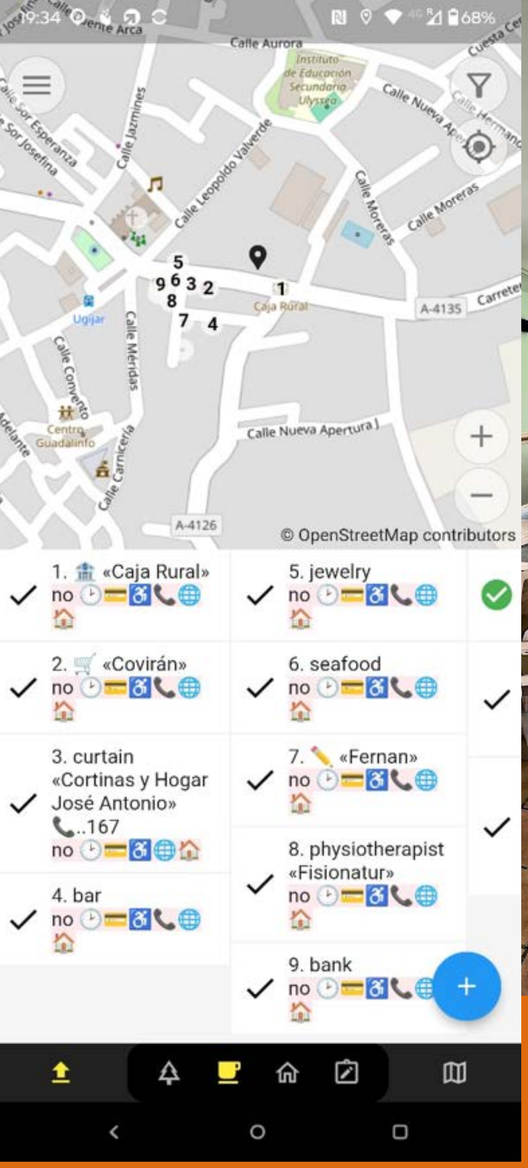
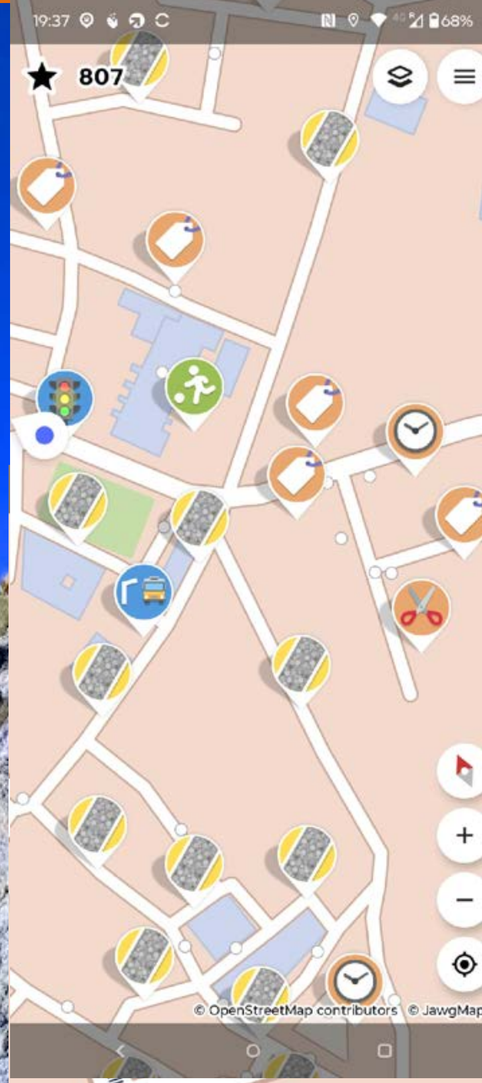
Mobile Mapping for OpenStreetMap

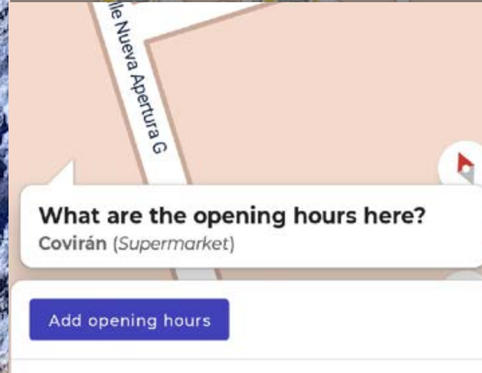
Alpujarra
Knowmad Land



Taller - Workshop - (English)

