, v6](#)
[556365150, v1](#)

Nodes (1-20 of 144)

1 2 3 4



OpenStreetMap

Edit

History

Export

Search

Where is this?

Go



Changesets

Created 2 hotels and a restaurant

Closed about 18 hours ago by [Wobbles](#) · #55817260

waterways

Closed about 19 hours ago by [Gumeg](#) · #55817019

Added missing ISO3166-1 tag

Closed 1 day ago by [Łukasz Dudek](#) · #55798073

South Chile & Kamchatka #OSMStreak

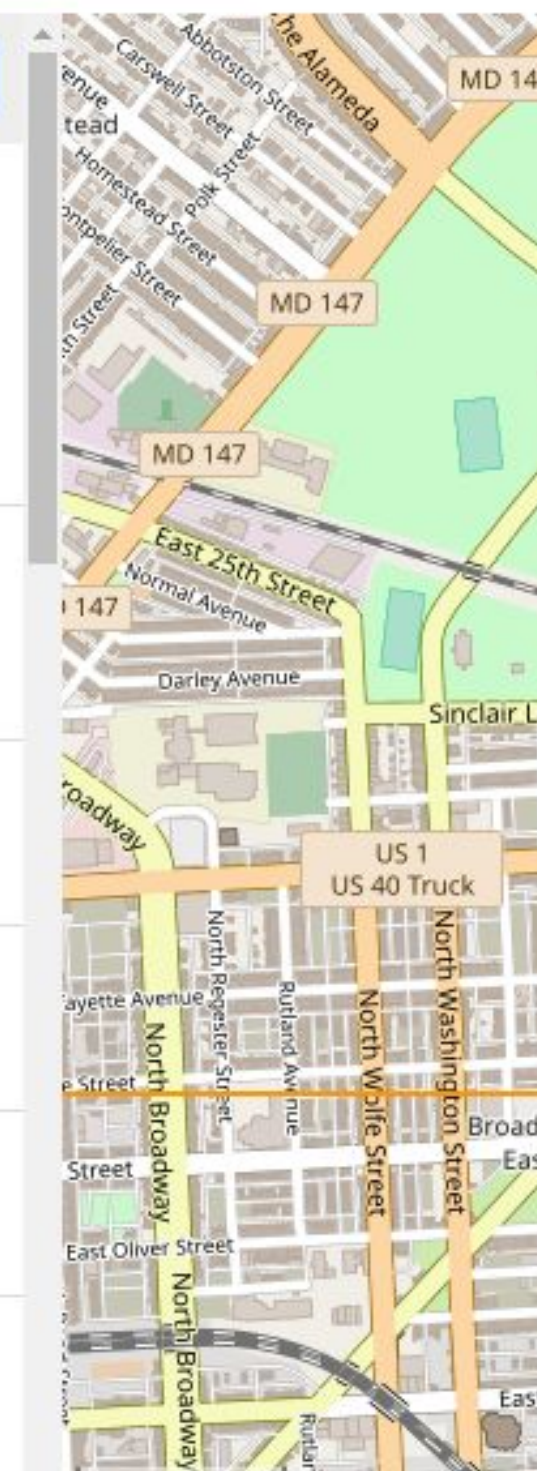
Closed 1 day ago by [Enock4seth](#) · #55791031

