OPEN MAPPING EDUCATION SERIES

OPENSTREETMAP MODULES 1-5

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OPENSTREETMAP MODULE 2

EDITING AND TAGGING WITH iD EDITOR

LEARNING OBJECTIVES

In this module, you will learn three basic steps to add a feature to OpenStreetMap using the iD Editor:

1. Digitize an object by tracing it using aerial imagery. In this exercise, you will trace the footprint of a building and a length of road.

2. 'Tag' the object. In other words, add identifiers and a description of the object. highway=residential, name= "Magnolia Lane"

3. Compare OpenStreetMap road data with U.S. Census TIGER data.

4. Save the features you mapped by adding a brief note describing your mapping activity (as a changeset comment) and save!

BEFORE WE BEGIN - MAPPING TIPS

NEVER, **EVER** copy from Google or any other proprietary source!

- Log in to your OpenStreetMap account and click 'Copyright' at the top of the screen.
- Scroll to the 'Copyright Infringement' section and read every word.

HELPFUL RESOURCE

- Open the Map Features page in a separate browser tab and use it frequently. Map Features is the authority on how to tag in OpenStreetMap.

 https://wiki.openstreetmap.org/wiki/Map_Features

PART ONE - iD EDITOR WALKTHROUGH

GETTING STARTED WITH iD EDITOR

- Log into your OpenStreetMap account

- Zoom into an area that is familiar to you (you will not be allowed Edit unless you are zoomed in far enough)

- Click on the Edit button on the top left hand corner of the OSM map window, and choose iD Editor

- Choose to go through the iD Walkthrough tutorial upon pop-up and complete the tutorial.
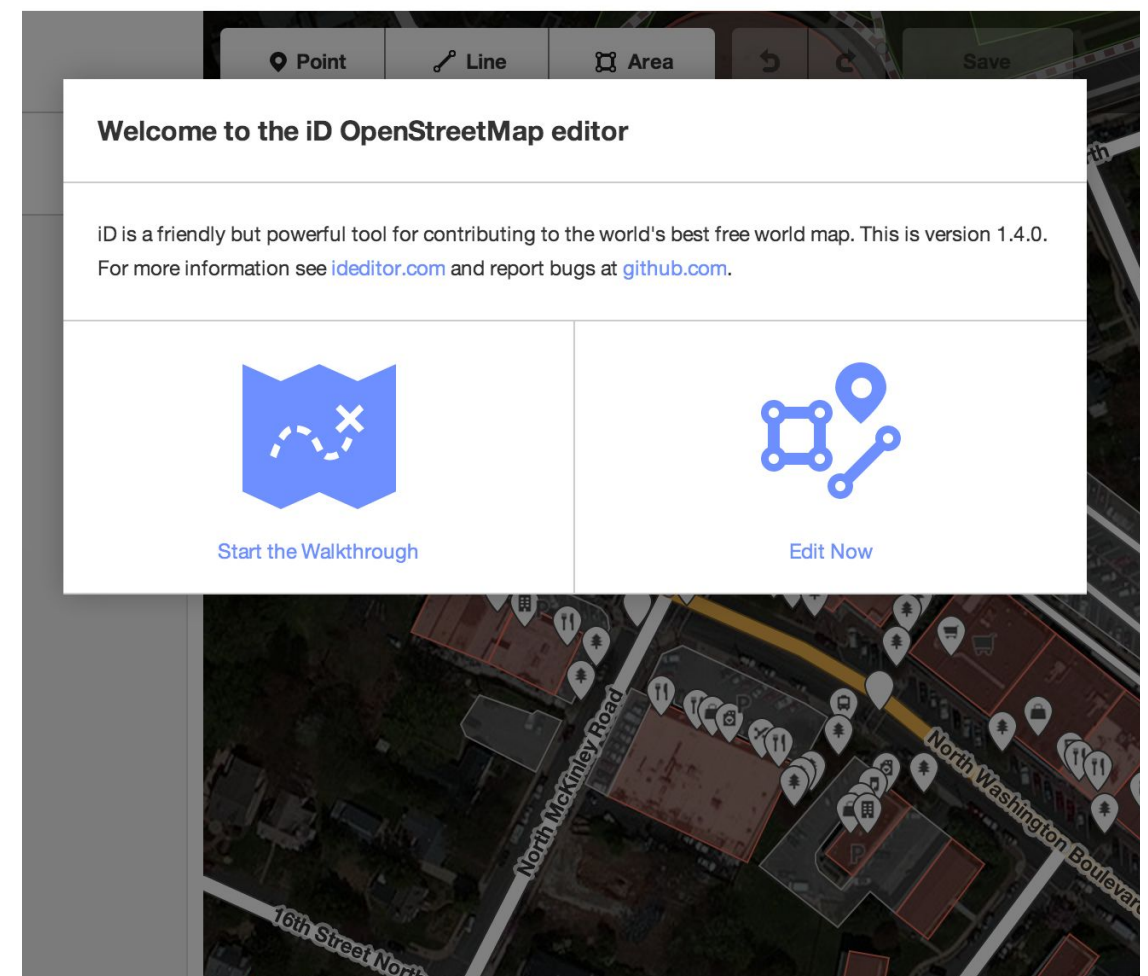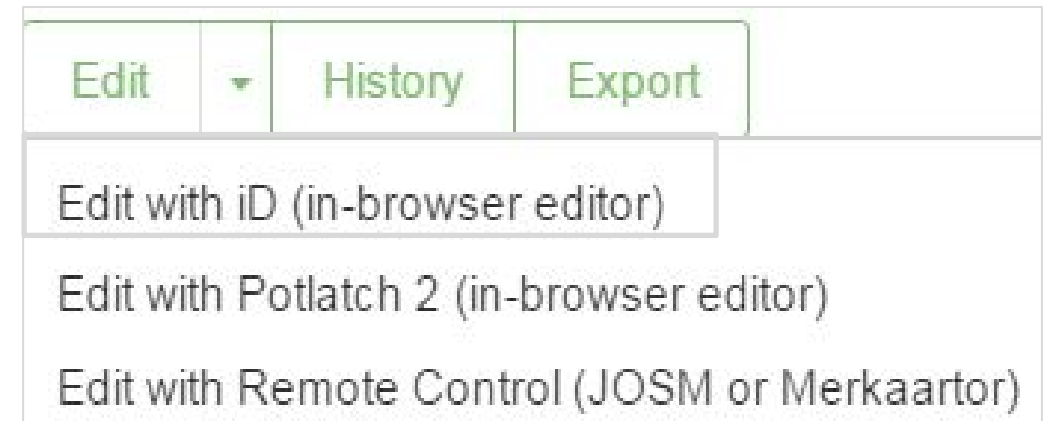
ACCESS THE WALKTHROUGH USING HELP

- Click on the 'Help' Icon

- Scroll down and click on 'Walkthrough' to complete the introductory lesson which will take 15 minutes to complete.