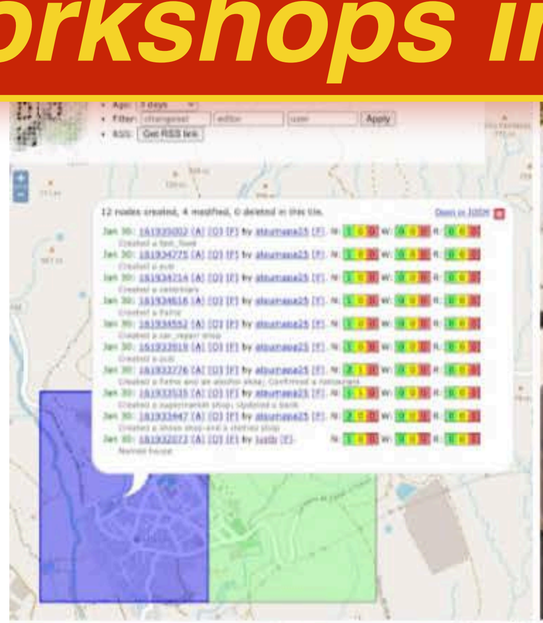
Learn how to map on OpenStreetMap, the free map of the world, the "Wikipedia of maps". Roads, paths, bars, shops,…
By: Just van den Broecke (OSM-NL)

