Part 2: TeachOSM Instructor Workflow

TeachOSM.org

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Why is OSM in the classroom different?

Here's why:

- You need equitable assignment of work volume
  - What do you do when you have:
    - Varying high/low density infrastructure in your chosen area
    - Areas that already have some complete tracing
  - Do you assign grid cells?
  - Do you set a quota (buildings/roads)?

- You need to track who-did-what (that pesky grading element)
  - You also need to prevent overlap as much as possible
  - How DO you grade it?

What we're covering today

- Workflow
  - Setting up a project
  - Assigning the work
  - Conducting training
  - Grading
- Sites/tools used
- Resources

Our Workflow

1. Choosing where to map

   investigating quality of available imagery and level of completion in OSM

2. Assigning the work

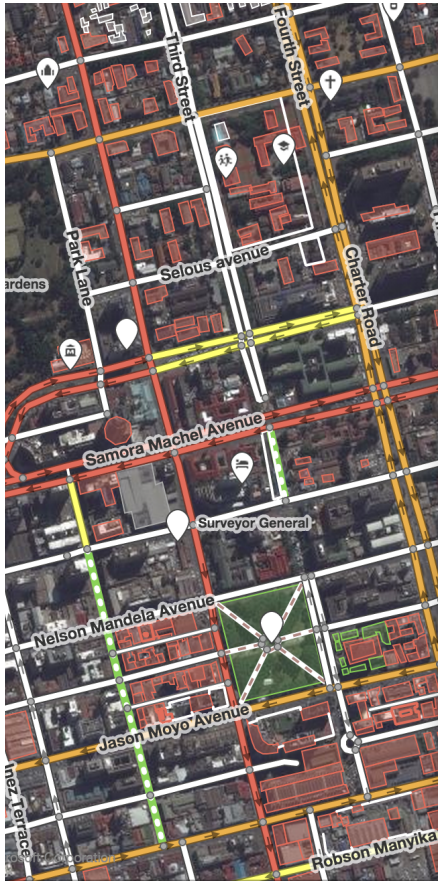
   Setting up a task and choosing a work allocation method

3. Conducting Training

   Choosing an editor, and planning events

4. Grading OSM Assignments

   Viewing individual students work and number of edits



1 Setting up a project

How do I pick a study area for my group?

Setting up a project

- Where will this be?
  - Local neighborhood, campus, city, or a study site abroad
    - Working with a partner can make this easy for you, it can dictate where you map
  - Determine the approximate boundary of the study area

- You will need to "scout" your chosen area
  - Virtually (using OSM and other mapping services)
    - What is the level of tracing difficulty
    - Quality of imagery available for the area
  - Scout on foot (if practical/accessible)

Successful Community Partnerships

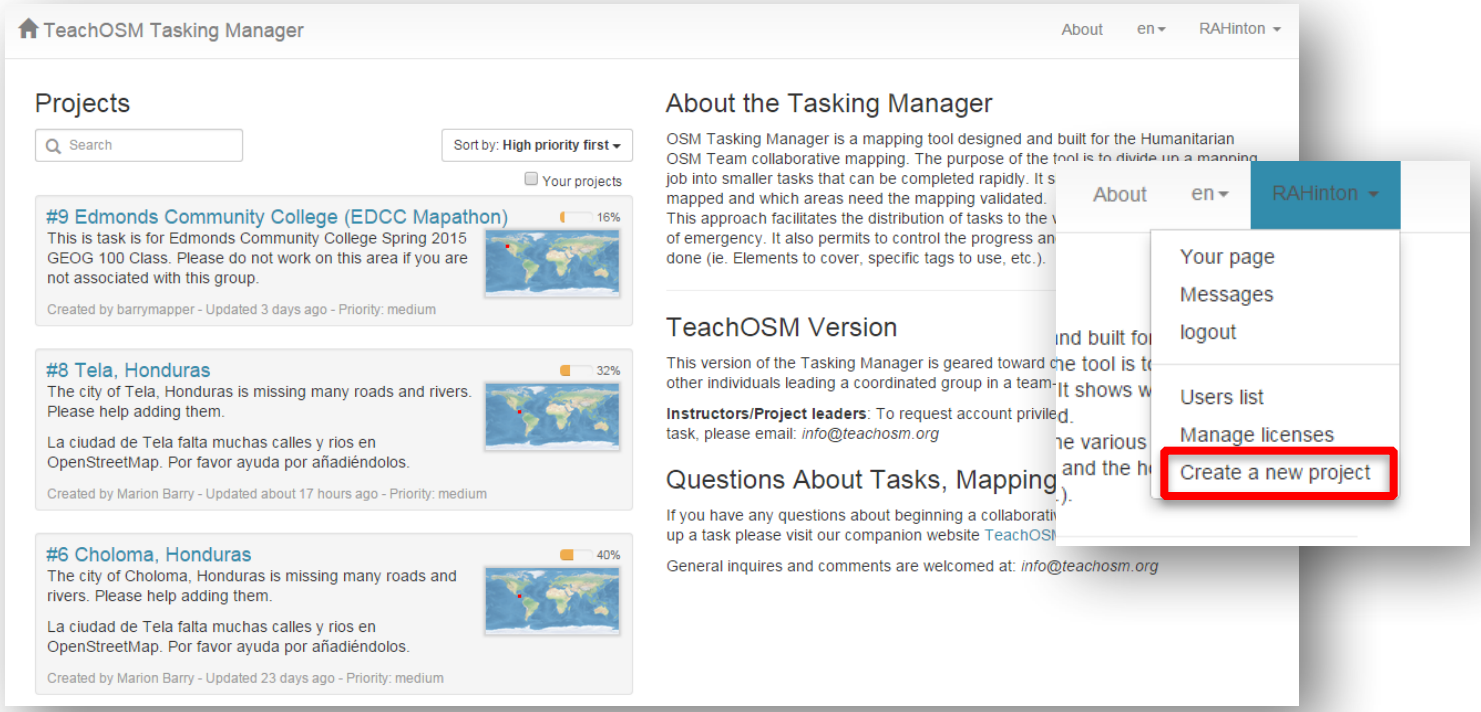
- DC Great Streets
- Georgia Avenue Mapping Project
- GIS Day Farmers Markets
- George Washington University
  - Red Cross, World Bank, USAID
- George Mason
  - Red Cross Missing Maps