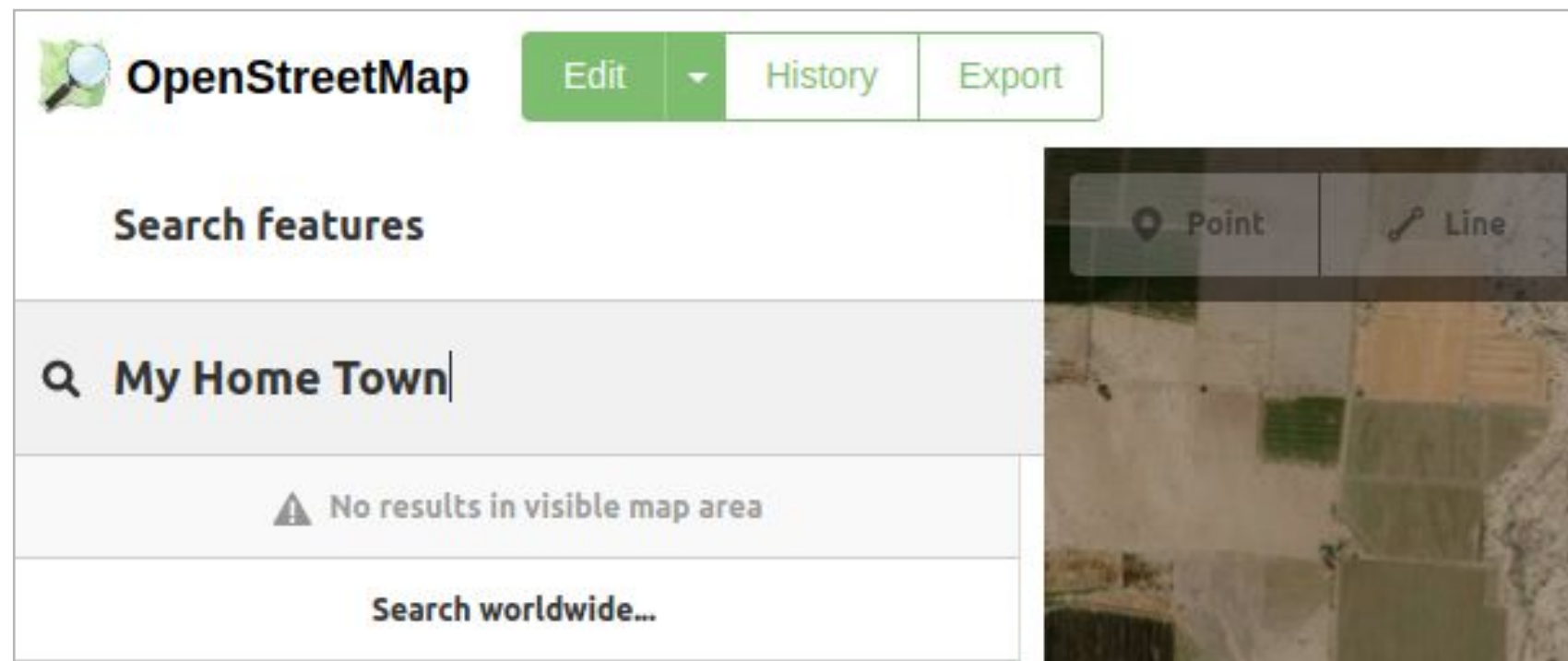- Complete the walkthrough and continue the module.
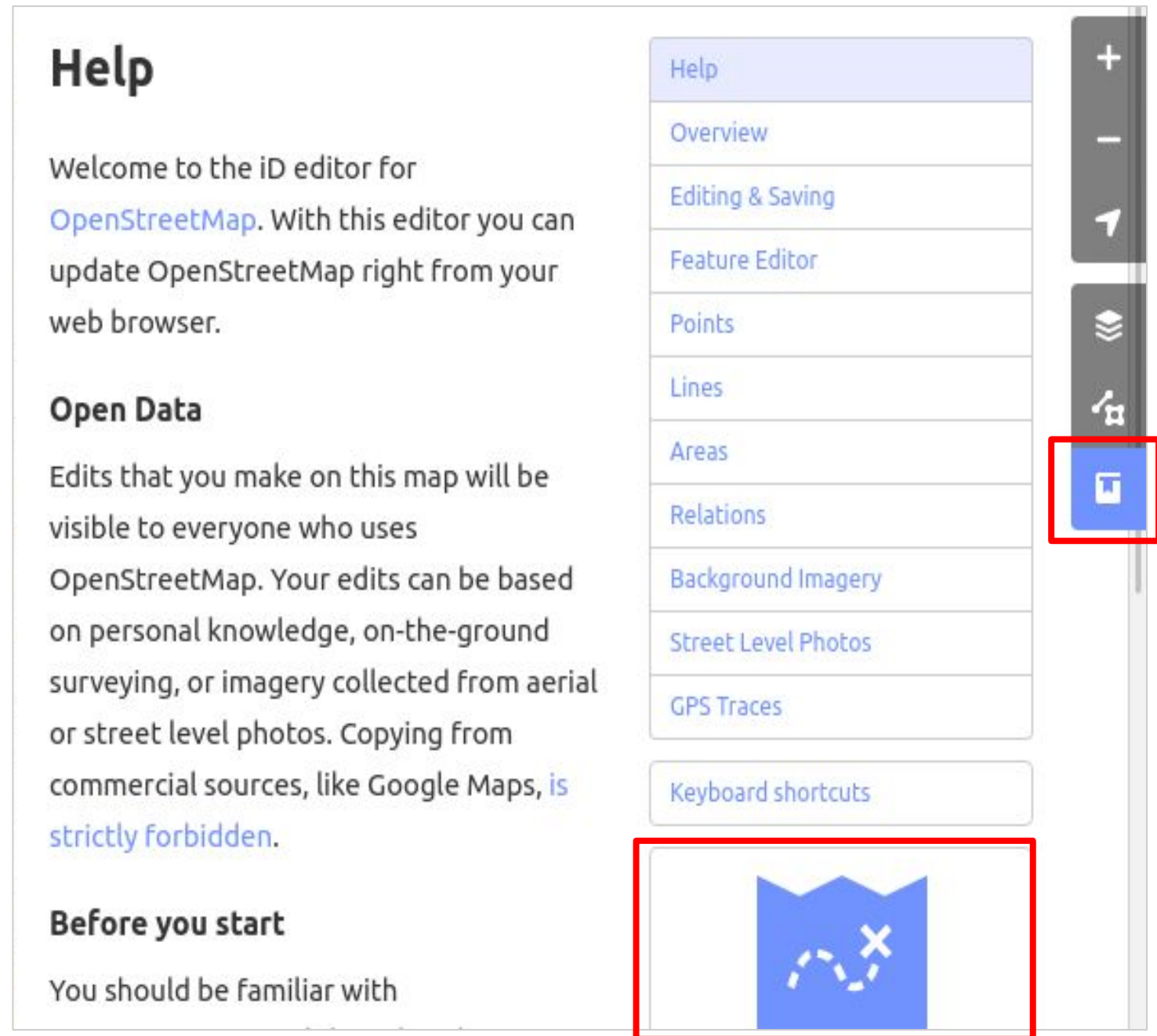
PART TWO - TRACE A BUILDING