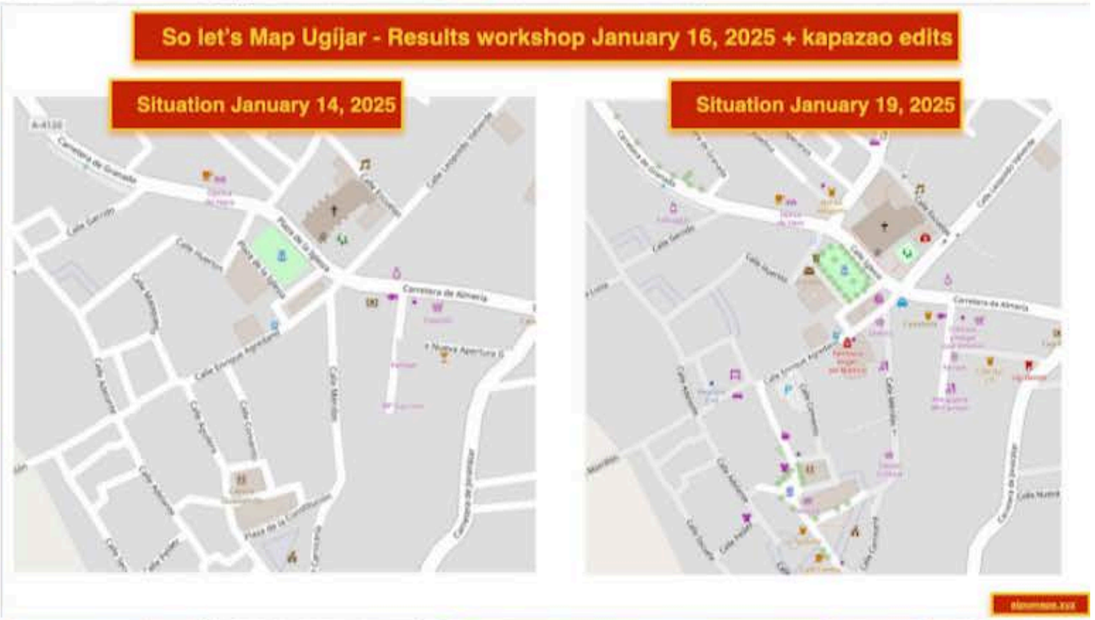




workshop docs
alpumapa.xyz

Workshops in Spain





Agenda

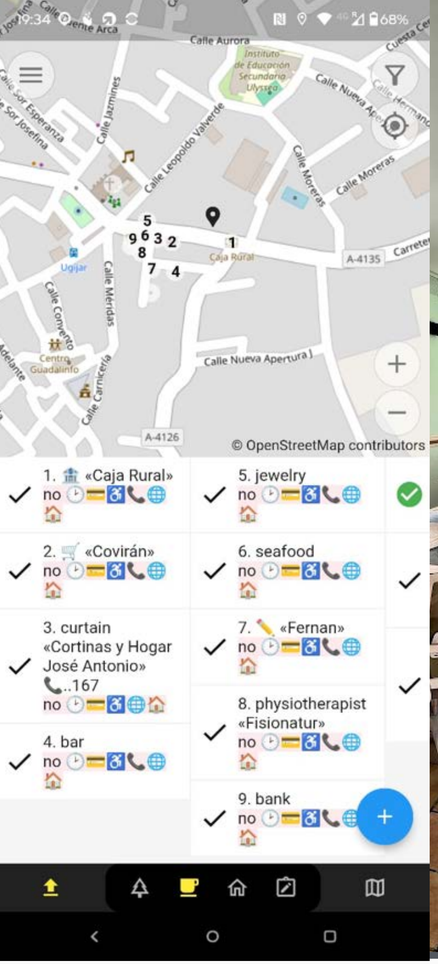
- Introduction (presentation slides)

- Workshop via alpumapa.xyz
  - create account on openstreetmap.org
  - learn, install and configure apps
  - go on the streets to map! OR remain inside (armchair mapping)
    BE CAREFUL WHILE LOOKING AT PHONE AND WALKING!
  - return here for looking at results & evaluation

OSM Website: openstreetmap.org

¡Vamos a mapear Las Alpujarras!
Let's Map Las Alpujarras!

Alpujarra
Knowmad Land



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Learn how to map on OpenStreetMap, the free map of the world, the "Wikipedia of maps". Roads, paths, bars, shops,…
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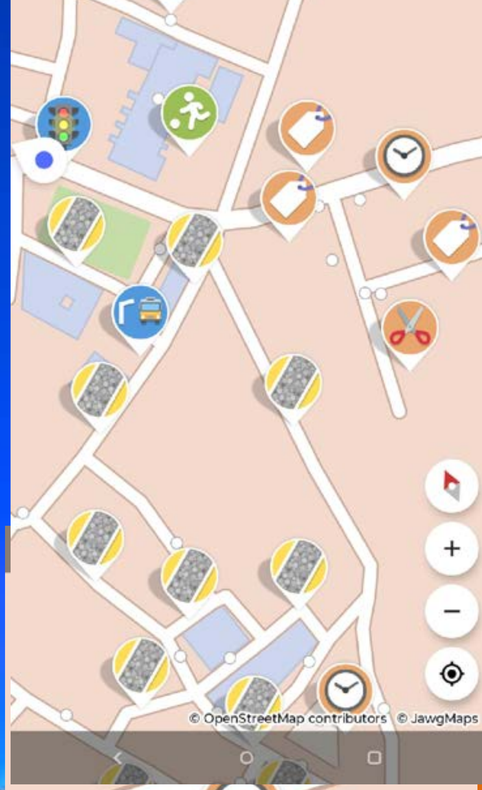
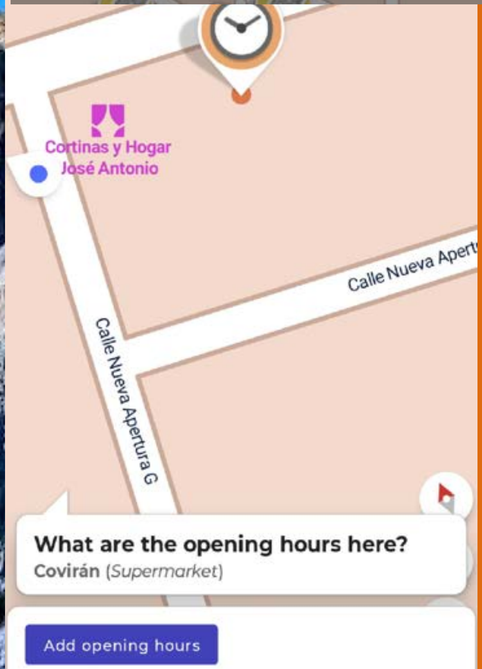
Thu, January 16, 2025 - 10:00-12:00

Ugíjar Co-workspace
Centro de Interpretación de La Alpujarra
C. Rabitillas, 2, 18480 Ugíjar, Granada
+34 6477887139 (Juan Luís, library)





More

alpumapa.xyz - workshop
alpujarraknowmads.com
openstreetmap.org
openstreetmap.es

Próximamente también en español!