2 Assigning the work

Tools & Techniques for equitable assignment of work

Assigning the work

- Set up a project in TeachOSM Tasking Manager (tasks.teachosm.org)
  - Request admin rights to create a task (info@teachosm.org)
  - Use OSM credentials to log onto Tasking Manger
  - Create a new project from drop down under OSM user name



Creating a Project

- STEP 1 – zoom to your chosen area and draw a polygon around your area of interest
- STEP 2 – Chose Square grid or arbitrary geometries.
  - Using a square grid is most common
- STEP 3 – Choose tile (square) size: XS - XL
  - Considerations on density and type of features
- STEP 4 – Add project title along with descriptive and contextual information.
- STEP 5 – Save, Review and when ready, Publish

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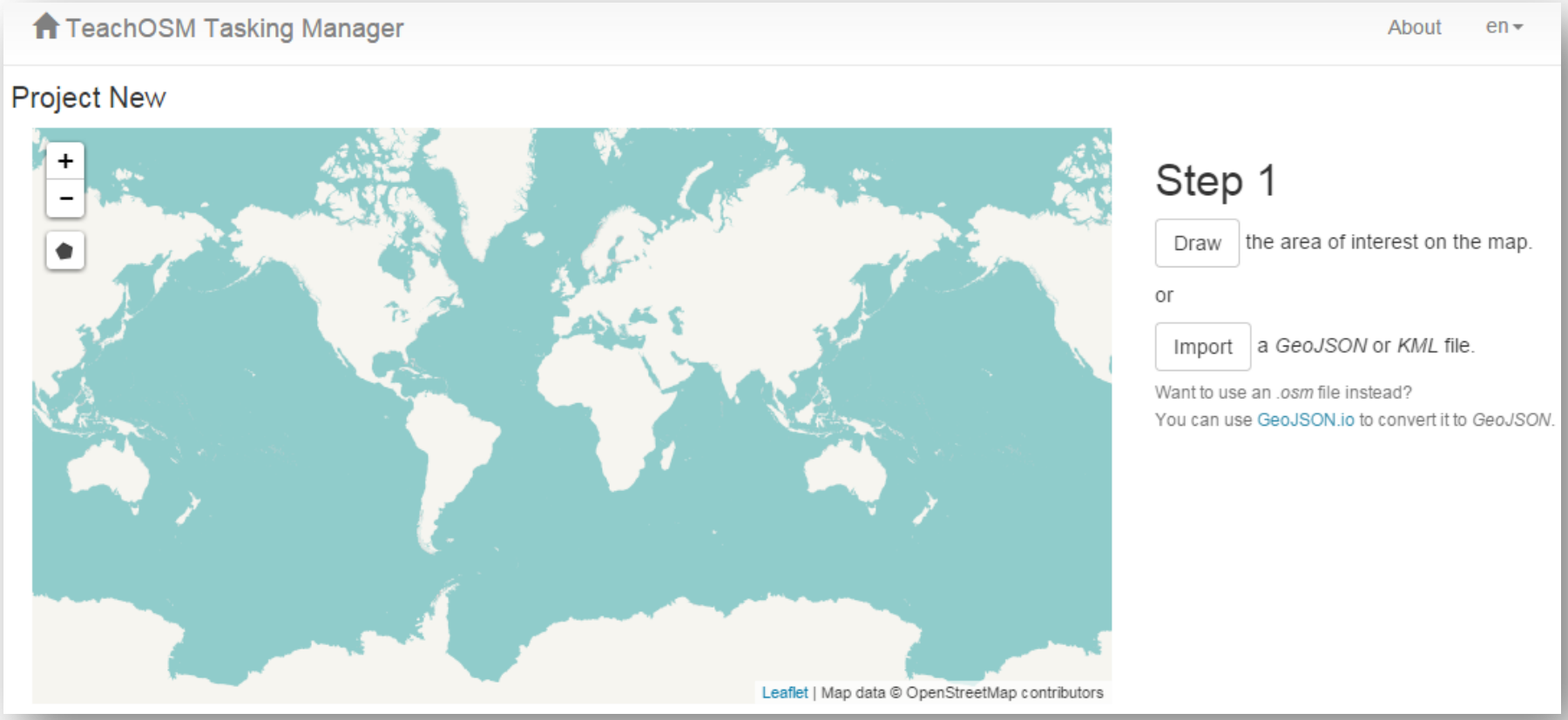

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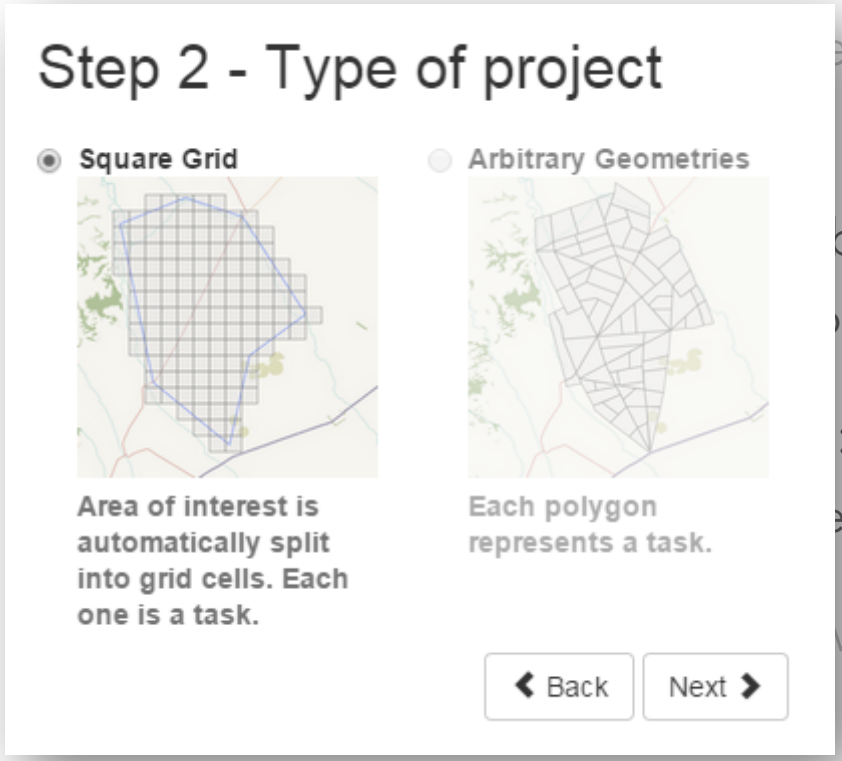