SEARCH FOR AN AREA OF INTEREST

- Use the search box to enter a place name such as your town, or a place you know well. Click 'Search Worldwide'.
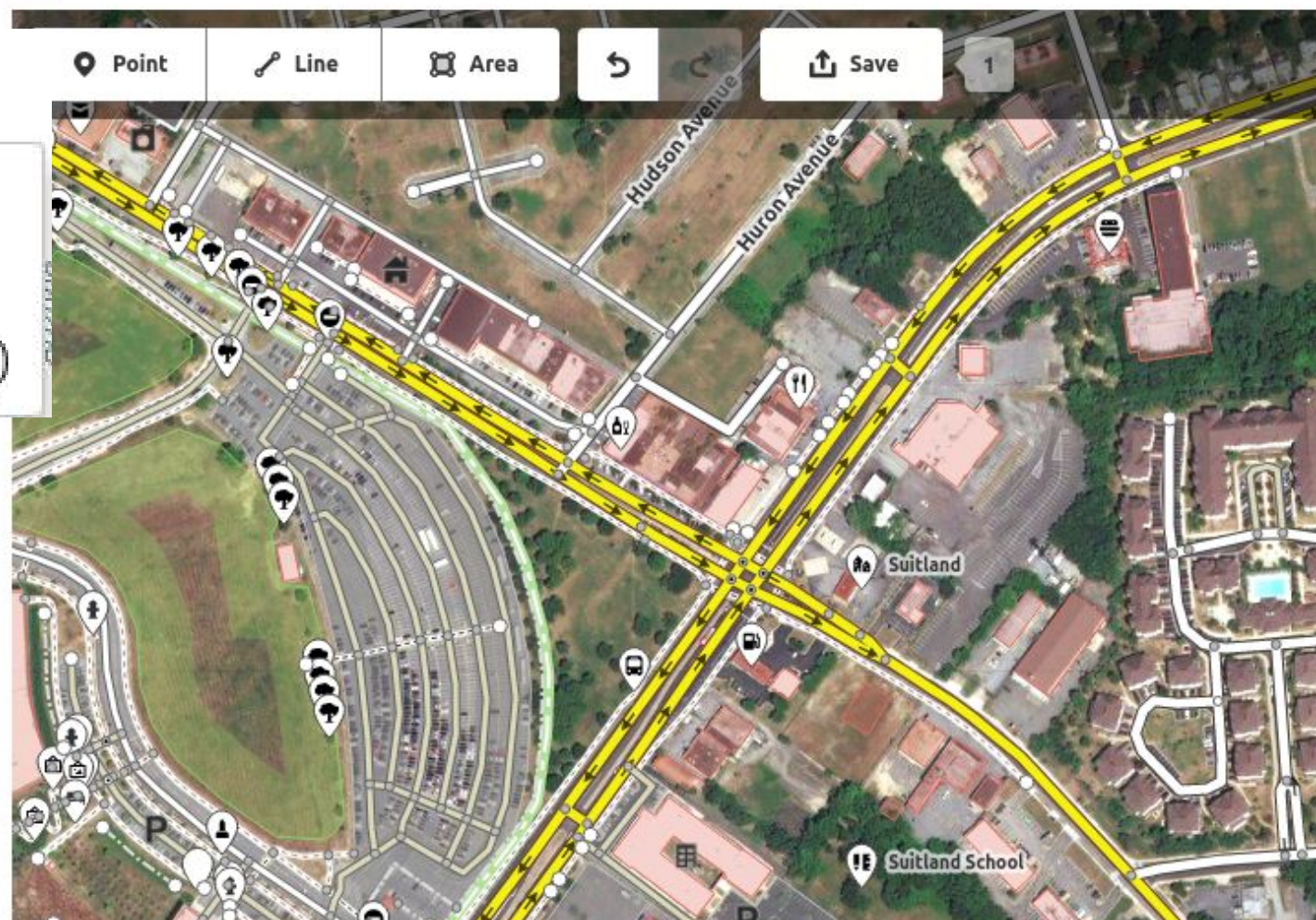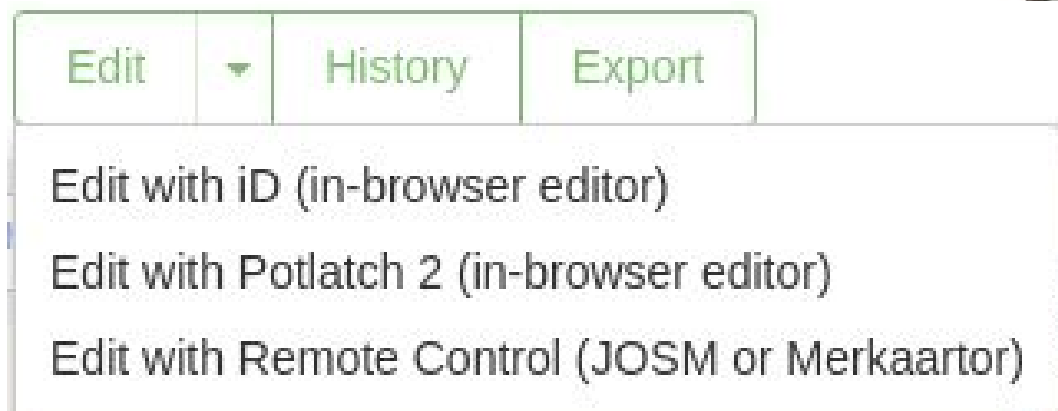

- Options will be listed below the search box. Select the correct geography.

INVOKE THE iD EDITOR

- On the left top corner, click the dropdown arrow in the 'Edit' box.

- Select 'Edit with iD (in-browser editor). The base map will change from the OpenStreetMap layer to an aerial image. Any edits to roads, points of interest, and buildings will be visible.

# CHOOSE A BUILDING TO ADD TO THE MAP

- Select a building that is unmapped. Center your view on the building you intend to add to the map. For example, public buildings such as libraries, schools, fire/police stations, etc., make good first edits. Check to see if your library or high school is mapped.

- Zoom In. You must accurately trace the building footprint. Do not guess; zoom in so you can see the building corners clearly. The images below show the correct & incorrect zoom levels for adding buildings.
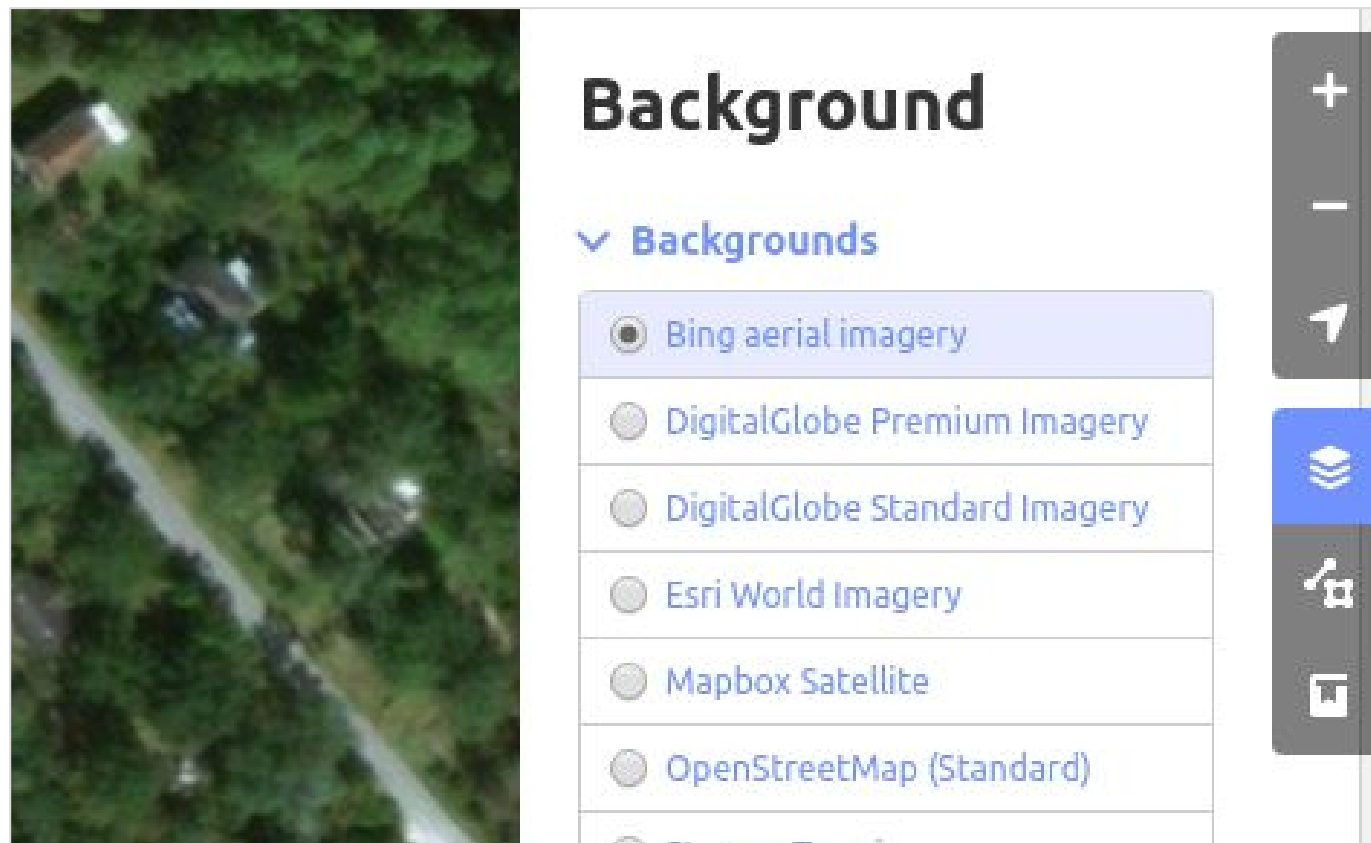
TRACE & SQUARE THE BUILDING