correct misspell tag

Closed 2 days ago by [thetornado76](#) · #55788154

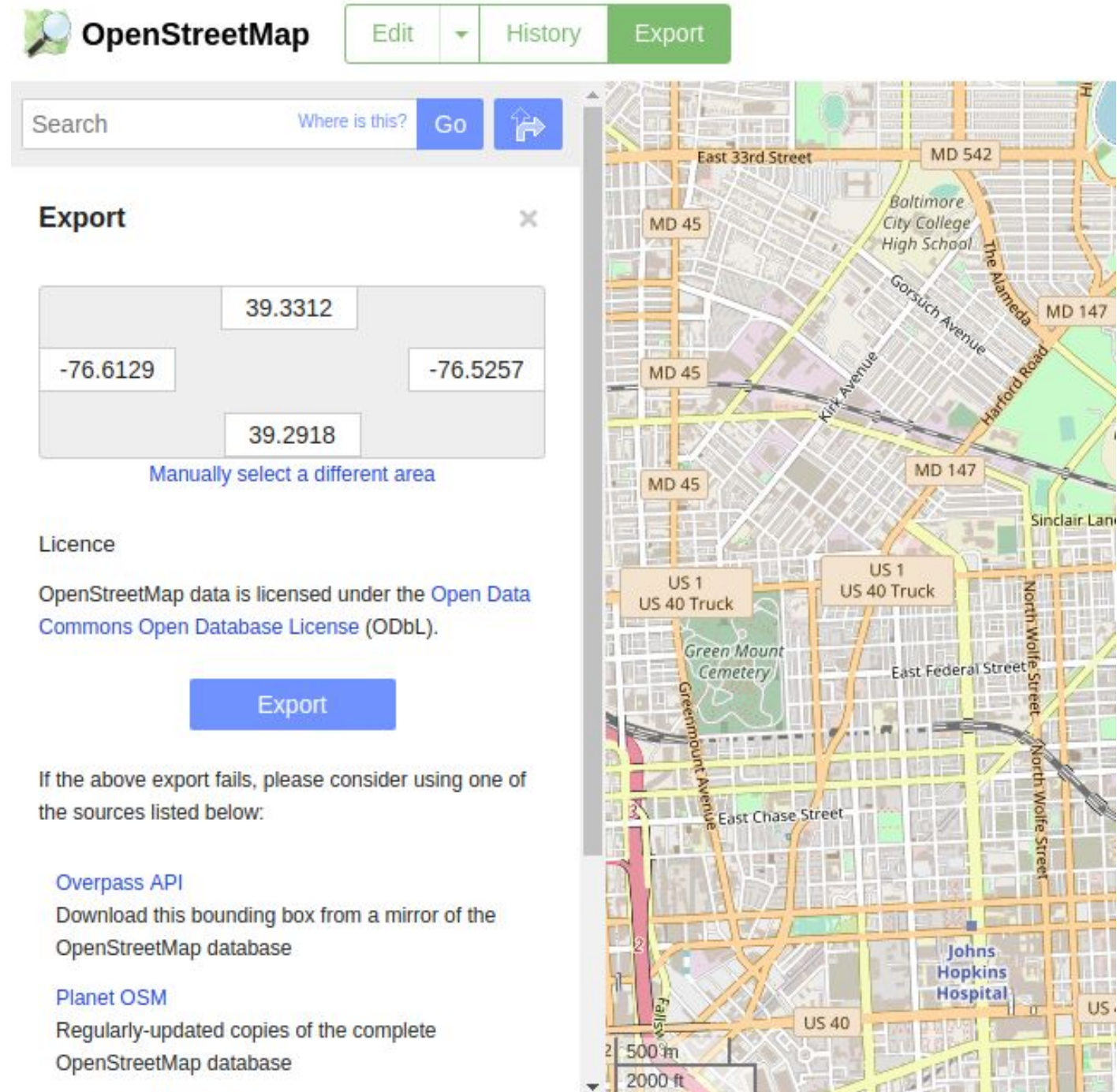
Provo UT

Closed 2 days ago by [alexandrebc](#) · #55784533



EXPORT BUTTON

Allows you to carry out basic exports of map images or raw OpenStreetMap data in a particular area.



The screenshot shows the OpenStreetMap website interface. At the top, there is a navigation bar with the OpenStreetMap logo, an 'Edit' button, a dropdown menu, a 'History' button, and an 'Export' button. Below the navigation bar is a search bar with the text 'Search' and a 'Where is this?' link, followed by a 'Go' button and a home icon. The main content area is titled 'Export' and contains a bounding box input field with the coordinates -76.6129, 39.3312, -76.5257, and 39.2918. Below the input field is a link that says 'Manually select a different area'. Underneath the bounding box is a 'Licence' section stating that OpenStreetMap data is licensed under the Open Data Commons Open Database License (ODbL). There is a blue 'Export' button. Below the button, there is a message: 'If the above export fails, please consider using one of the sources listed below:'. This message is followed by two links: 'Overpass API' and 'Planet OSM'. The 'Overpass API' link is followed by the text 'Download this bounding box from a mirror of the OpenStreetMap database'. The 'Planet OSM' link is followed by the text 'Regularly-updated copies of the complete OpenStreetMap database'. On the right side of the screenshot is a map of Baltimore, Maryland, showing streets, landmarks like Baltimore City College High School and Johns Hopkins Hospital, and a scale bar indicating 500m and 2000ft.

OpenStreetMap

Edit History Export

Search Where is this? Go

Export

39.3312

-76.6129 -76.5257

39.2918

[Manually select a different area](#)

Licence

OpenStreetMap data is licensed under the [Open Data Commons Open Database License \(ODbL\)](#).

Export

If the above export fails, please consider using one of the sources listed below:

[Overpass API](#)

Download this bounding box from a mirror of the OpenStreetMap database

[Planet OSM](#)

Regularly-updated copies of the complete OpenStreetMap database

DIRECTIONS

Route directions from one point to another. Use the dropdown to select mode of transport (car, bicycle, pedestrian).

Type two places and press 'Go!'

The screenshot displays the OpenStreetMap web interface. At the top, the 'OpenStreetMap' logo is visible alongside 'Edit' and 'History' buttons. A directions panel on the left contains input fields for the start and end points, a mode of transport dropdown, and a 'Go' button. The start point is '831, William Street, Federal Hill, Baltimore, M' and the end point is '702, Gladstone Avenue, Wyndhurst, Baltimore'. The mode is set to 'Car (OSRM)'. Below the input fields, a 'Directions' panel shows the route details: 'Distance: 12km. Time: 0:16.' and a list of seven steps with turn instructions and distances. The main map area shows a blue route line connecting the two points, passing through areas like Pikesville and Lochearn. A red pin marks the destination, and a green pin marks the starting point. The map includes labels for various roads (I 695, I 70, MD 139, MD 144) and landmarks like Gwynns Falls/Leakin Park.