contact: justb4@gmail.com

Just van den Broecke

Open Source Geospatial Professional

www.justobjects.nl

Soy hollandés

About Me

Founder

OSGeo·NL

FOSS Projects

- pygeoapi
- GeoHealthCheck
- nlextract

Cloud Services

- Map5.nl
- GeoQoS
- geotoko.nl

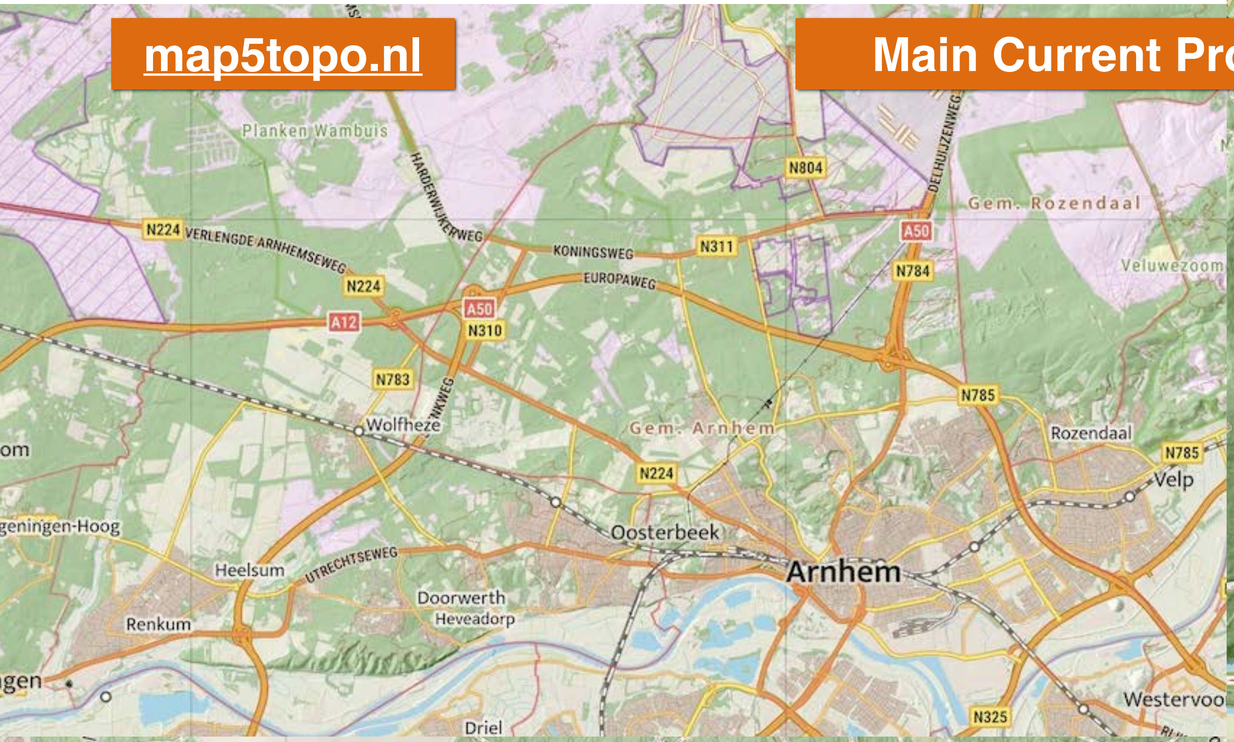
OpenStreetMap Mapper

openstreetmap.org/user/justb

BY MAP5.NL WITH LEAFLET | CC BY SA MAP5.NL - OPENSTREETMAP

map5topo.nl

Main Current Project : Topographic Map of The Netherlands



NEW: map5topo app - *the best free topographic map of The Netherlands!*

Google Play Games Apps Books Kids

map5topo

map5topo

10+ Downloads

PEGI 3

Install on more devices

This app is available for all of your devices

Look for this Logo!