- Connect the vertices and trace the edges of the building. Double-click on the last vertex to finish tracing.
- Make sure you square the corners of your building as shown in the figure below. It contributes to data quality and it is good cartographic practice to be as accurate as possible.
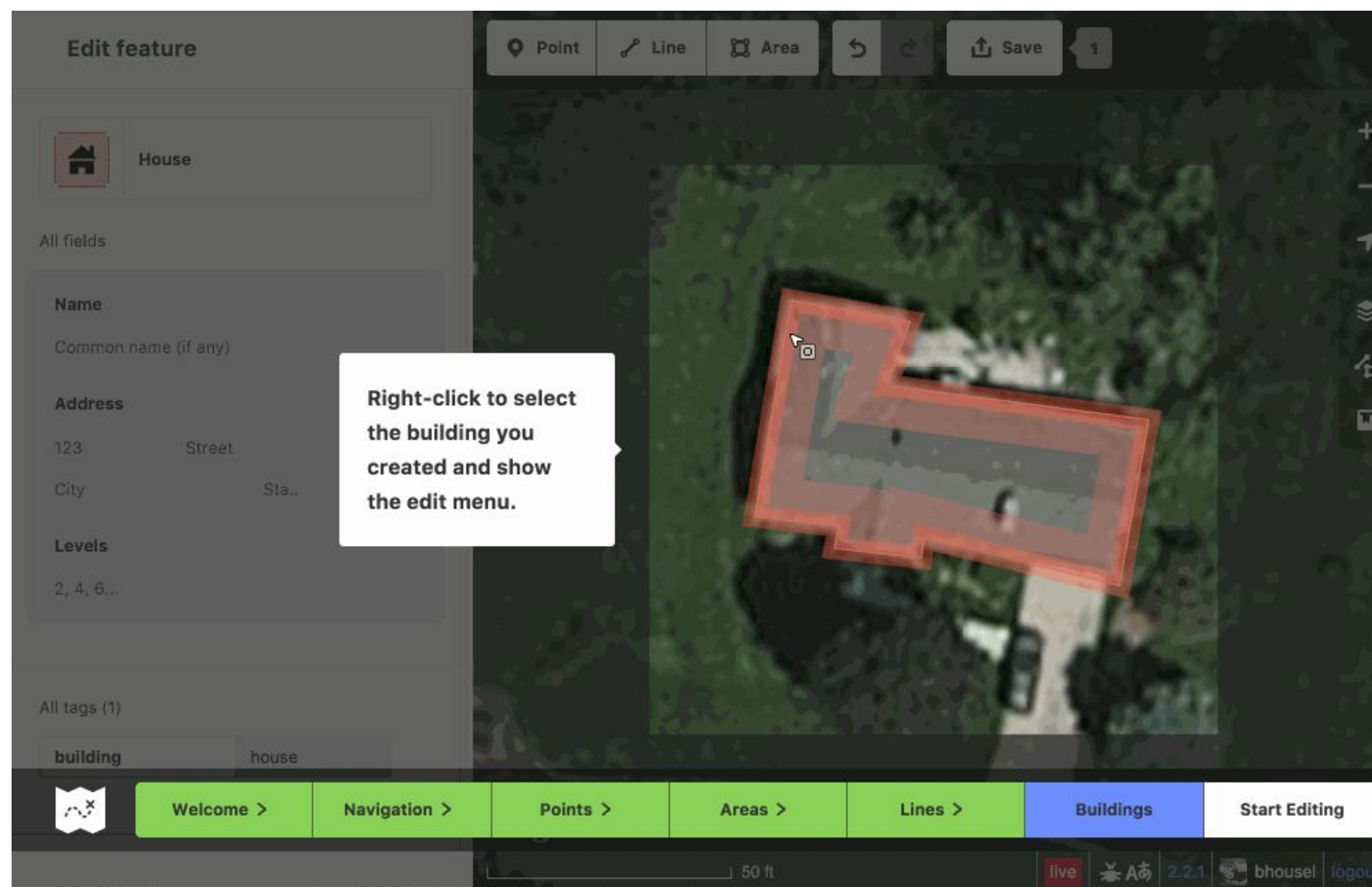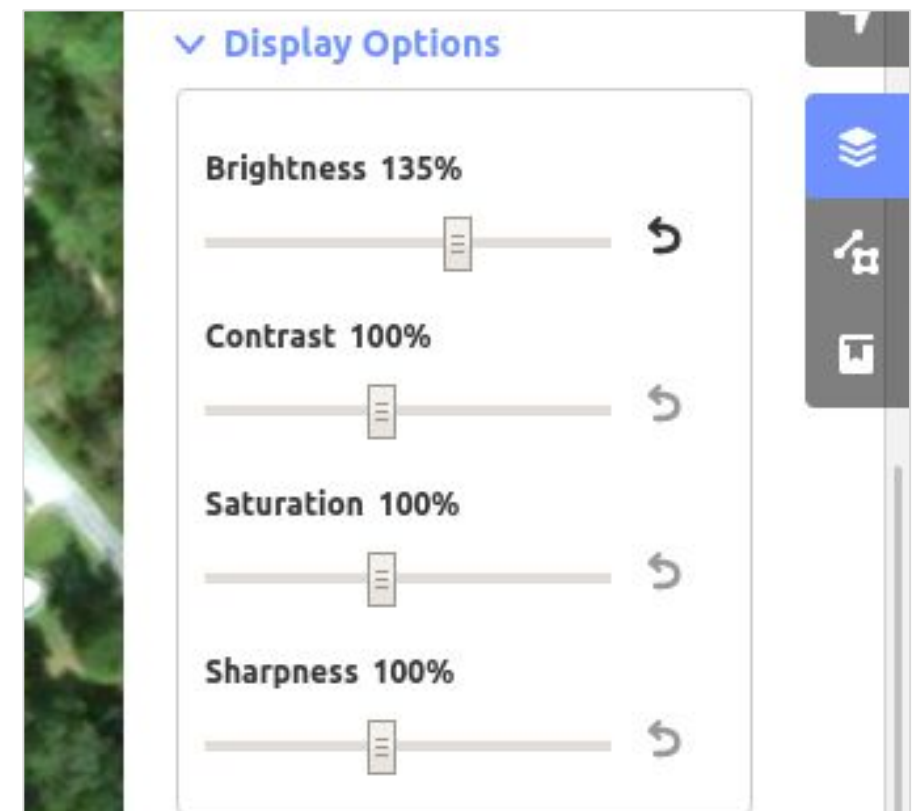
CHANGE THE BACKGROUND

Sometimes imagery is not clear & you must change your map view.