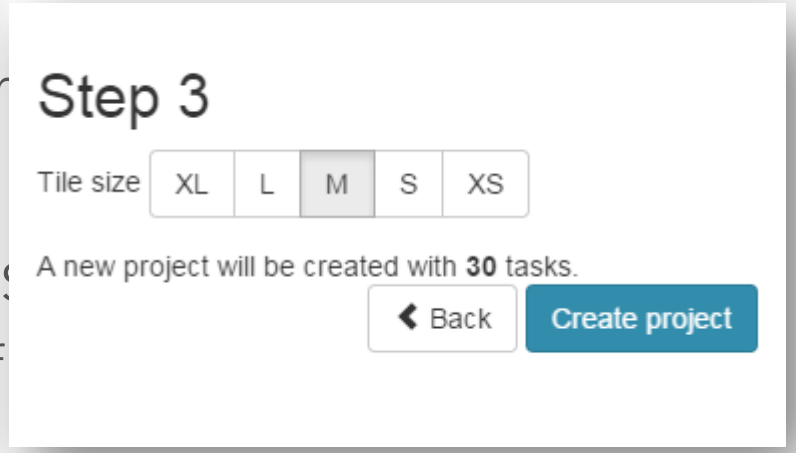

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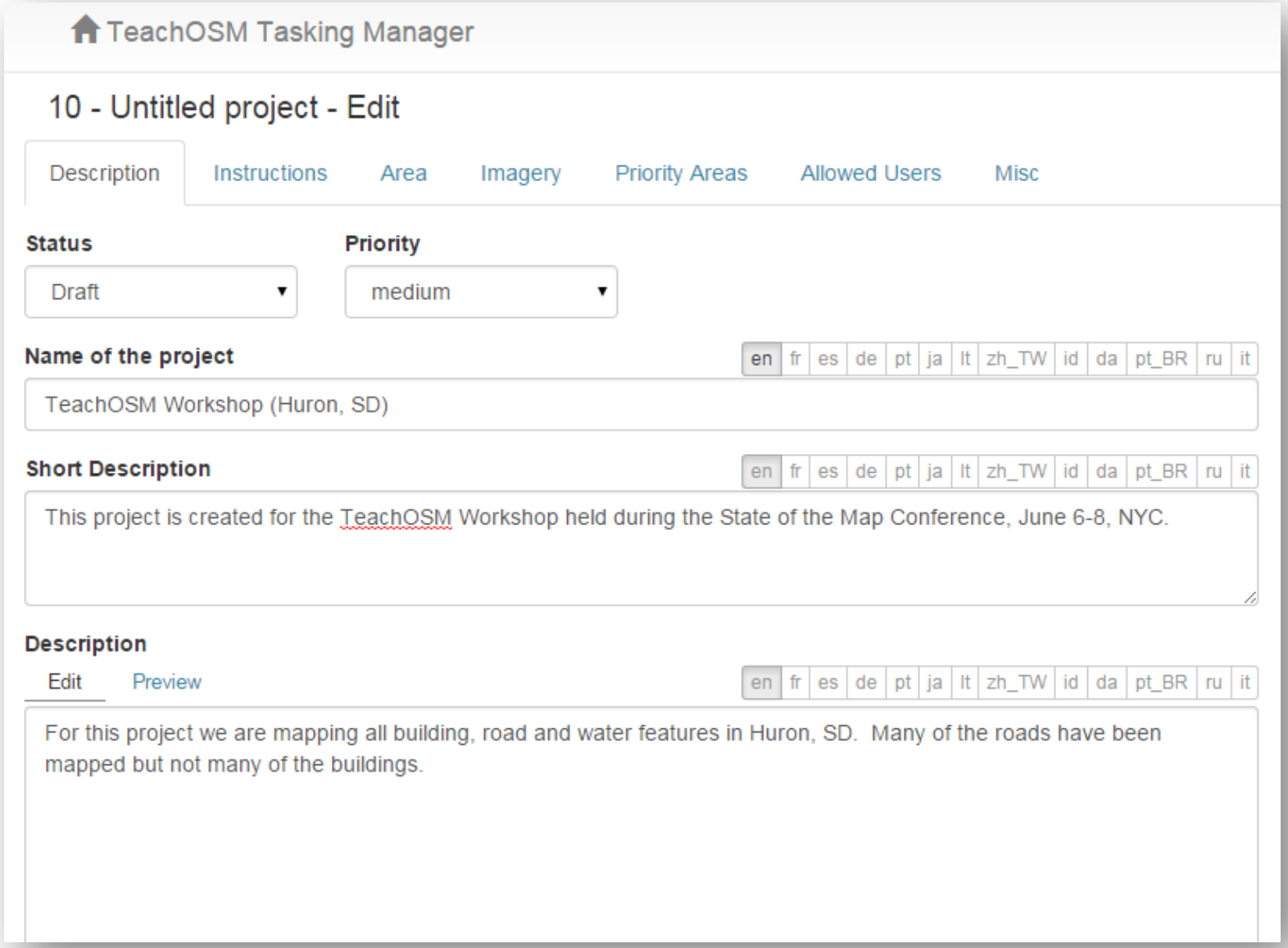