map5topo.nl

App Store

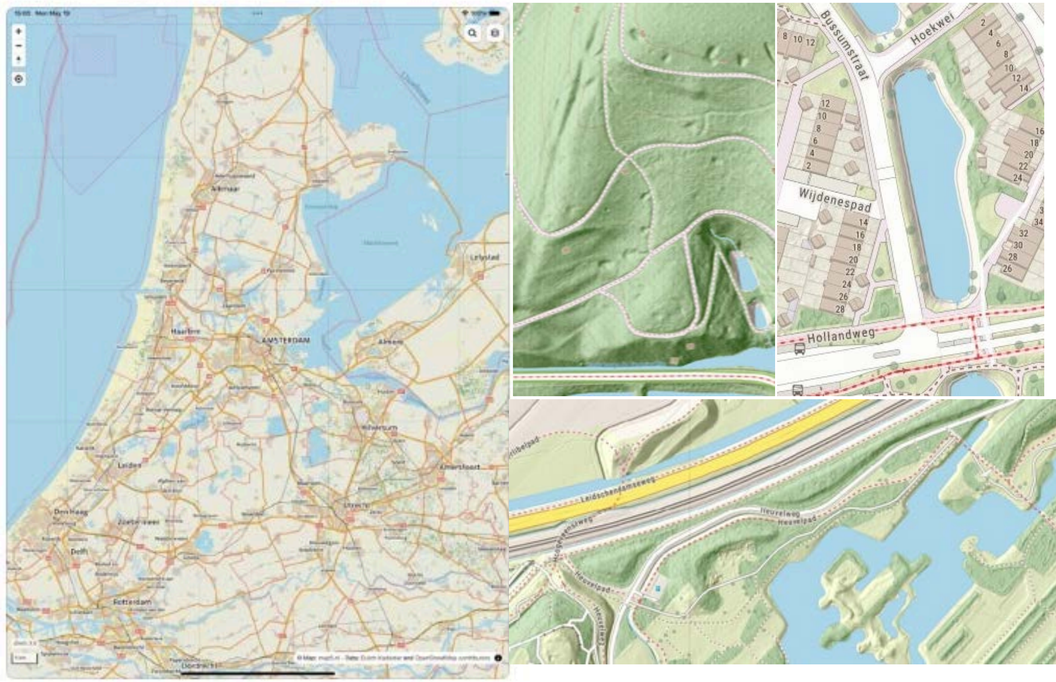
map5topo

Utilities

Designed for iPad. Not verified for macOS.

Get

AGE	CATEGORY	DEVELOPER		
4+			EN	1,2
Years Old	Utilities	Just Objects B.V.	English	MB



iPhone and iPad Apps

Met de map5topo app kan je momenteel vier kaartlagen bekijken: map5topo retina tiles, openlufo, map5topo grijs en topraster van Kadaster.
Je kan locaties opzoeken en je huidige GPS locatie op de kaart opvragen. more

Just Objects B.V.

Support

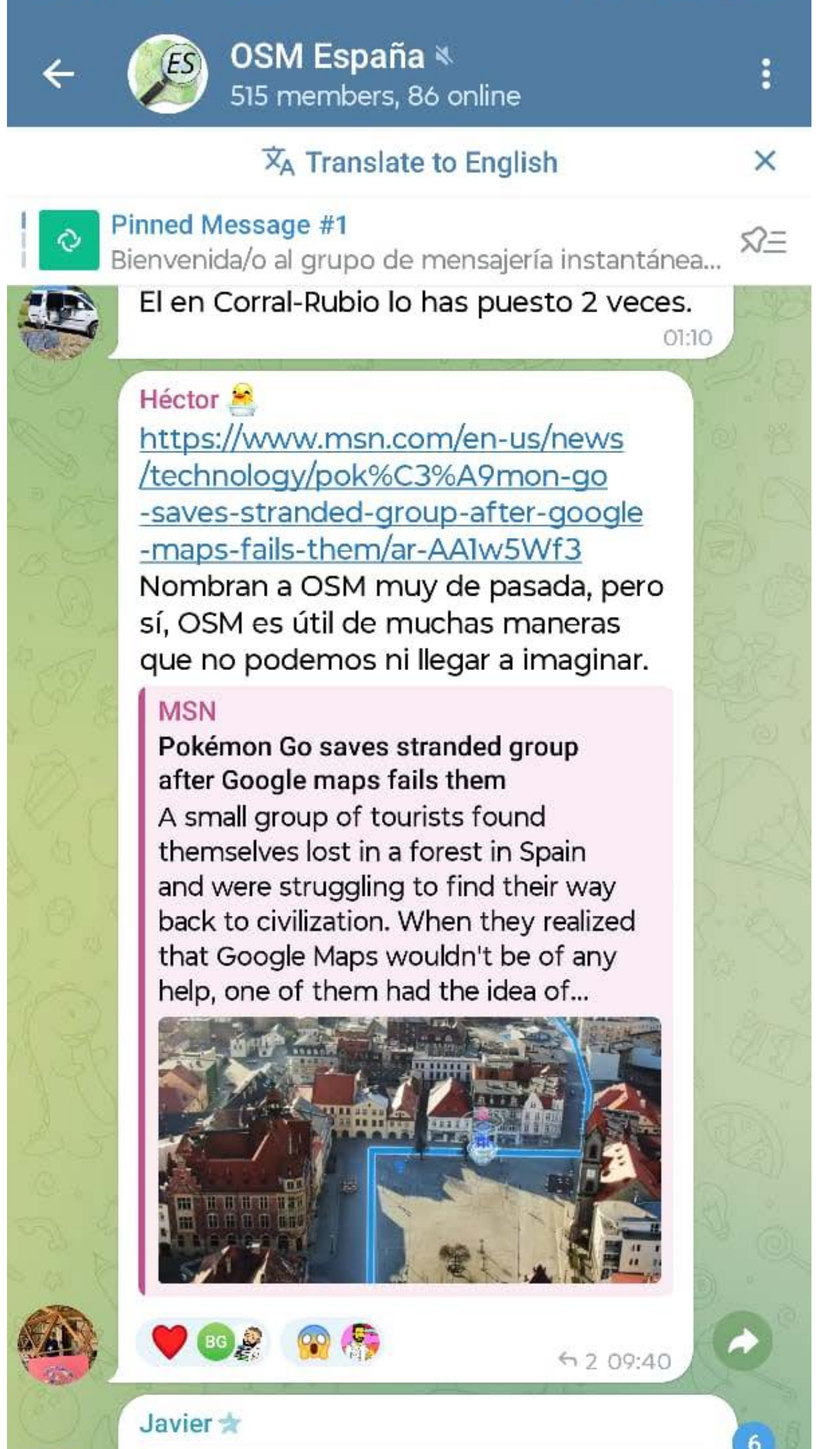
What is OpenStreetMap?