Click 'Background Settings'

Background

∨ Backgrounds

- ⦿ Bing aerial imagery
- ◯ DigitalGlobe Premium Imagery
- ◯ DigitalGlobe Standard Imagery
- ◯ Esri World Imagery
- ◯ Mapbox Satellite
- ◯ OpenStreetMap (Standard)

Click to change satellite source or see different background options

∨ Display Options

Brightness 135%

Contrast 100%

Saturation 100%

Sharpness 100%

To alter the background, scroll down to ' Display Options' & move the sliders left or right.

PART THREE - TAG A BUILDING

TAGGING FEATURES

When we 'tag' something on OpenStreetMap, we're doing two things:

1. Giving OpenStreetMap an identity for this point/line/polygon. In this case, we tell OpenStreetMap that this is a building.

2. Adding descriptive attributes. In other words, adding some defining characteristics. For our building example, we might add an address, name of the institution or business, and phone number.

Tags are made up of keys and values.

1. The key describes a broad class of features (for example, highways).

2. The value details the specific feature that was generally classified by the key (e.g. highway=motorway).

APPLYING THE TAG

Click on your building to select it. The color outline changes to indicate the feature has been selected, as shown in the figure below. The red box in the image indicates that a building has been selected.
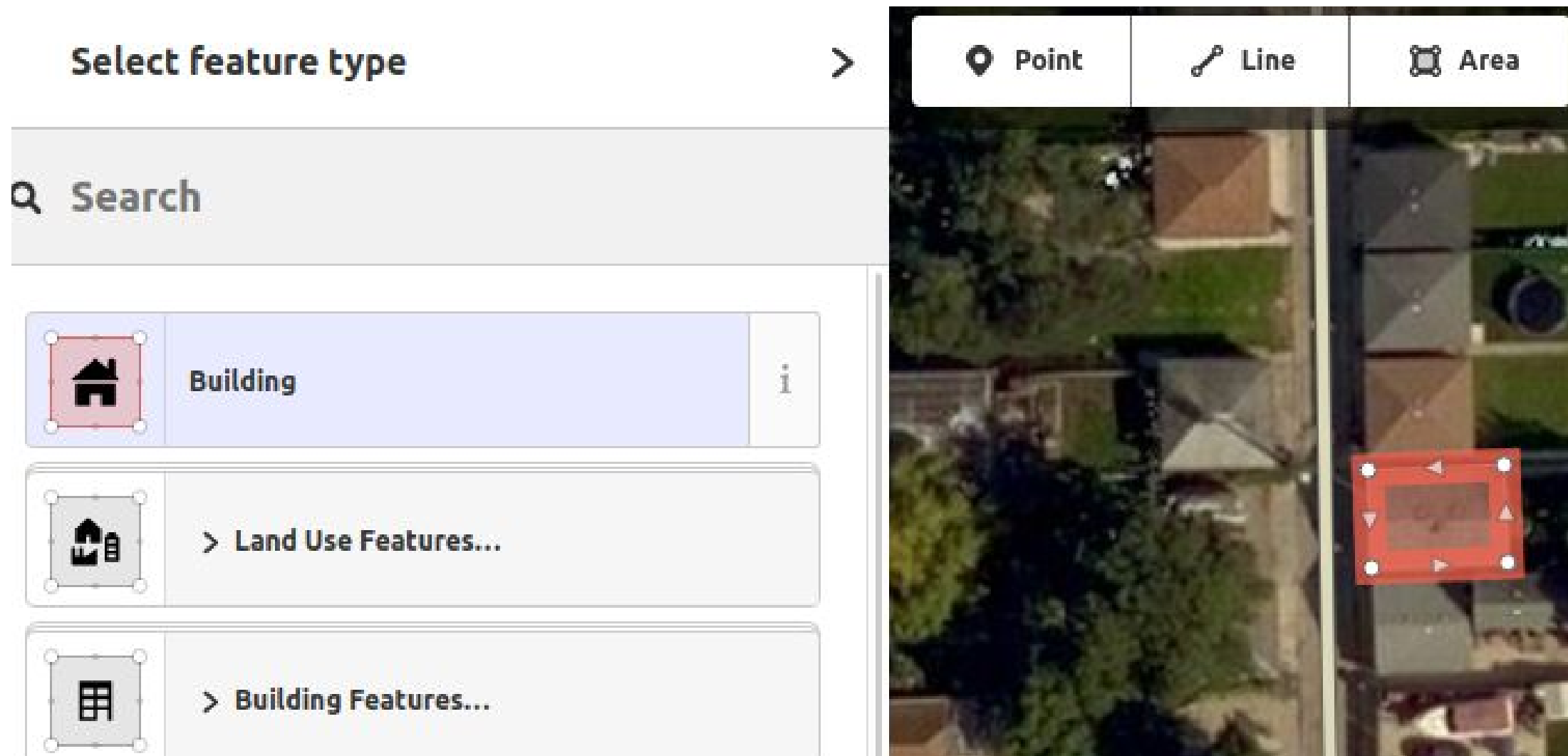
APPLY TAG FEATURE DETAILS

- Once 'Building' is selected from the feature menu, a form appears.
- Add descriptive information about the building here. For example, Address / Building type / Building name (if any) / Number of levels
- Scroll through the entire panel to see the attributes available for entry.

HOW TO FIND THE RIGHT TAG

It's good mapping practice to refer to the Map Features page on the OSM wiki. Open a new browser tab (Ctrl+T) and point to http://wiki.openstreetmap.org/wiki/Map_Features for a comprehensive list of the most popular tags.

IMPORTANT TAG KEYS

Key:highway - For highways, roads, paths, footways, cycleways, etc.

Key:place - Used for countries, cities, towns, etc.

Key:amenity - Used for useful amenities like restaurants, drinking water spots, parking, etc.

Key:shop - Used for shops you buy products from.