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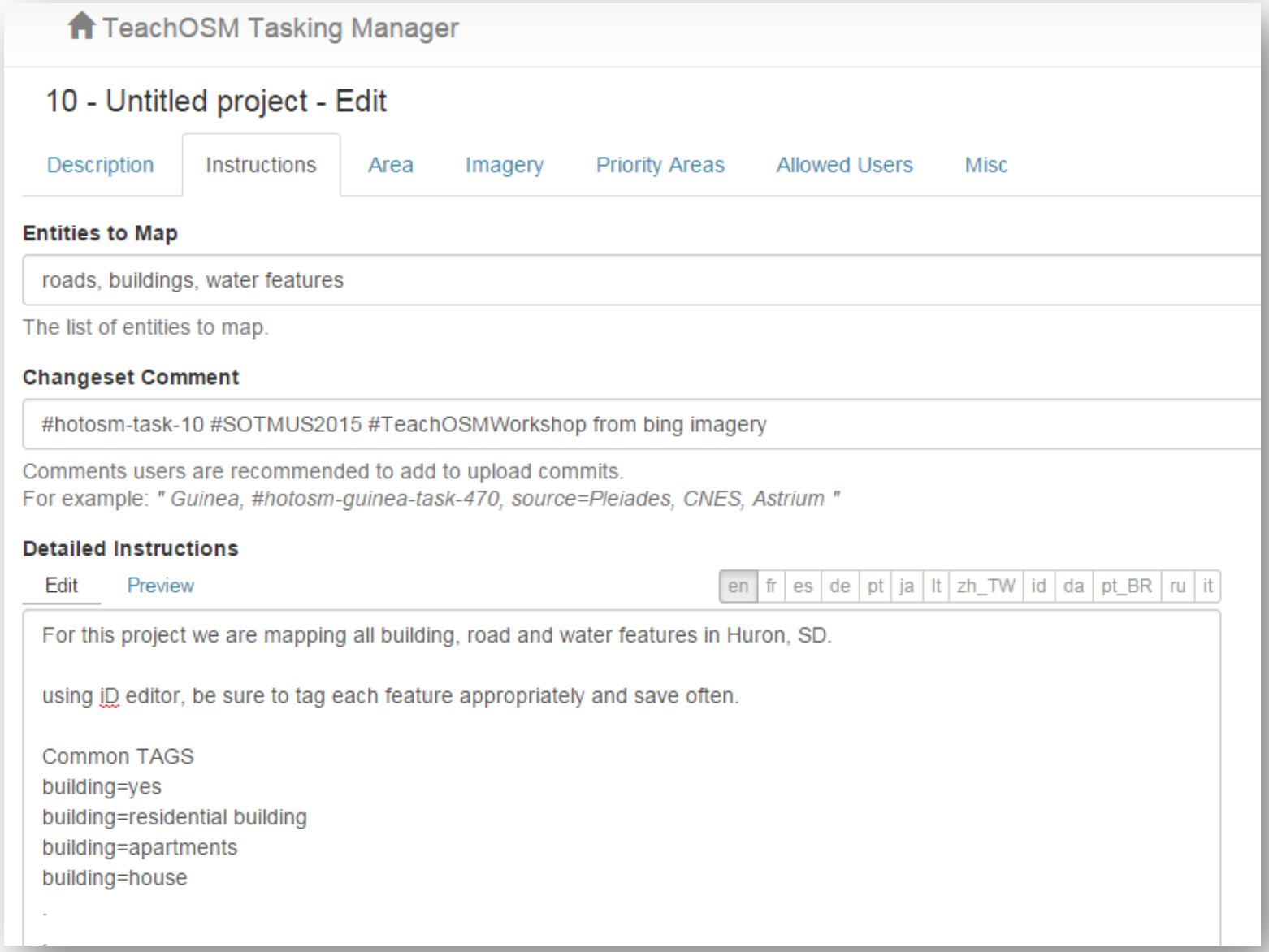

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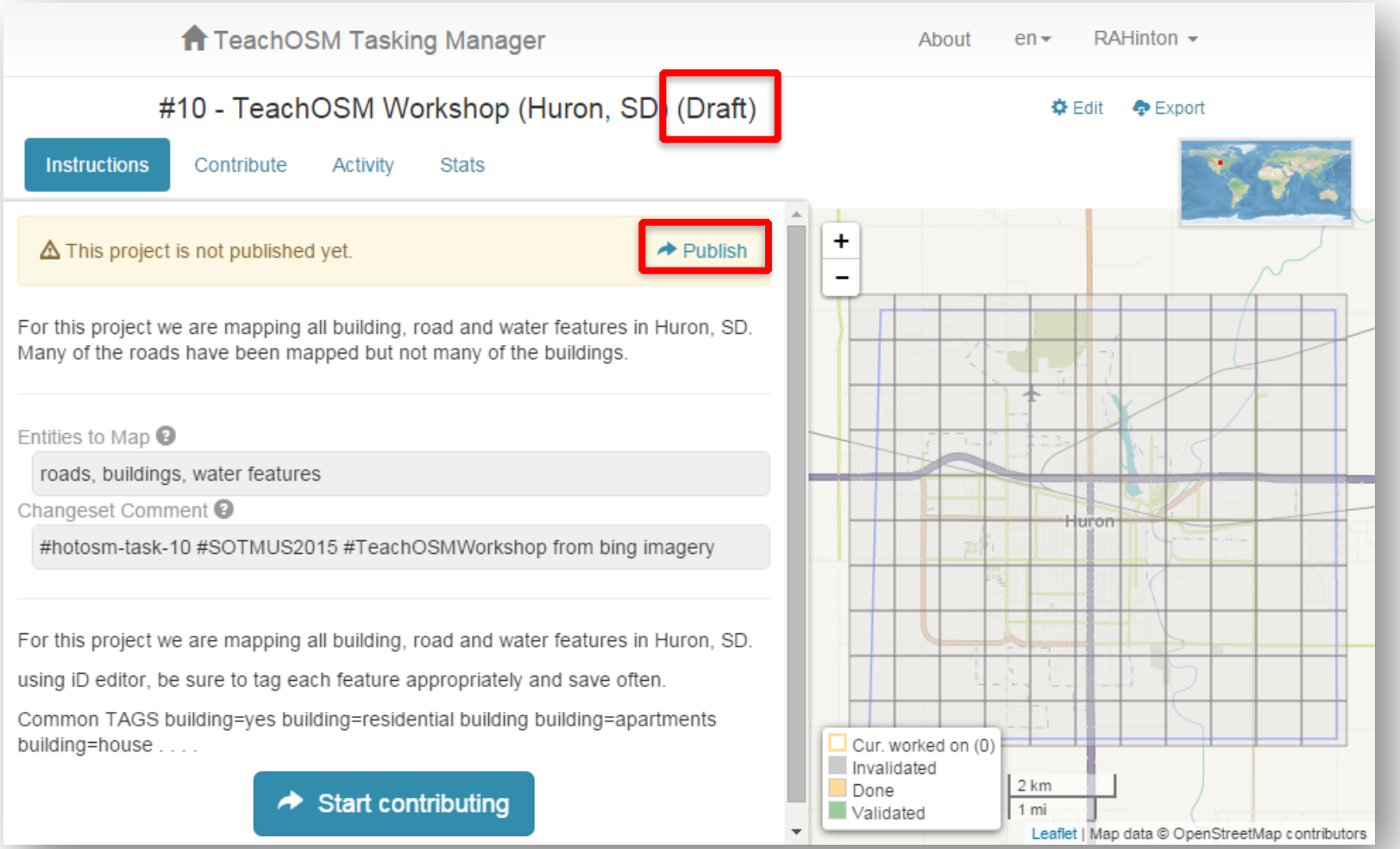