OpenStreetMap Edit History

From: 831, William Street, Federal Hill, Baltimore, M

To: 702, Gladstone Avenue, Wyndhurst, Baltimore

Car (OSRM) Go

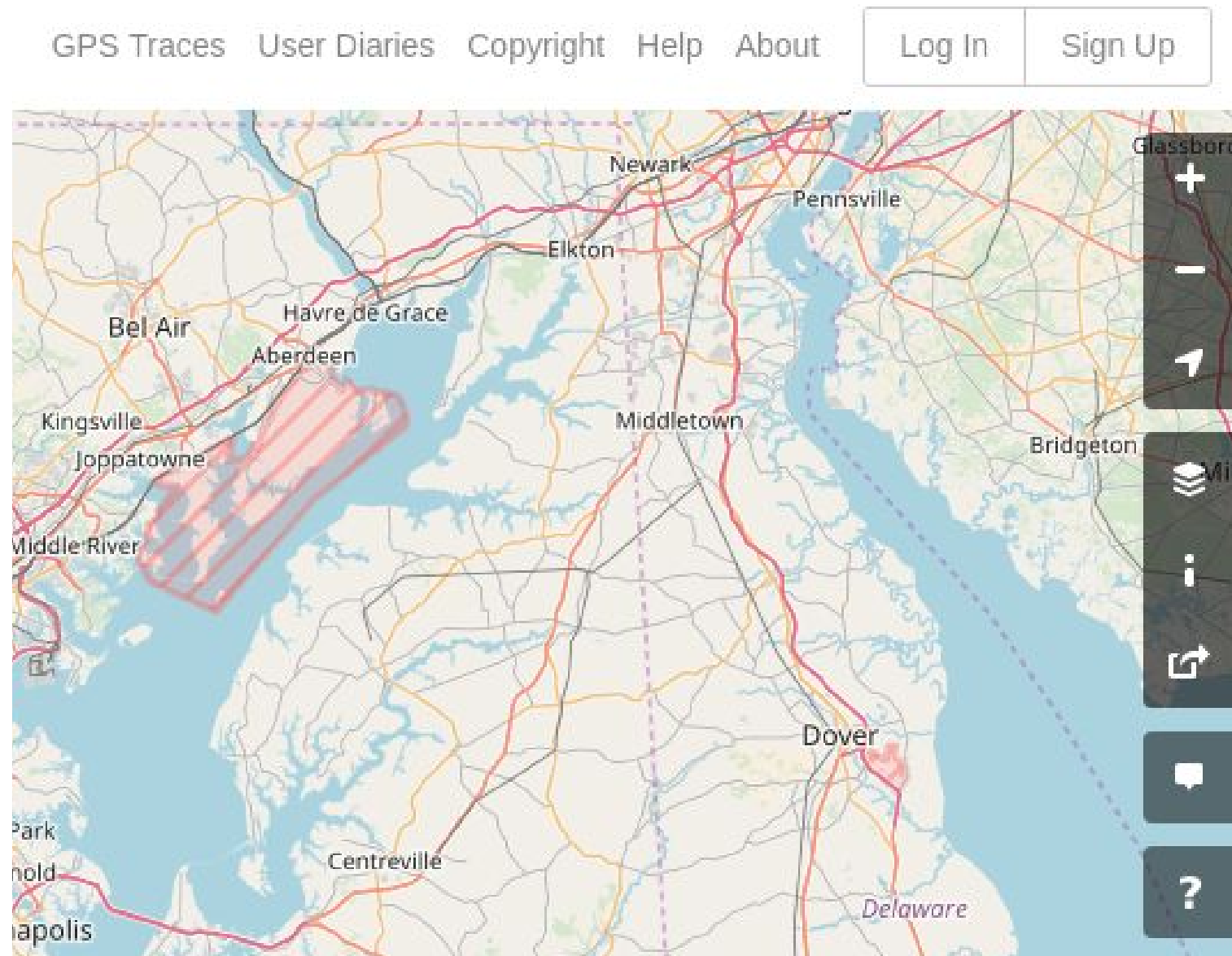
Directions

Distance: 12km. Time: 0:16.

1. Start at end of **William Street** 170m
2. At the end of the road turn left onto **Key Highway** 150m
3. Continue on **Light Street** 600m
4. Continue on unnamed road 110m
5. Continue on **East Pratt Street** 200m
6. Turn left onto **South Gay Street** 700m
7. Turn left on the ramp onto unnamed road 500m