- **Definition:**
  A free, open-source, and collaborative mapping platform where anyone can contribute, edit, and use map data.

- **Mission:**
  To create and provide free geographic data to everyone.

- **Fun Fact:**
  Often referred to as "the Wikipedia of maps."

OSM Website: openstreetmap.org

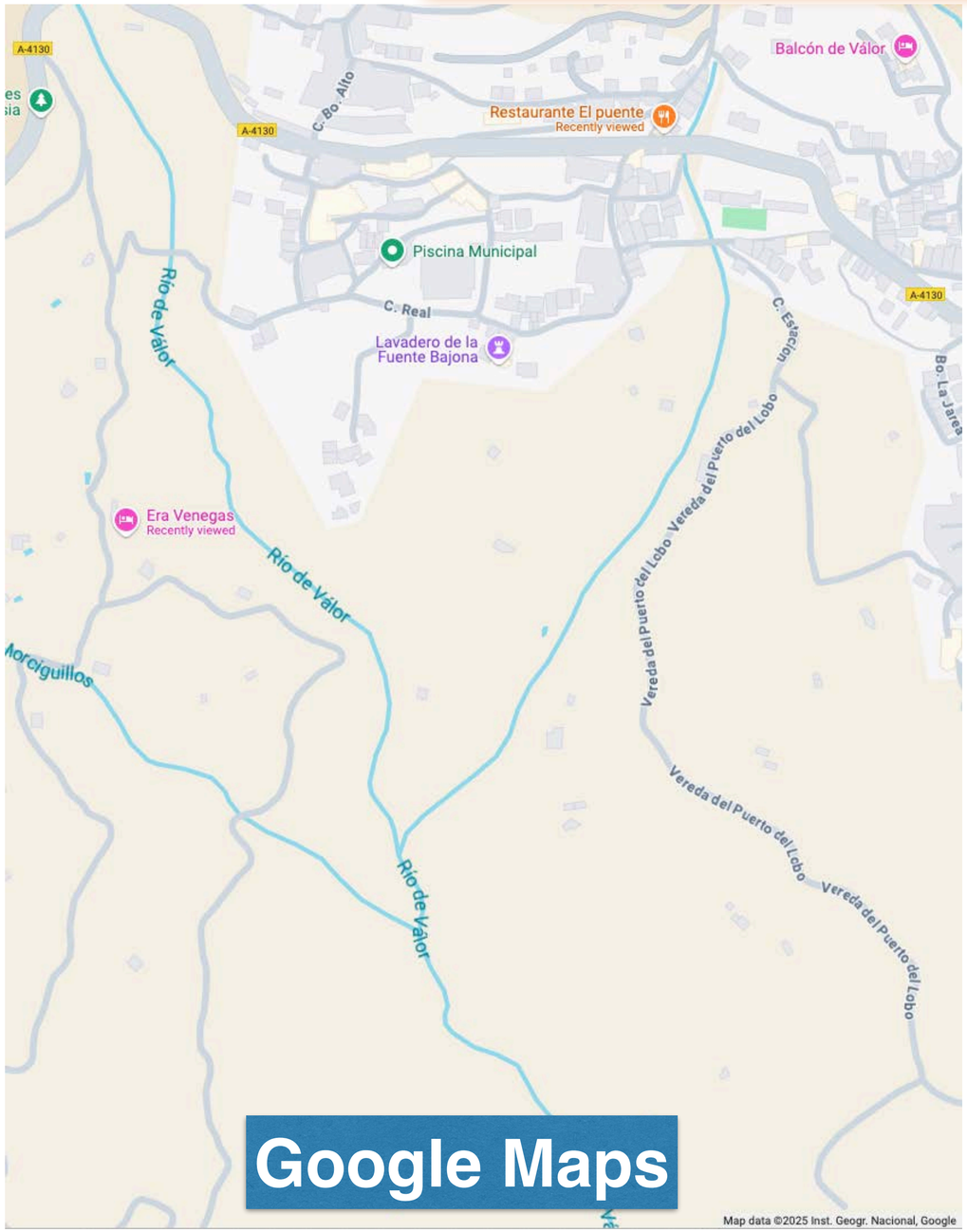


Why? Por que?