Key:building - Used for buildings.
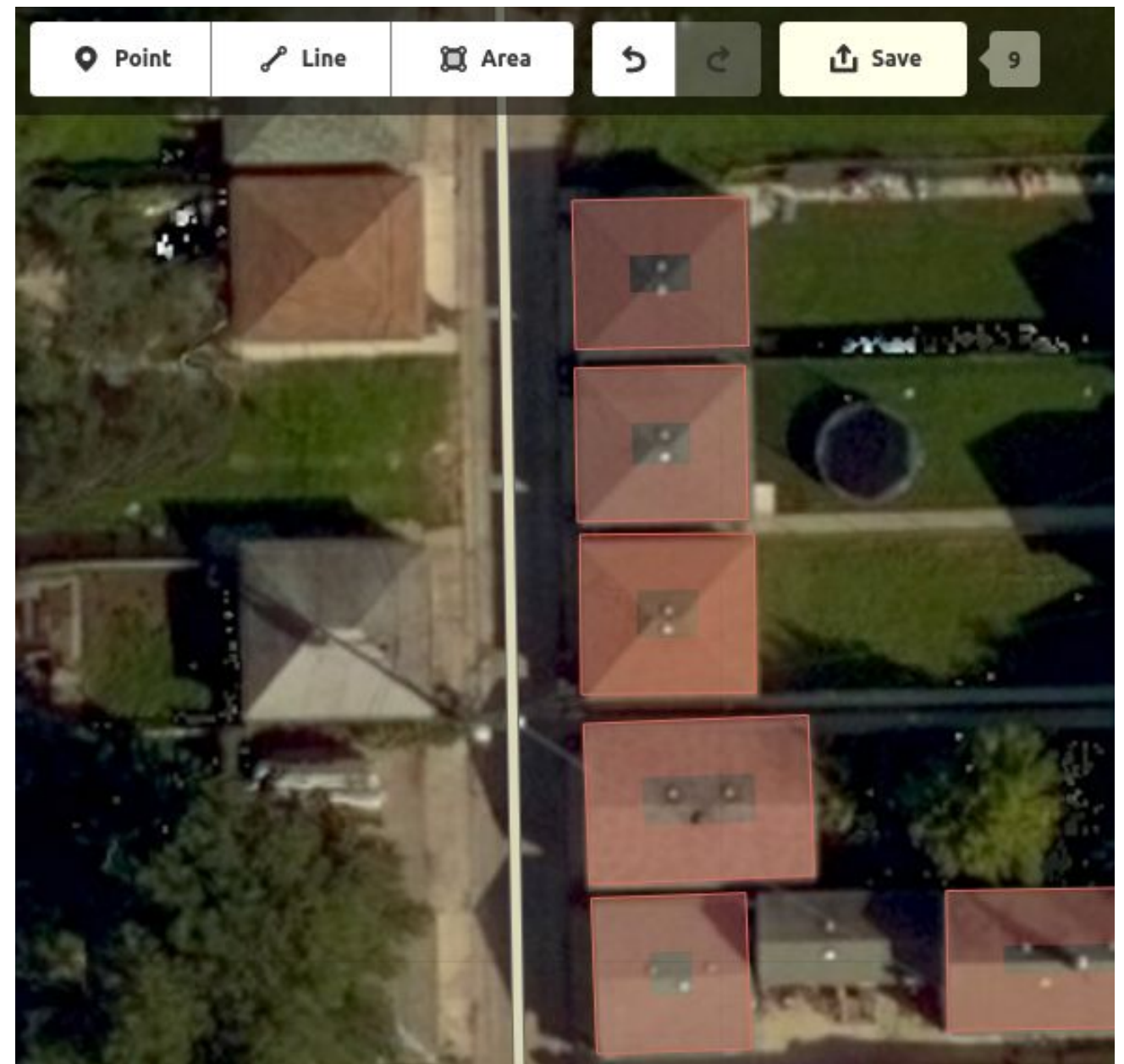
Key:landuse - Used for land used by humans.

Key:natural - Used for natural land like forests.

SAVE YOUR EDITS

It's a good idea to save frequently, perhaps after you have added several features to the map.

Notice the indicator next to the 'Save' icon at the top of the screen, which shows 9 features not yet saved.

SAVE YOUR EDITS

Click **'Save'**. A box will appear.

Enter a short changeset comment that describes what you mapped.

For example, "Added buildings in residential district" or "Corrected road alignment using imagery".

Your edits will be listed at the bottom of the box.

If it is your first edit, celebrate by adding **#myfirstedit** to the comment!

CONGRATULATIONS!

You just edited OpenStreetMap! ✕

Your changes should appear in the "Standard" layer in a few minutes. Other layers, and certain features, may take longer.

🔗 Details

View on OSM

PART FOUR - ADD A ROAD

U.S. CENSUS & THE TIGER DATASET

- TIGER = Topologically Integrated Geographic Encoding and Referencing
- Developed in preparation for the 1990 Census by the Census Bureau & the U.S. Geological Survey.
- The first nationwide digital map of the U.S., Puerto Rico, and other territories.
- As a national digital map, TIGER contains all of the geographic features — such as roads, railroads, rivers, and legal and statistical geographic boundaries. Data are updated annually and free to all.
- These data are necessary to support the Census Bureau's data collection and dissemination programs.

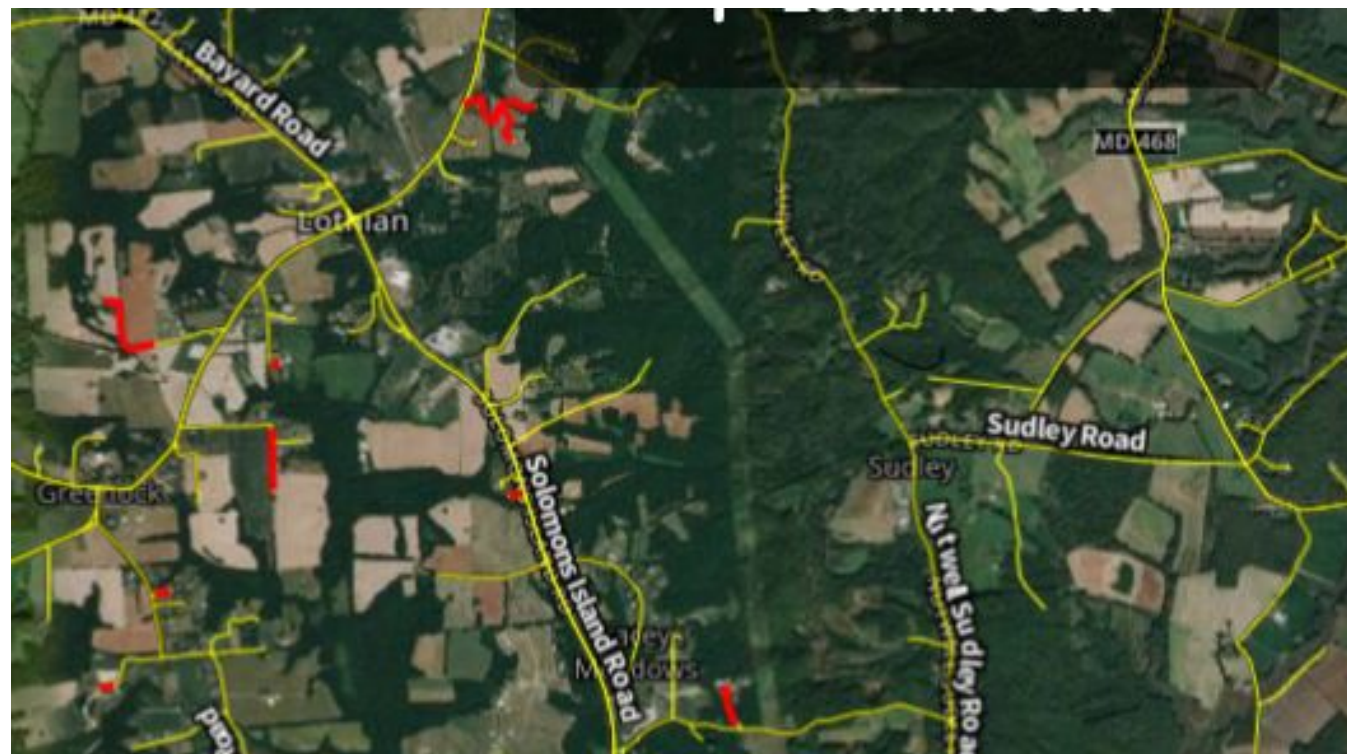Now, let's use OpenStreetMap to take a look at some TIGER roads!