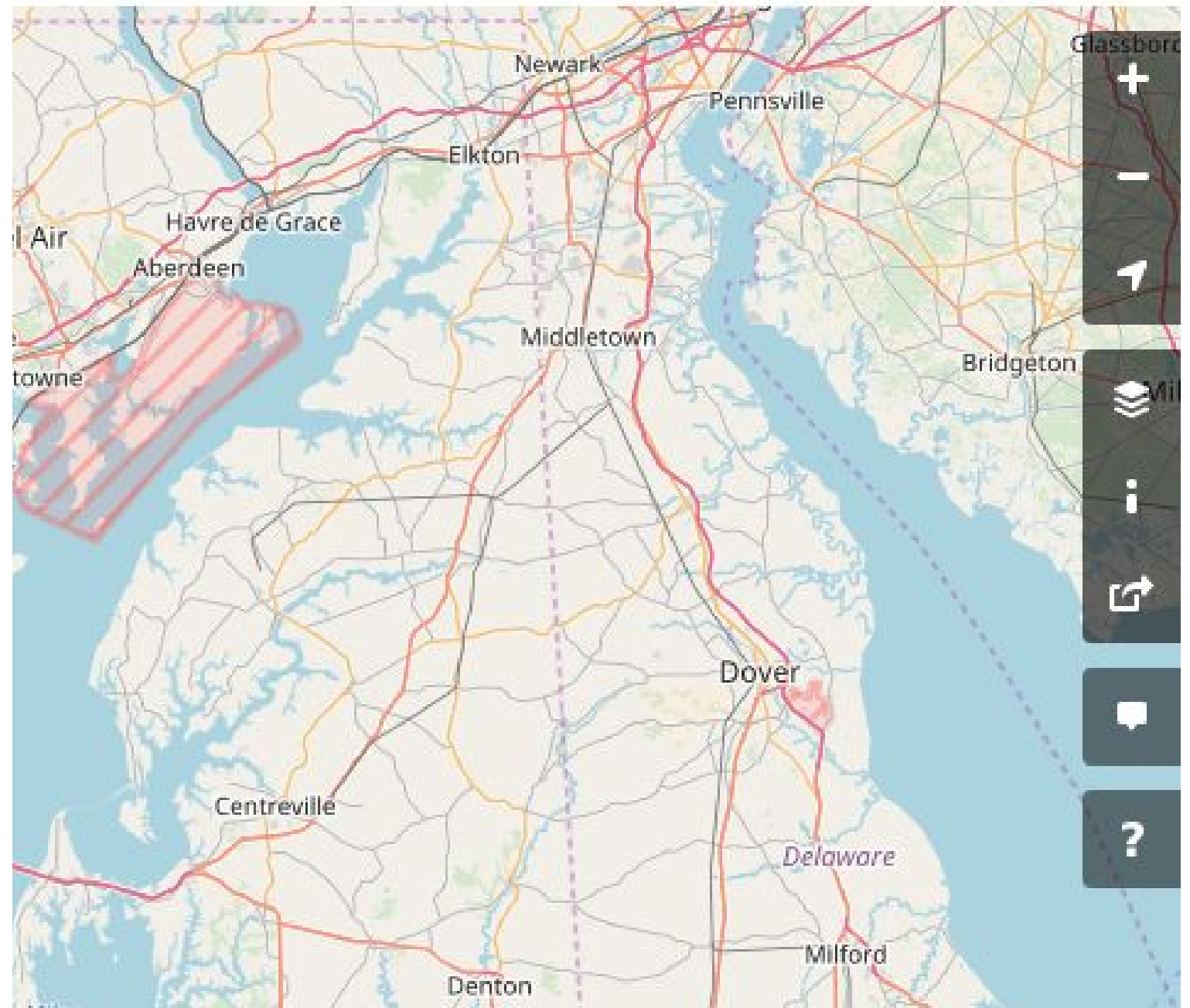
LINKS (left to right)

- GPS Traces - where community members upload GPS traces
- User Diaries - where mappers post reports and share knowledge
- OSM Copyright Info
- OSM Help
- About the OSM Project
- Log In
- Sign Up



MAIN MAP CONTROLS (top to bottom)

- Zoom In
- Zoom Out
- Show My Location
- Layers
- Map Key
- Share the map
- Annotate the map
- Query map features



CONTROL YOUR VIEW - PAN & ZOOM

Once you locate your area of interest, you may want to change the view.

- PAN: Click and hold the mouse/touchpad and (simultaneously) drag.
- ZOOM: Change the scope of the view. For example, zoom out to gain a wider view, or zoom in to see more local detail. Try each control by clicking:

- + Zoom In
- - Zoom Out

- ZOOM TO YOUR LOCATION

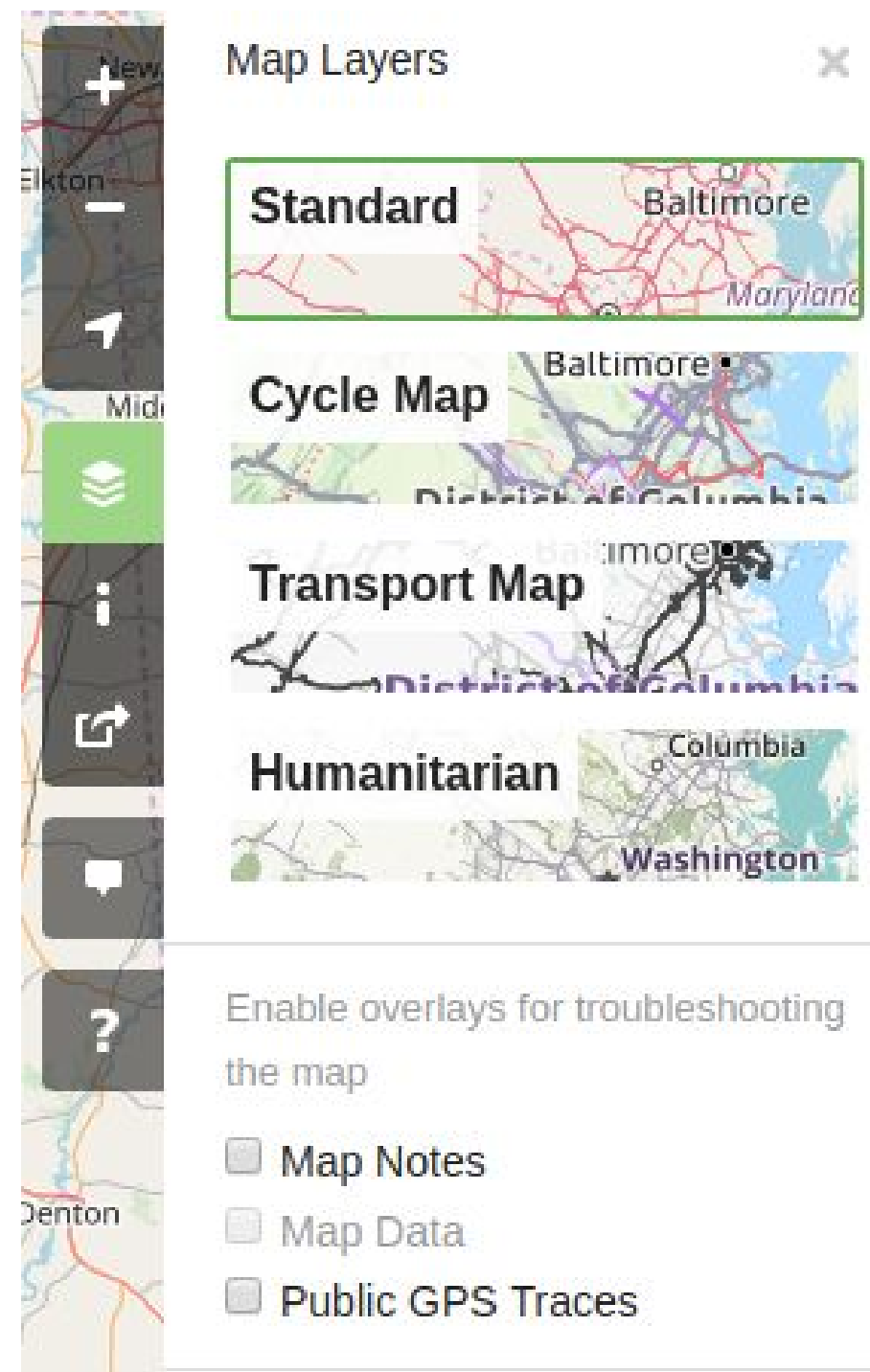


CONTROL YOUR VIEW - LAYERS

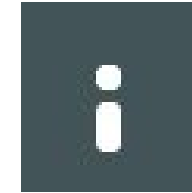


Click to reveal the Map Layers control box. Existing layers:

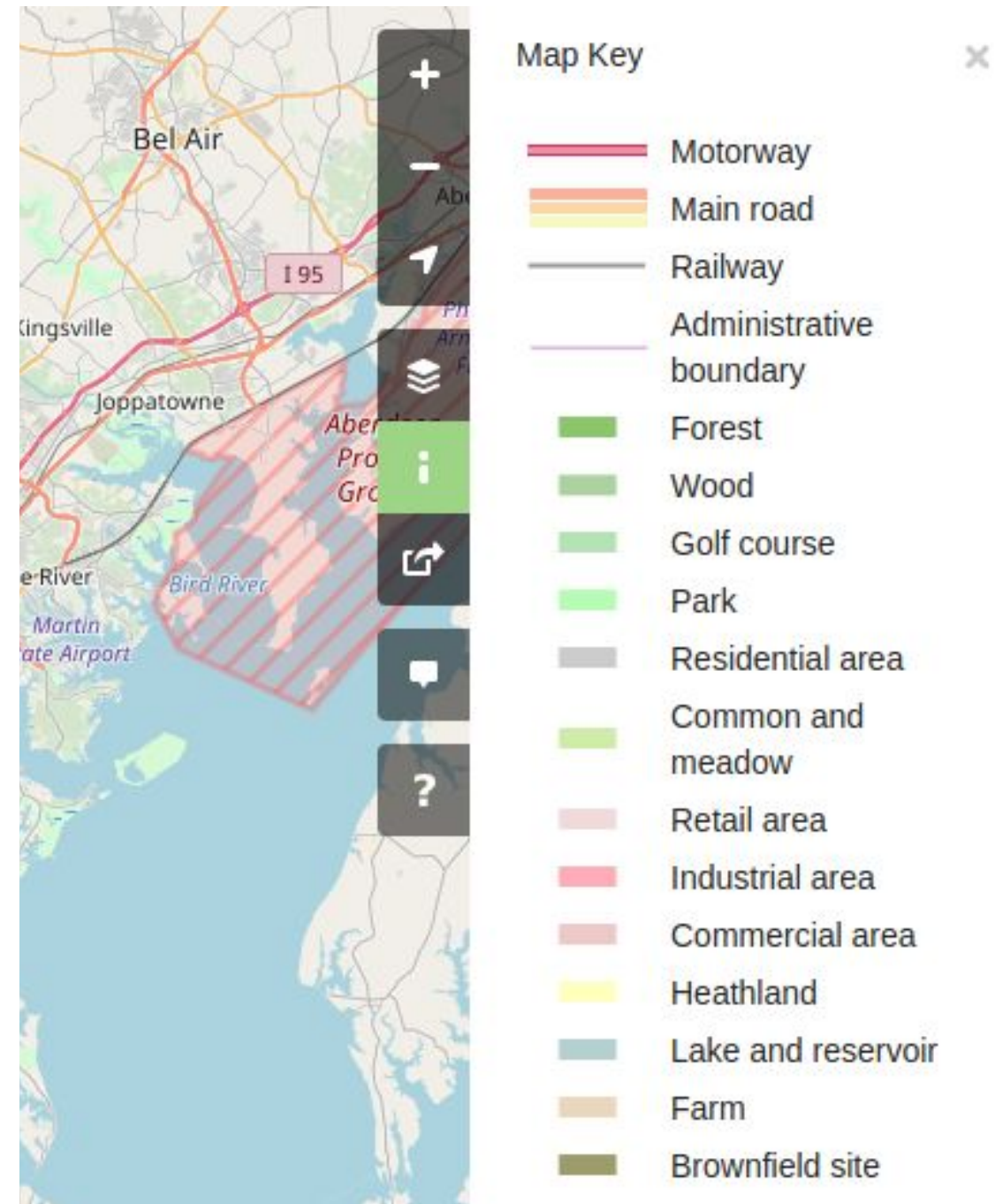
- Standard: shows the default view
- Cycle Map: Shows National Cycle Network routes, regional and local routes, and cycling-specific features
- Transport Map: shows public transport lanes like railways, buses and trams
- Humanitarian: focused on resources useful for humanitarian organizations and citizens in general in emergency situations,
- Map Notes: Show notes added by other community members. Click the marker to read and comment on notes.
- Map Data: Loads raw map data for the visible area of the map. Elements (nodes and ways) can be selected, by clicking on the map itself, or on the object list show in the left side panel.
- Public GPS Traces: tracks uploaded by other OSM users.