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3 Conducting training

Training students on editors, and fun ways to engage your audience

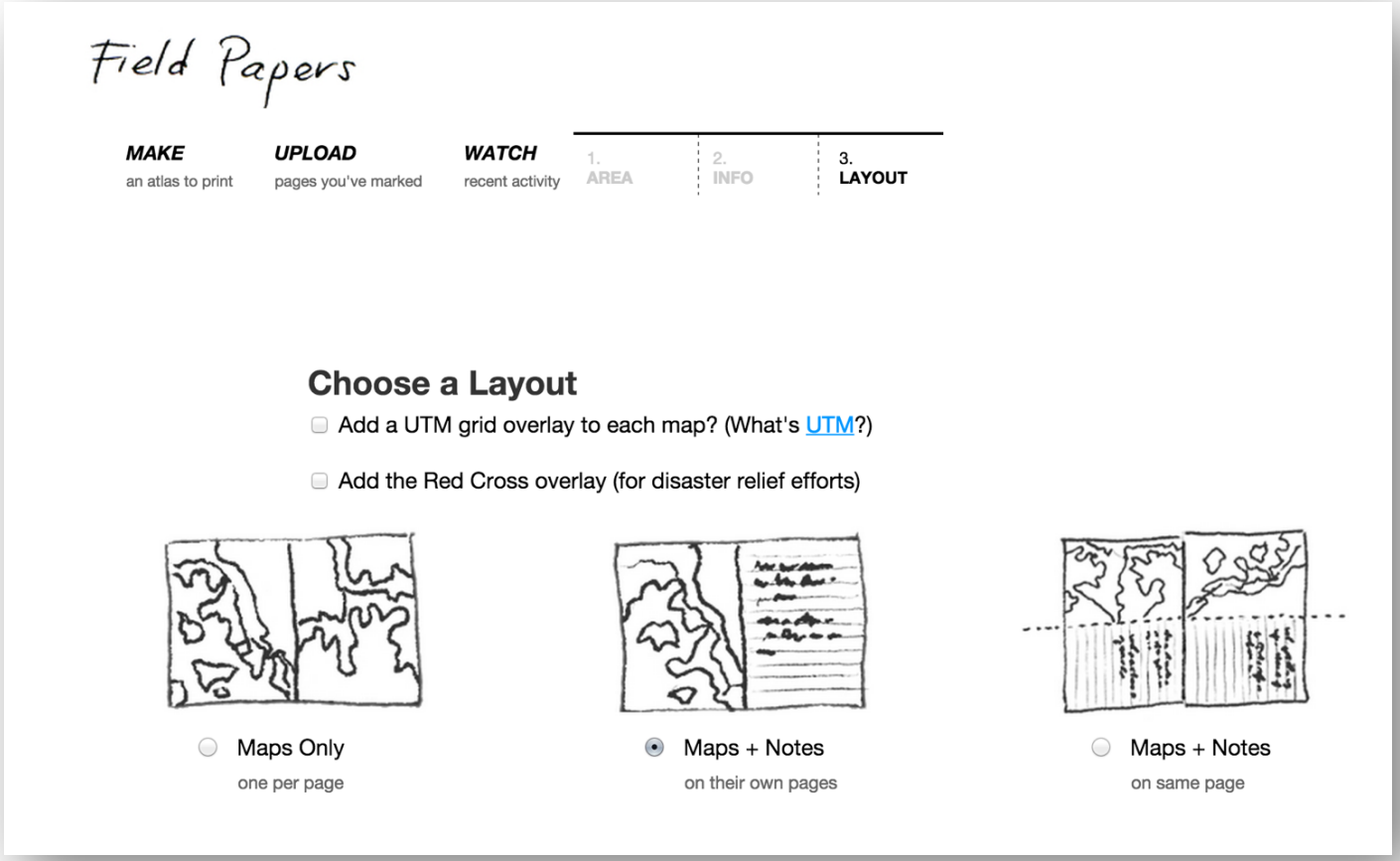
Conducting training

- Intro to OSM
- Create account
- Learn iD

Engaging the students

- Project intro (invite partner to brief them on the areas)
- Execution / Introduction of workflow
  - Create an OSM account, and editor demo
  - Provide tracing guide (specific to the area)
  - Tasking out the work (OSM tasking manager/quota system)
  - Local Mapping (if practical) (Field Papers)
  - Keeping track (overpass turbo)
- Mapping party/Mapathon (optional, but FUN!)