ADD THE TIGER ROADS OVERLAY

- Click on the 'Background Settings' icon
- Scroll down to 'Overlays'
- Check the box ' TIGER Roads 2017' to add the overlay
- Yellow roads indicate Public Domain data from the US Census. Red are data not found in OpenStreetMap.

TRACE A ROAD

- Zoom into an area with red lines, indicating that the Census data has not been added to the OpenStreetMap database.
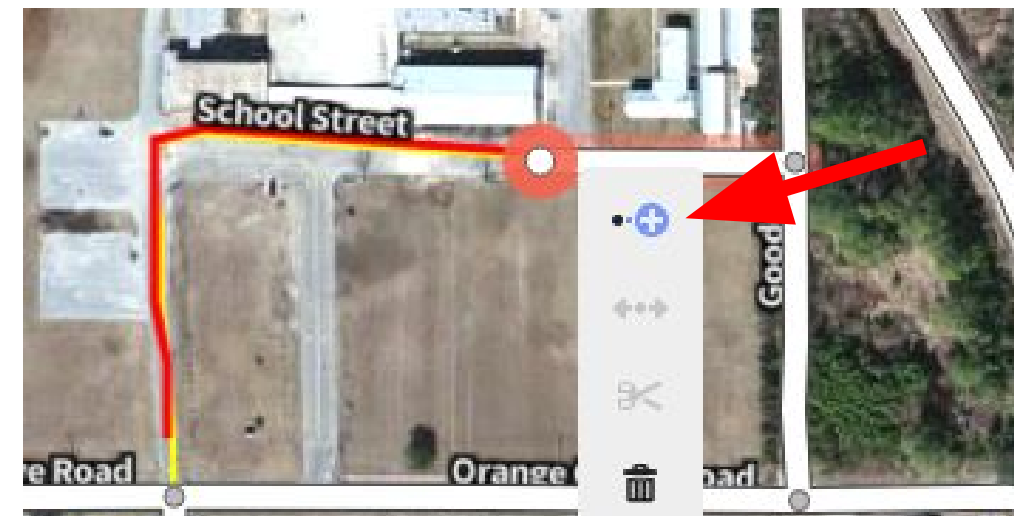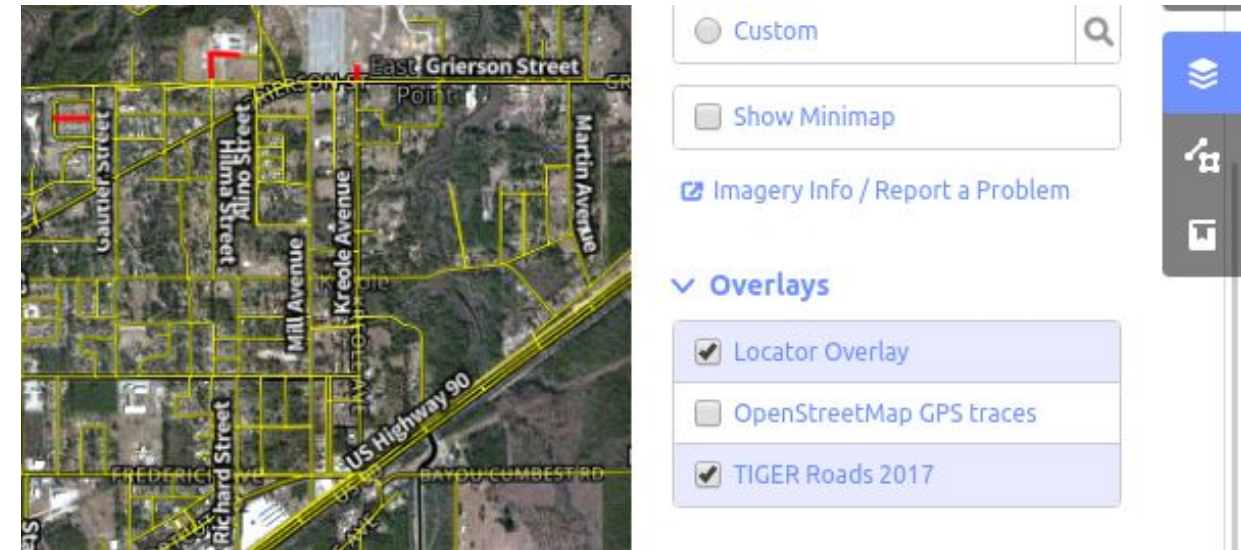- If the road continues, select it and right click to continue the line.
- Add any pertinent information.
- Click 'Save' to save your edits.
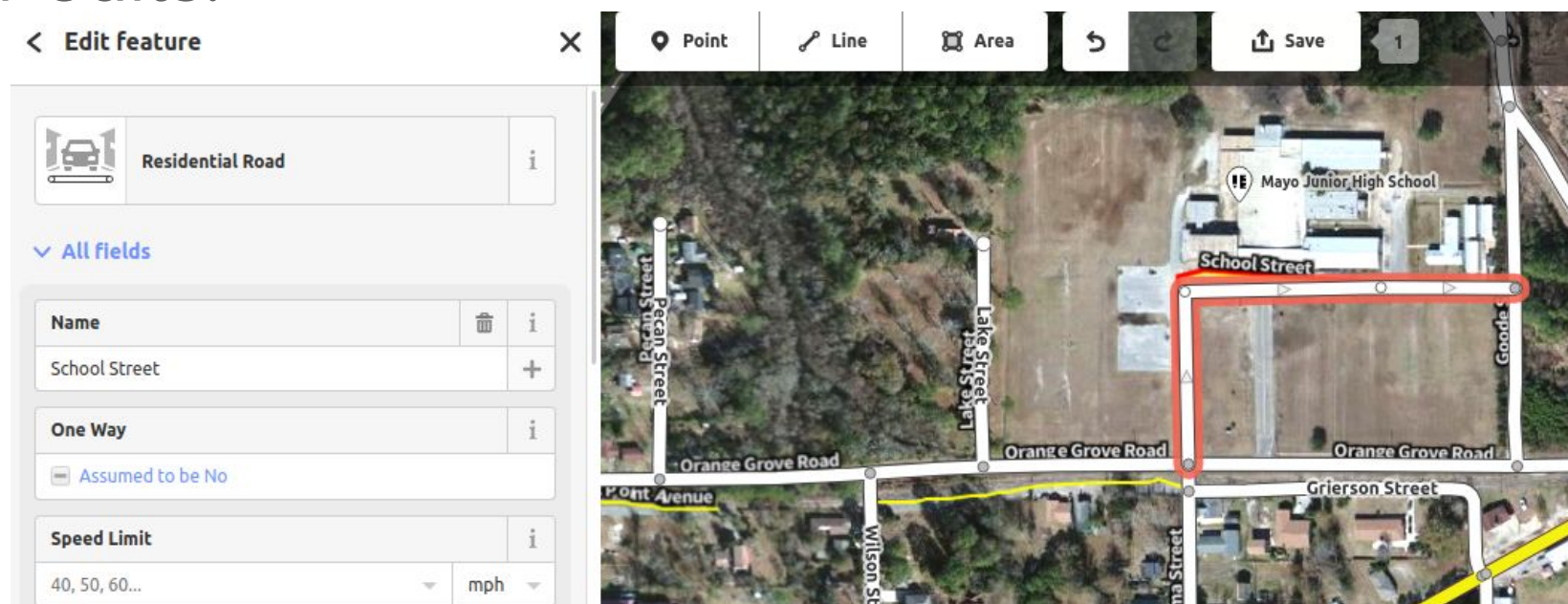
TRACE A ROAD