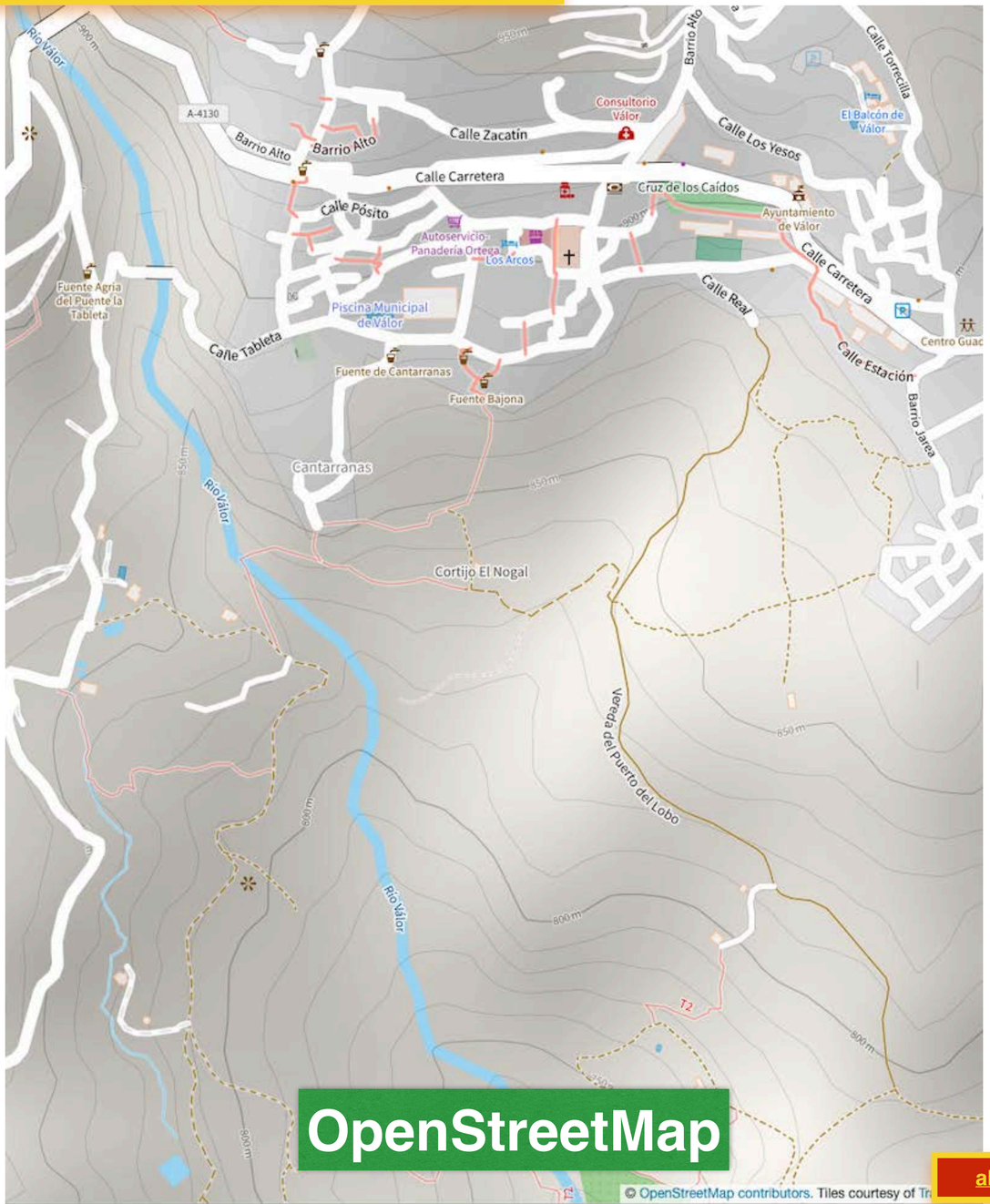
Three Reasons
Tres Razones

Reason 1

More detailed maps in rural areas