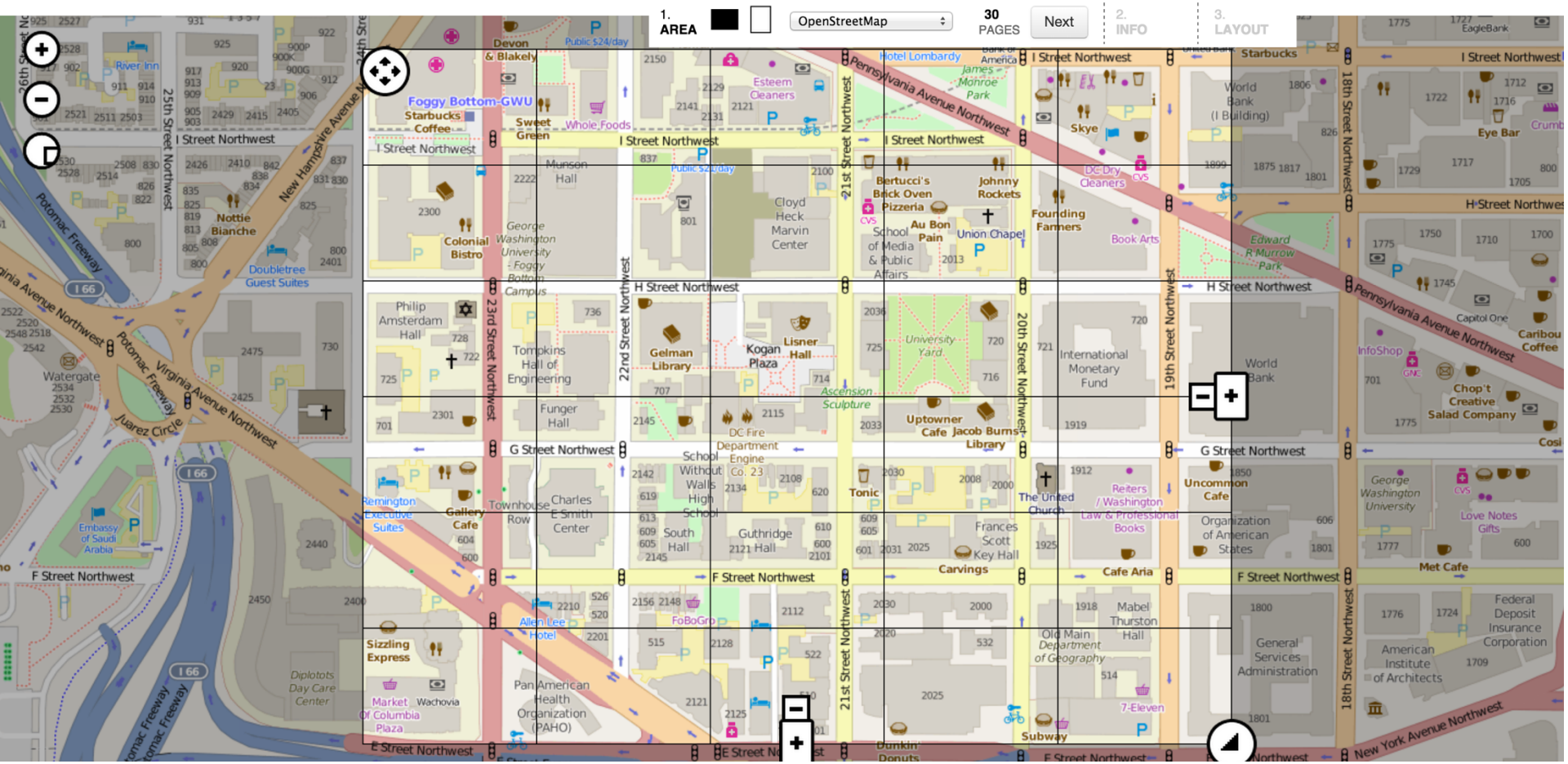
Field Papers

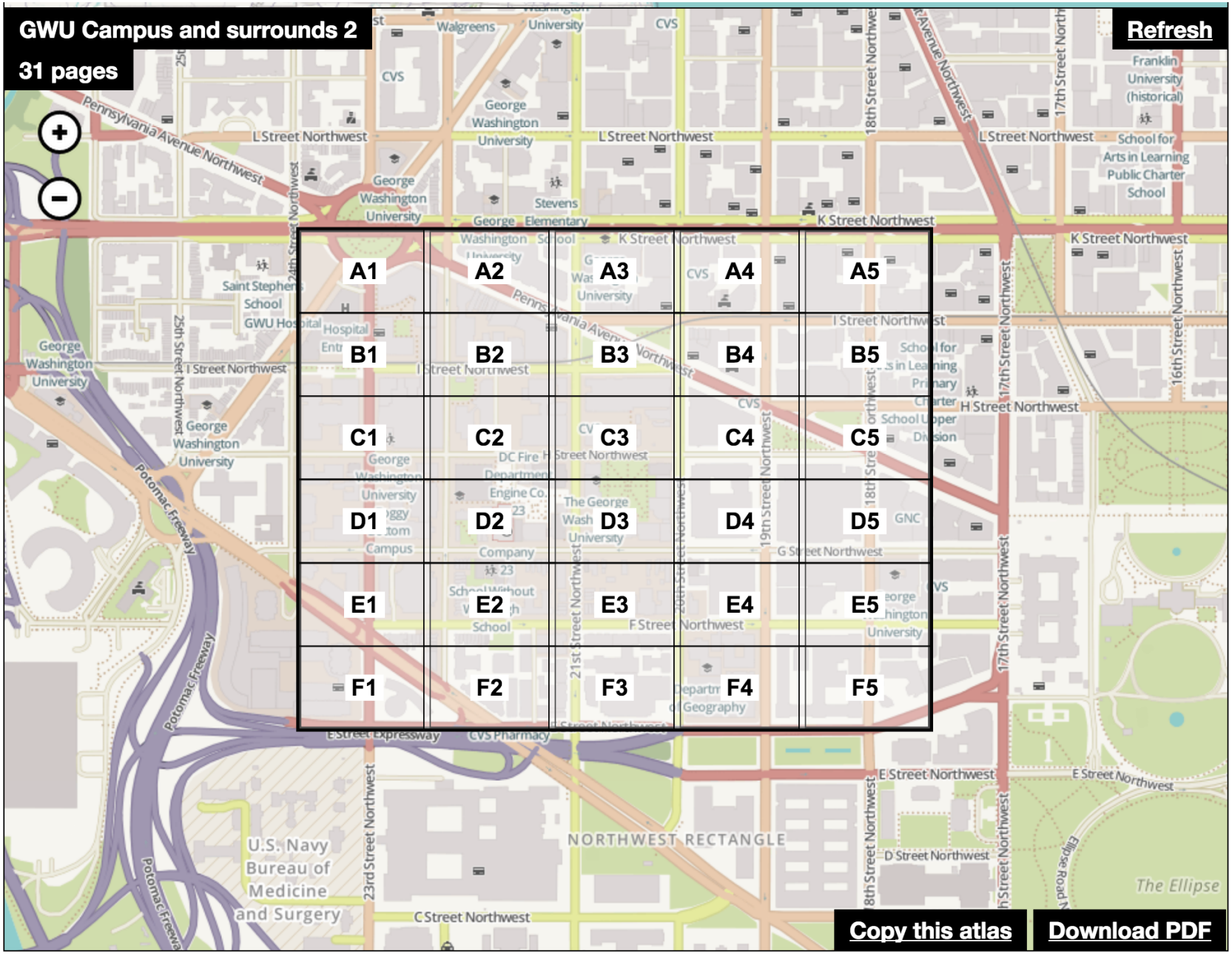


Field Papers

MAKE an atlas to print | **UPLOAD** pages you've marked | **WATCH** recent activity | **EXTEND** with advanced tools | **LOG IN** or create an account