- If it is a new road, click 'Line'
- Click on existing node to connect the road. Draw the road, double click to complete edit.
- Tag the road appropriately. Start typing 'Road' in the search box and choices appear. Make sure to choose the correct value.
- If you do not know the type of road , choose 'Unknown Road'.
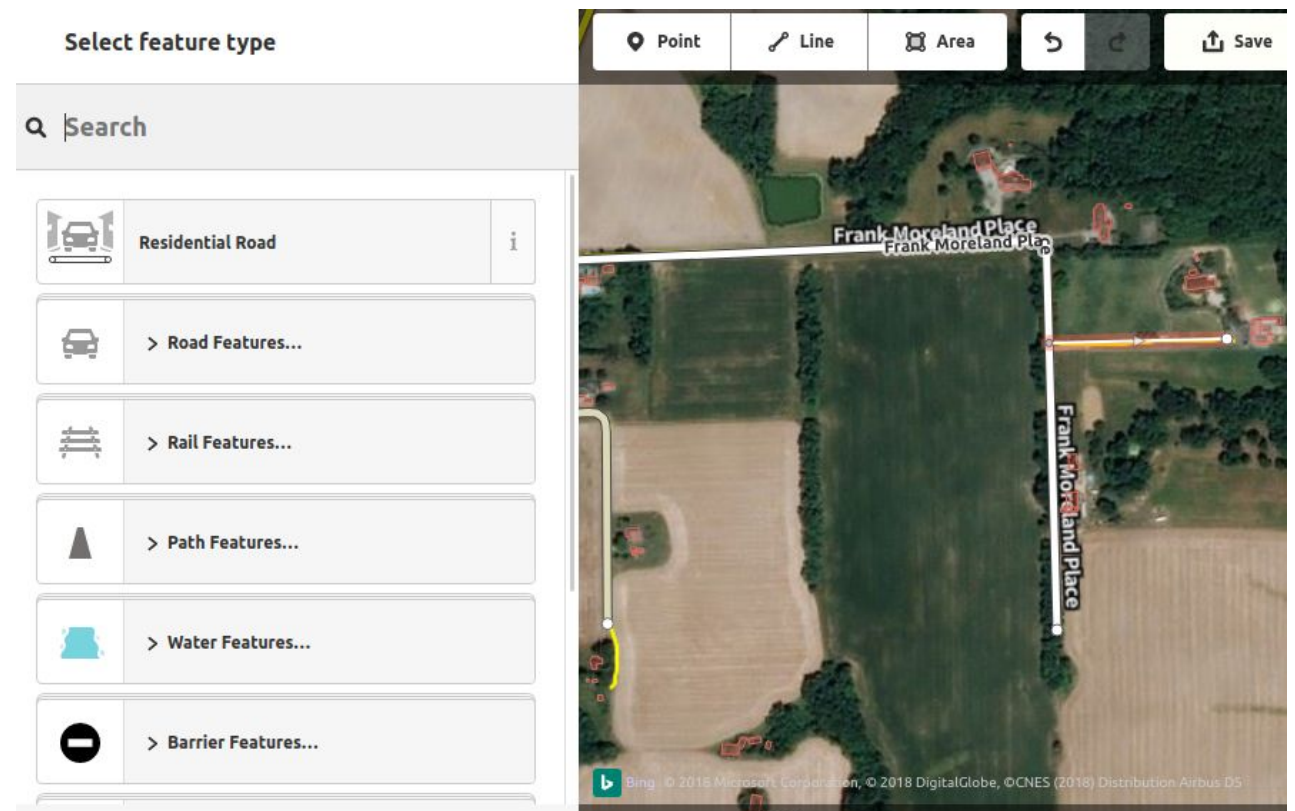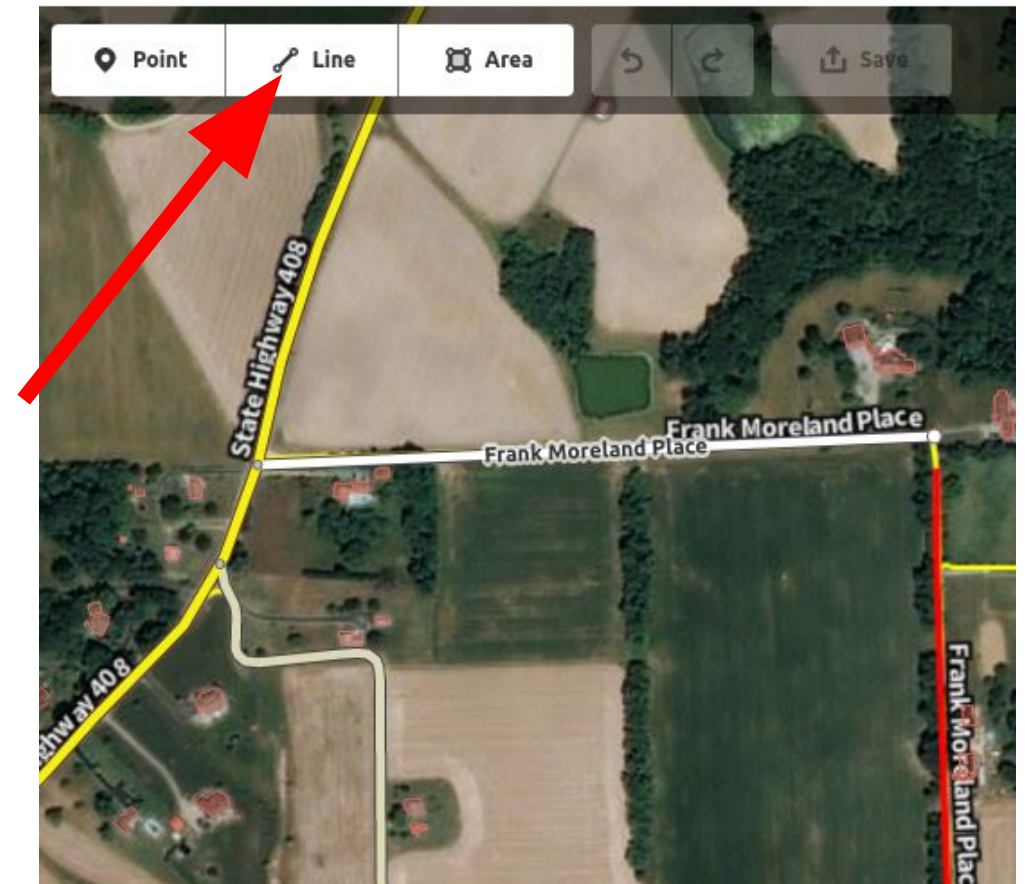
TAGGING ROADS IN OSM

The key **highway**=* is the main key used for identifying any kind of road, street or path. The value of the key helps indicate the importance of the highway within the road network as a whole, and supports accurate routing and directions.

For example, a residential road has a different value than a highway.

Key	Value	Element	Comment	Rendering	Photo
			Roads		
			These are the principal tags for the road network. They range from the most to least important.		
highway	motorway		A restricted access major divided highway, normally with 2 or more running lanes plus emergency hard shoulder. Equivalent to the Freeway, Autobahn, etc..		
highway	trunk		The most important roads in a country's system that aren't motorways. (Need not necessarily be a divided highway.)		

Visit the OSM Wiki page for more information on tagging roads and ways.
https://wiki.openstreetmap.org/wiki/Highways

NEXT IN THE SERIES - OSM MODULE 4

OPENSTREETMAP TASKING MANAGER