CONTROL YOUR VIEW - MAP KEY



- Click to reveal a map legend. You will see roads, land use, and other features depending on your current location on the map.
- Zoom or pan the map to change contents of the key.
- Click the 'x' in the corner to close.

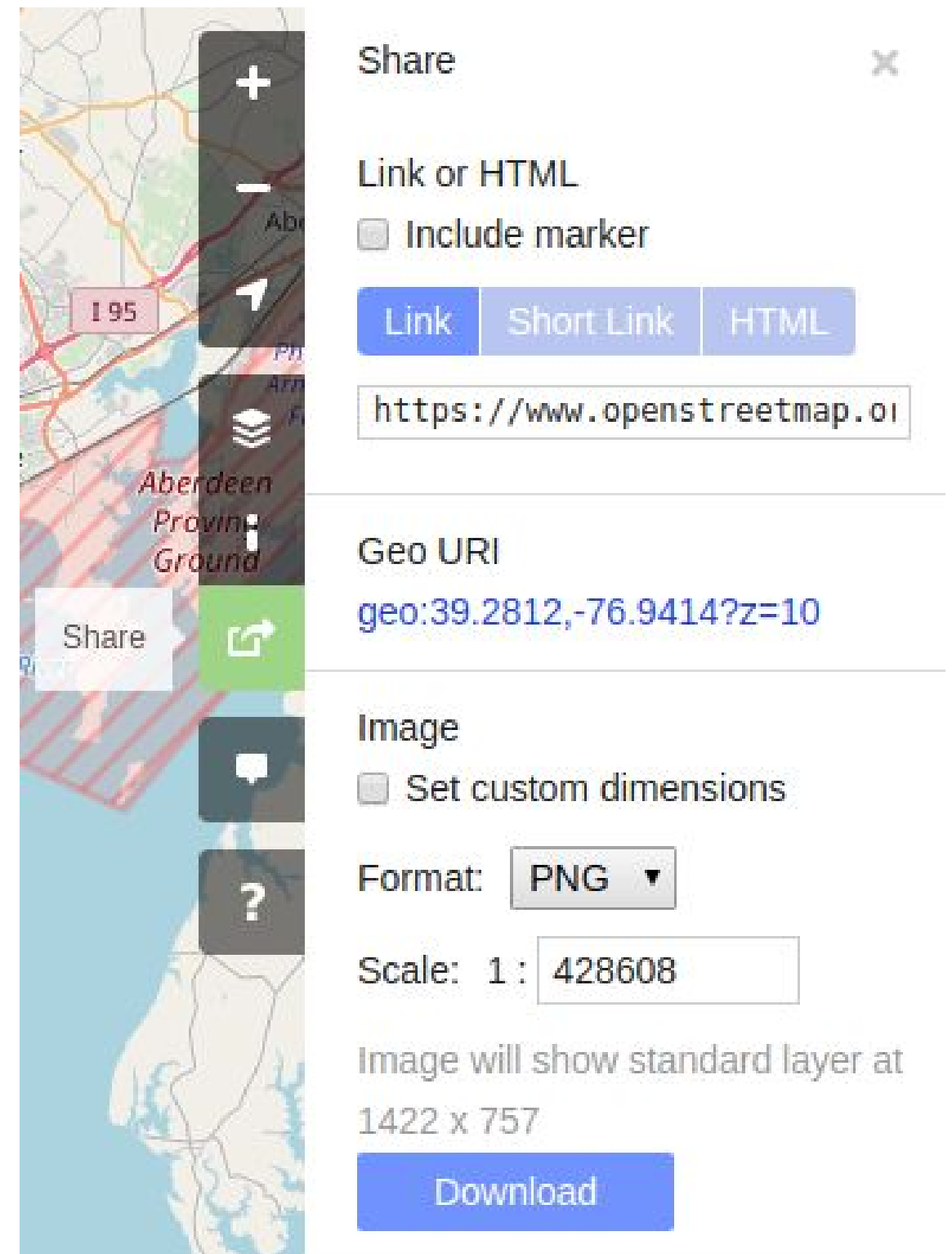


CONTROL YOUR VIEW - SHARE



Share your map with others with a few options:

- Link
- Short Link
- HTML
- Geo URI
- Download an Image File (PNG, JPG, SVG, PDF)
- Add a pin to the map by clicking “include marker”



The screenshot shows the OpenStreetMap interface. On the left, a map of Aberdeen is visible with a red line indicating a route. A vertical toolbar on the right side of the map contains icons for zooming in (+), zooming out (-), a compass, a layer switcher, a 'Share' button, a 'Pin' button, and a 'Help' button (?). The 'Share' sidebar is open on the right, displaying various sharing options.

Share ✕

Link or HTML

☐ Include marker

[Link](#) [Short Link](#) [HTML](#)

<https://www.openstreetmap.org/>

Geo URI

[geo:39.2812,-76.9414?z=10](https://www.openstreetmap.org/?geo=39.2812,-76.9414?z=10)

Image

☐ Set custom dimensions

Format: [PNG](#) ▼

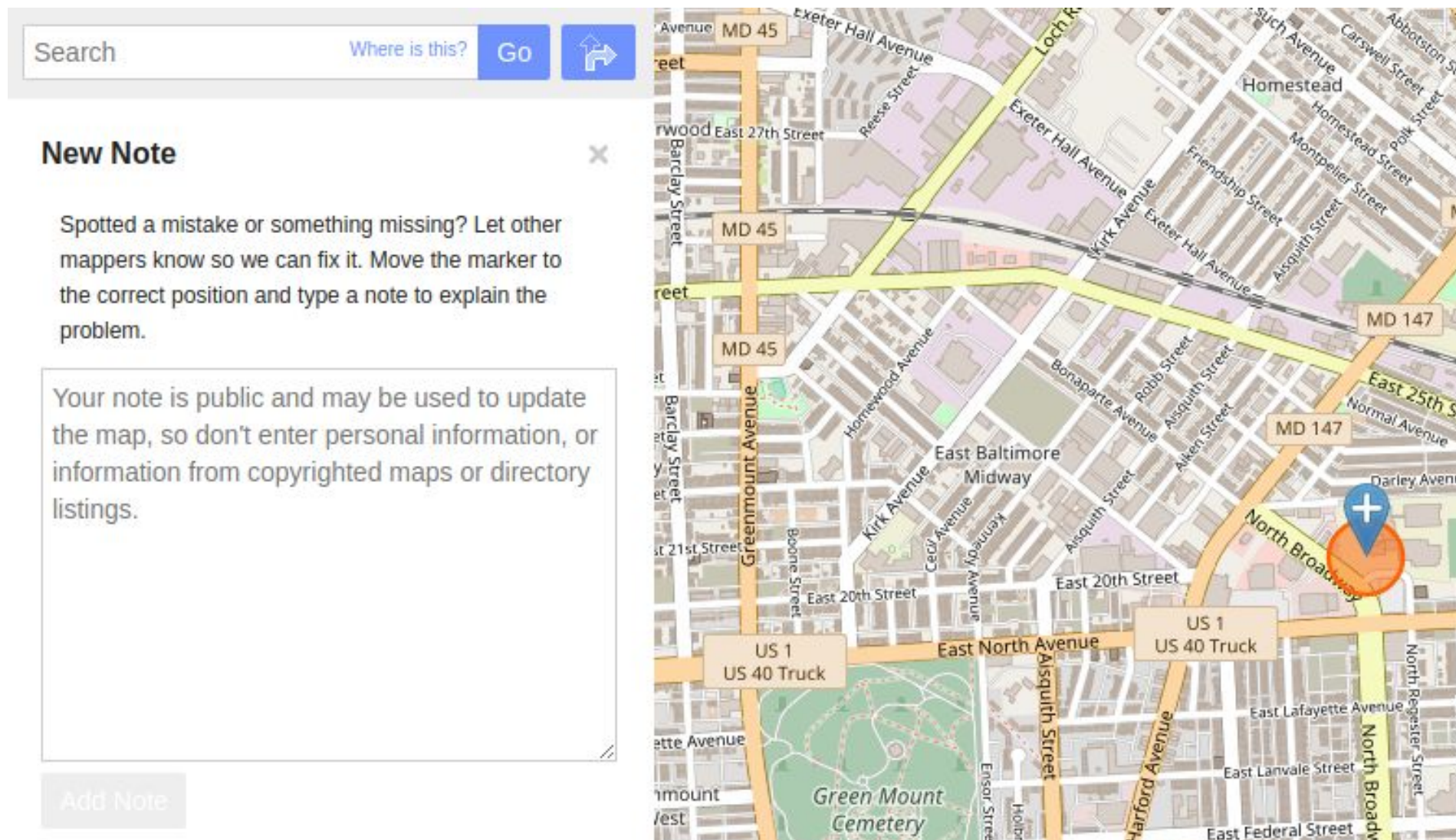
Scale: 1 :