1. AREA | OpenStreetMap | 30 PAGES | Next | 2. INFO | 3. LAYOUT




GWU Campus and surrounds 2
31 pages
Refresh
A1
A2
A3
A4
A5
B1
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B4
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C1
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F5
Pennsylvania Avenue Northwest
L Street Northwest
K Street Northwest
I Street Northwest
H Street Northwest
George Washington University
Stevens Elementary
Saint Stephen's School
GWU Hospital
Potomac Freeway
E Street Expressway
U.S. Navy Bureau of Medicine and Surgery
NORTHWEST RECTANGLE
C Street Northwest
D Street Northwest
E Street Northwest
The Ellipse
Copy this atlas
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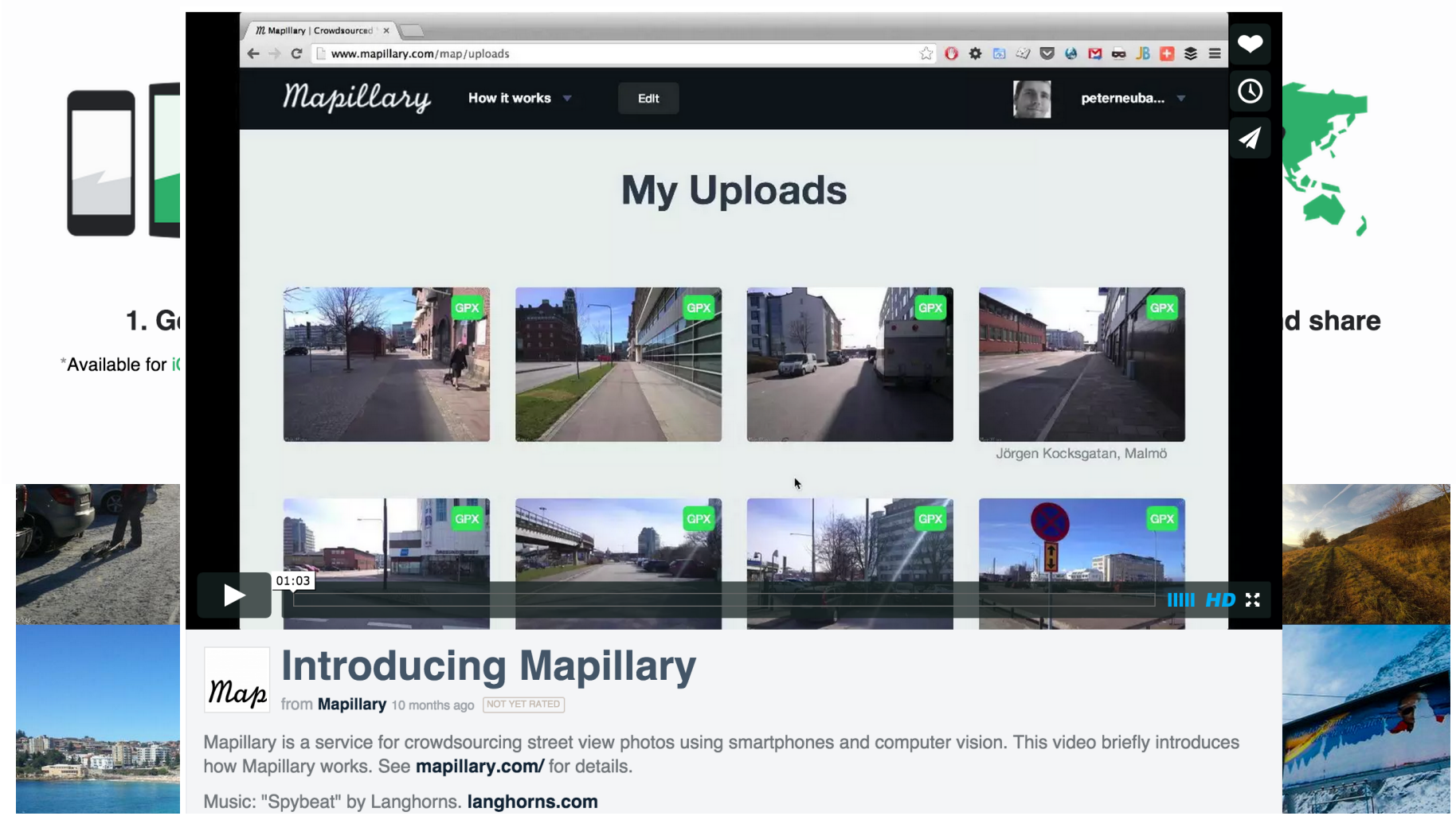
Mapillary: collaborative photo mapping



