Getting started with OpenSidewalks

# Background

Read the current schema definition here:

<https://github.com/OpenSidewalks/OpenSidewalks-Schema>

This should give you a simple introduction to the basics of the elements we’re going to deal with.

# Tools of the trade

**OpenStreetMap:**

<https://www.openstreetmap.org>

Mother of all maps, and map data. This is where the input files will most likely come from.

<https://taginfo.openstreetmap.org/> : all the tags used in OSM

Get an account with OSM.

**Overpass**:

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

Tool to examine and get the openstreetmap data

**SharedStreets:**

A schema to represent streets, based on the intersections, rather than the actual streets.

**Shape file**:

Shape files are used to show the various things. For example, <http://apps.bellevuewa.gov/gisdownload/Data/Transportation/SHP/PEDNETWORK.zip> shows the pedestrian network in shape file.

We can use geopandas to deal with shape files

**QGIS**

To view shape files, we need QGIS. download the tool from here:

<https://www.qgis.org/en/site/forusers/download.html>

Once download is complete, go to plugins-> and download OSMDownloader

### Overpass queries

To find all nodes, and ways in a bounding box:

/\*

This has been generated by the overpass-turbo wizard.

The original search was:

“node=\*”

\*/

[out:json][timeout:25];

// gather results

(

// query part for: “node=\*”

node({{bbox}});

way({{bbox}});

);

// print results

out body;

>;

out skel qt;

### Agenda for KO:

1. Explain cartography, OSM, and some elements
2. Challenges with the current approach
3. OSW approach
4. Shared Streets
5. Tasks
6. OpenStreetMap Introduction, and QGIS

<https://www.openstreetmap.org/edit?way=475984998#map=18/47.66612/-122.30029>

1. Line geometry vs polygon geometry
2. OSM is mostly car / automobile centric
3. QGIS and other to OSM/OSW
4. How do we know the OSW file generated is good?