Image will show standard layer at 1422 x 757

[Download](#)

CONTROL YOUR VIEW - ADD A NOTE

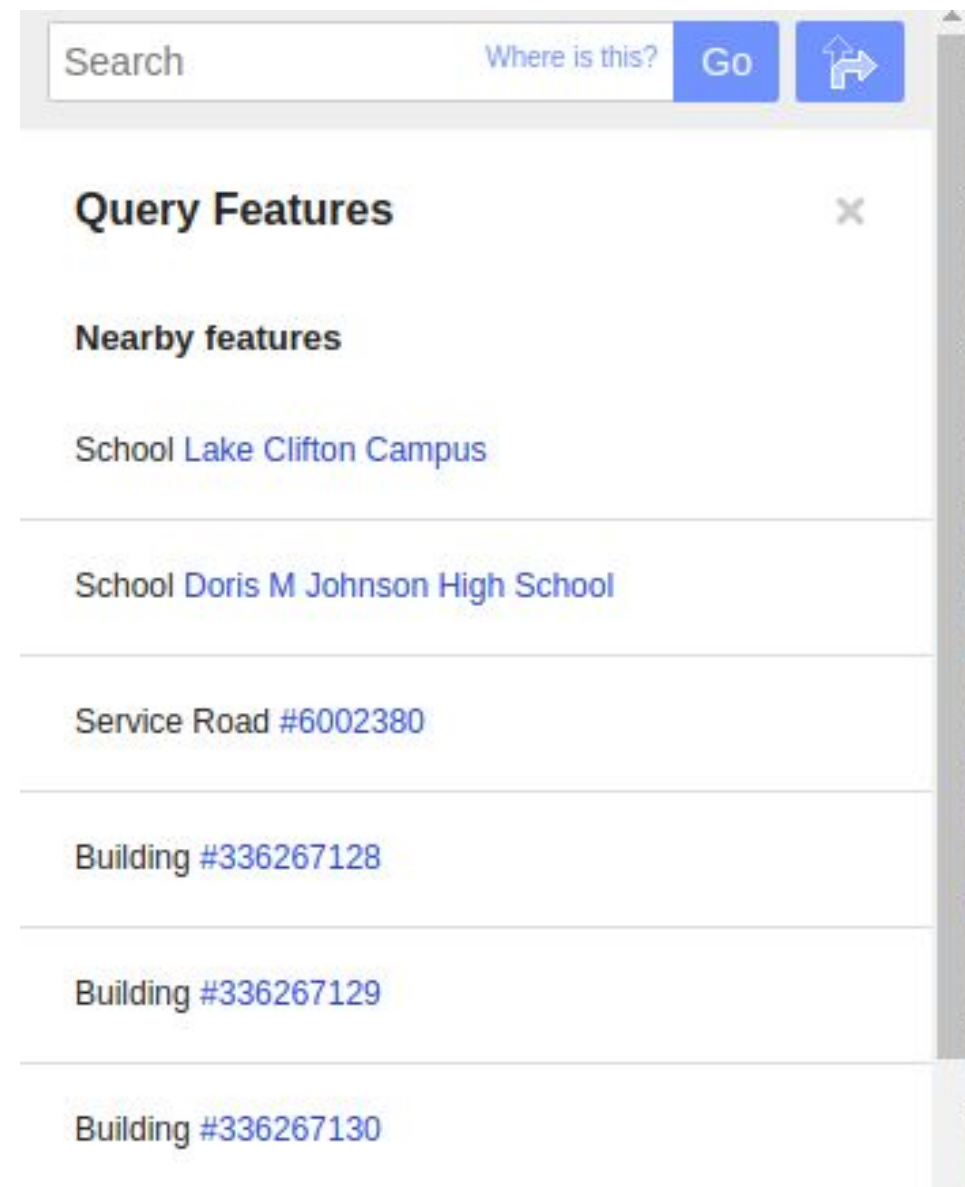
- Zoom into the place you would like to add a note.
- Click the Note icon.
- A pin will appear on the map and a box will open beneath the search bar.



The screenshot displays the OpenStreetMap web interface. At the top, there is a search bar with the text 'Search' and a 'Go' button. Below the search bar, a 'New Note' dialog box is open. The dialog box contains the following text: 'Spotted a mistake or something missing? Let other mappers know so we can fix it. Move the marker to the correct position and type a note to explain the problem.' Below this text is a large text input area. At the bottom of the dialog box, there is an 'Add Note' button. The background of the screenshot is a map of East Baltimore, Maryland, showing streets such as Greenmount Avenue, Kirk Avenue, and US 1. A blue location pin with a white crosshair is placed on the map, indicating the location where a note can be added.

CONTROL YOUR VIEW - QUERY THE MAP

- Click the ?
- Click a spot in the map to see which data elements are at this spot.
- A description of the feature will show on the left-hand side of the screen.
- Close by clicking the 'x'



NEXT IN THE SERIES - OSM MODULE 2

OPENSTREETMAP BASICS II