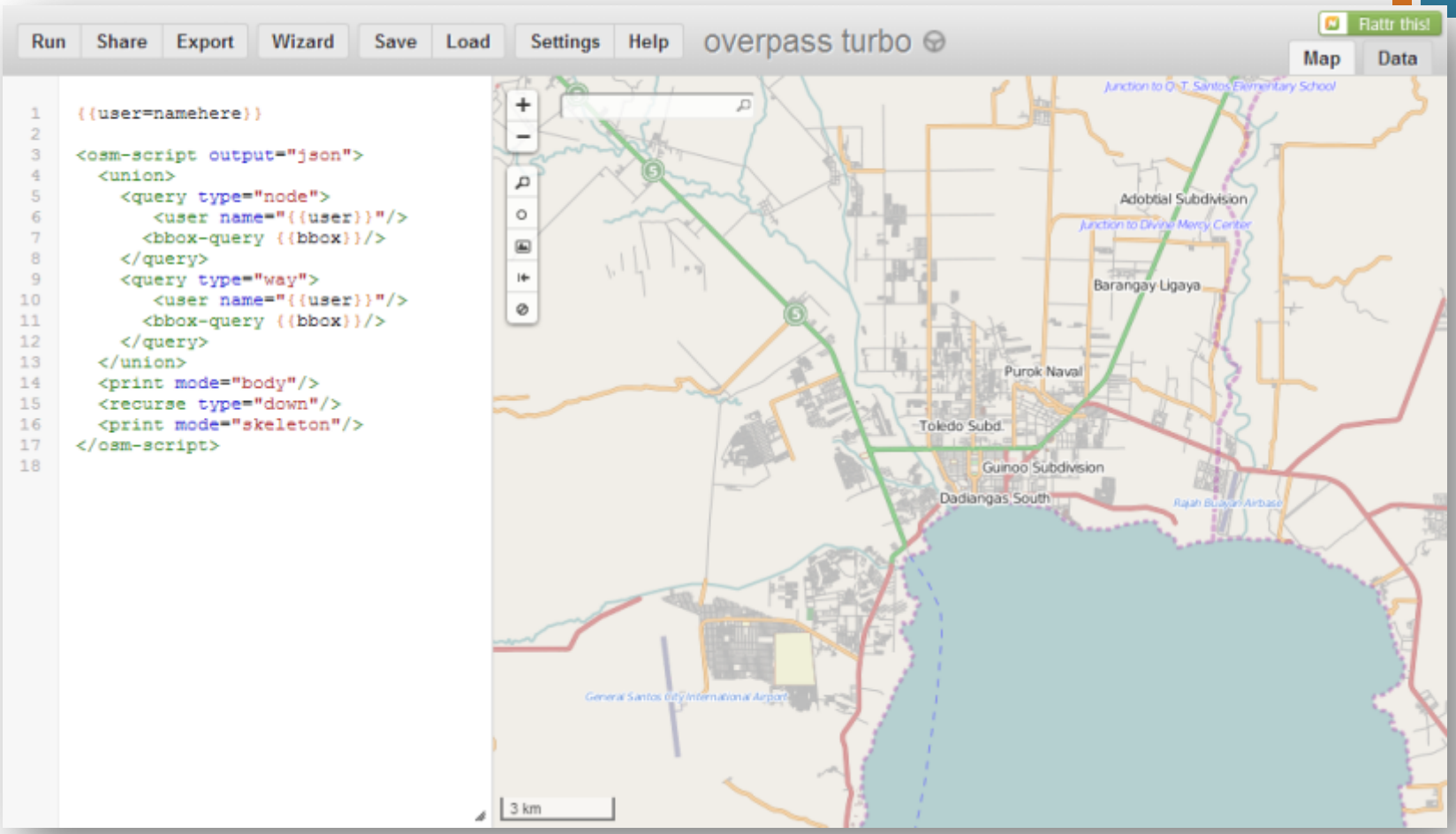

EXIT
MAPBOX
38°53'49.26"N
77° 2'40.57"

4 Grading OSM assignments

Suggestions for Instructors who need to include evaluation

Tracking your Work: Overpass Turbo

http://overpass-turbo.eu/



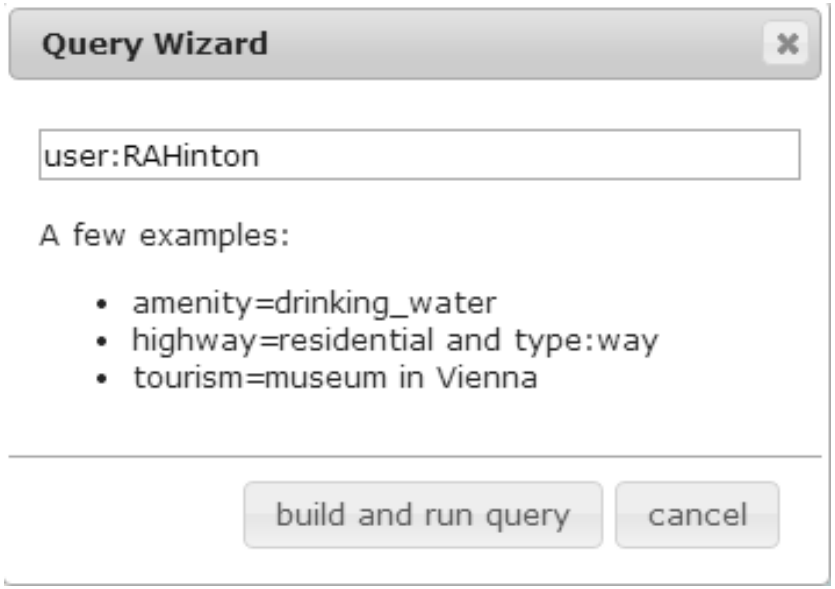
Overpass Turbo

- With overpass turbo you can run Overpass API queries and analyze the resulting OpenStreetMap data interactively on a map.

  http://overpass-turbo.eu/

1. Navigate to the area your are working
2. Click the Wizard button
3. Use the following syntax to search for your OSM edits:

   user: your_osm_name



OSM Grading: The Quota Method

- Example: Quota of **2000** "nodes"
- All contributions are **Weighted on Completeness**
- Marked on Quality, Coverage and Sticking to Area
- You'll be graded following the rubric below

	A	B	C	D	E	F	G	H	I
1		Name	OSM Username	% Complete	Quality (70%)	Coverage (20%)	SticktoArea (10%)	Weighed total	TOTAL
2	1	Student 1		90	60	15	8	7.47	7.47
3	2	Student 2						0	0
4	3	Student 3						0	0
5	4	Student 4						0	0
6	5	Student 5						0	0
7	6	Student 6						0	0
8	7	Student 7						0	0
9	8	Student 8						0	0
10	9	Student 9						0	0
11	10	Student 10						0	0

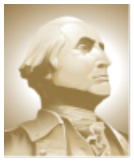
TeachOSM.org

The Instructors resource for collaborative mapping in the classroom

TeachOSM.org

- Materials required to identify, assign, manage and grade the module are available on the site
  - Step-by-step OSM module design (for instructors)
  - Simple to advanced work flow options
  - Demo videos of how to set up tasks and assign cells
  - Sample grading rubric
  - OSM teaching material for instructors
    - Instructional powerpoints/youtube videos
    - How to edit in id editor (best practices for tracing)
    - Tagging procedures and etiquette

Example OSM Projects



THE GEORGE WASHINGTON UNIVERSITY
WASHINGTON, DC

American Red Cross

USAID
FROM THE AMERICAN PEOPLE

HIU
U.S. Department of State
hiu_info@state.gov
http://hiu.state.gov
HUMANITARIAN INFORMATION UNIT

THE WORLD BANK

- Natural Disaster Hotspot List
  - Chittagong, Bangladesh (2011)
- American Red Cross
  - Columbia (2012)
  - Indonesia (2012)
  - Philippines (Haiyun) (2013)
  - Harare, Zimbabwe (2014)
- USAID & World Bank Open Cities
  - Kathmandu, Nepal (2013)
- USAID GeoCenter
  - Mindanao, Philippines (2014)
  - Bangladesh (2014)

Sample Ideas for Projects

- Conduct a street survey in your neighborhood:
  - http://teachosm.org/en/cases/DCGreatStreets_survey_casestudy/
- Map for disaster relief/preparedness:
  - http://mapgive.state.gov and http://missingmaps.org/
- Add historical features to OpenHistoricalMap:
  - http://ow.ly/MfhZw
- Map local food resources:
  - http://teachosm.org/en/cases/farmers-market/
- Start a student mapping society:
  - https://www.facebook.com/GWHMS

Resources

- LearnOSM (http://learnosm.org/en/)
- HOT Tasking Manager (http://tasks.hotosm.org)
- TeachOSM Tasking Manager (http://tasks.teachosm.org)
- MapGive videos (http://mapgive.state.gov/)
- TeachOSM site (http://teachosm.org/en/)

Please contact us if you have any questions

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