Google Maps



OpenStreetMap

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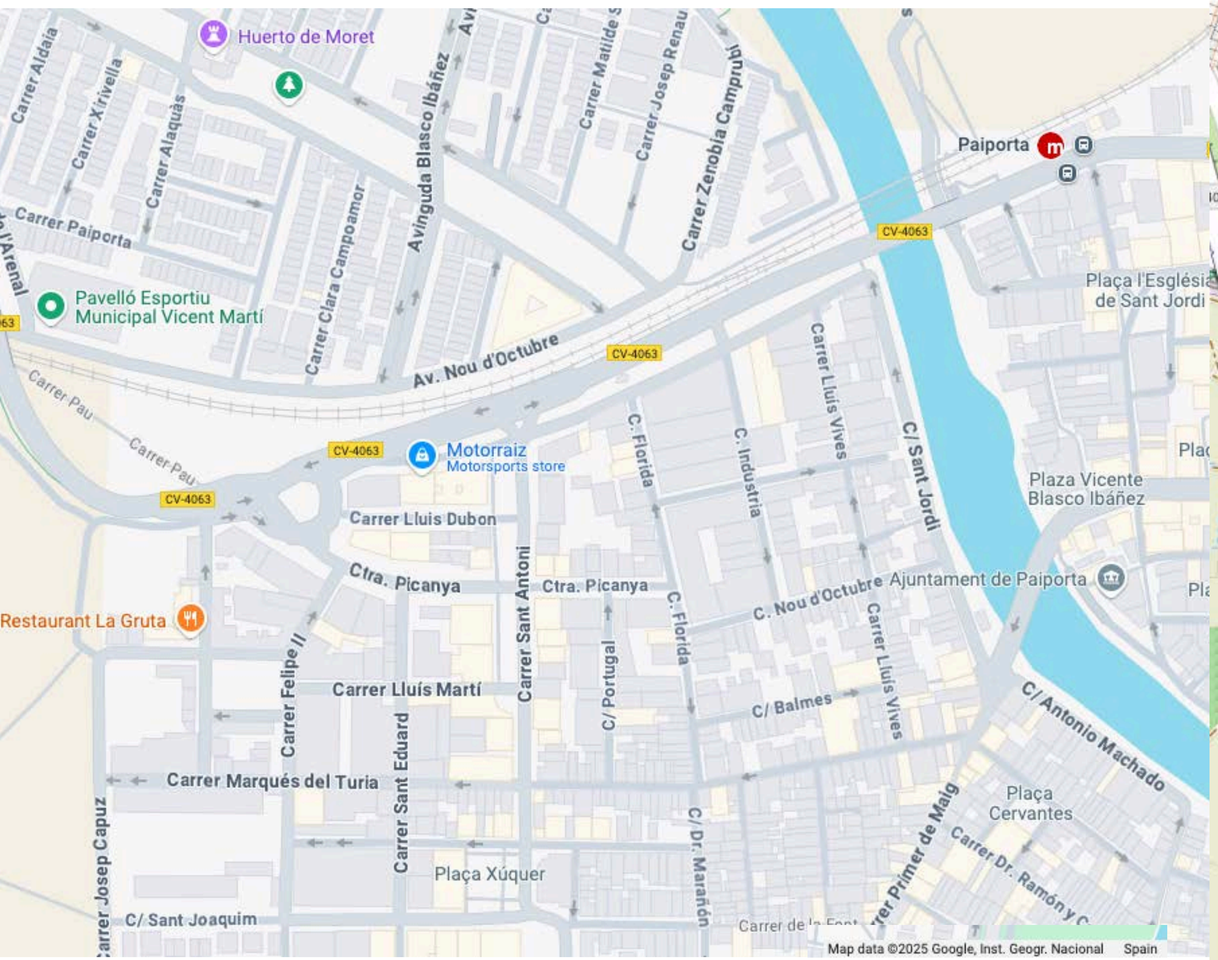
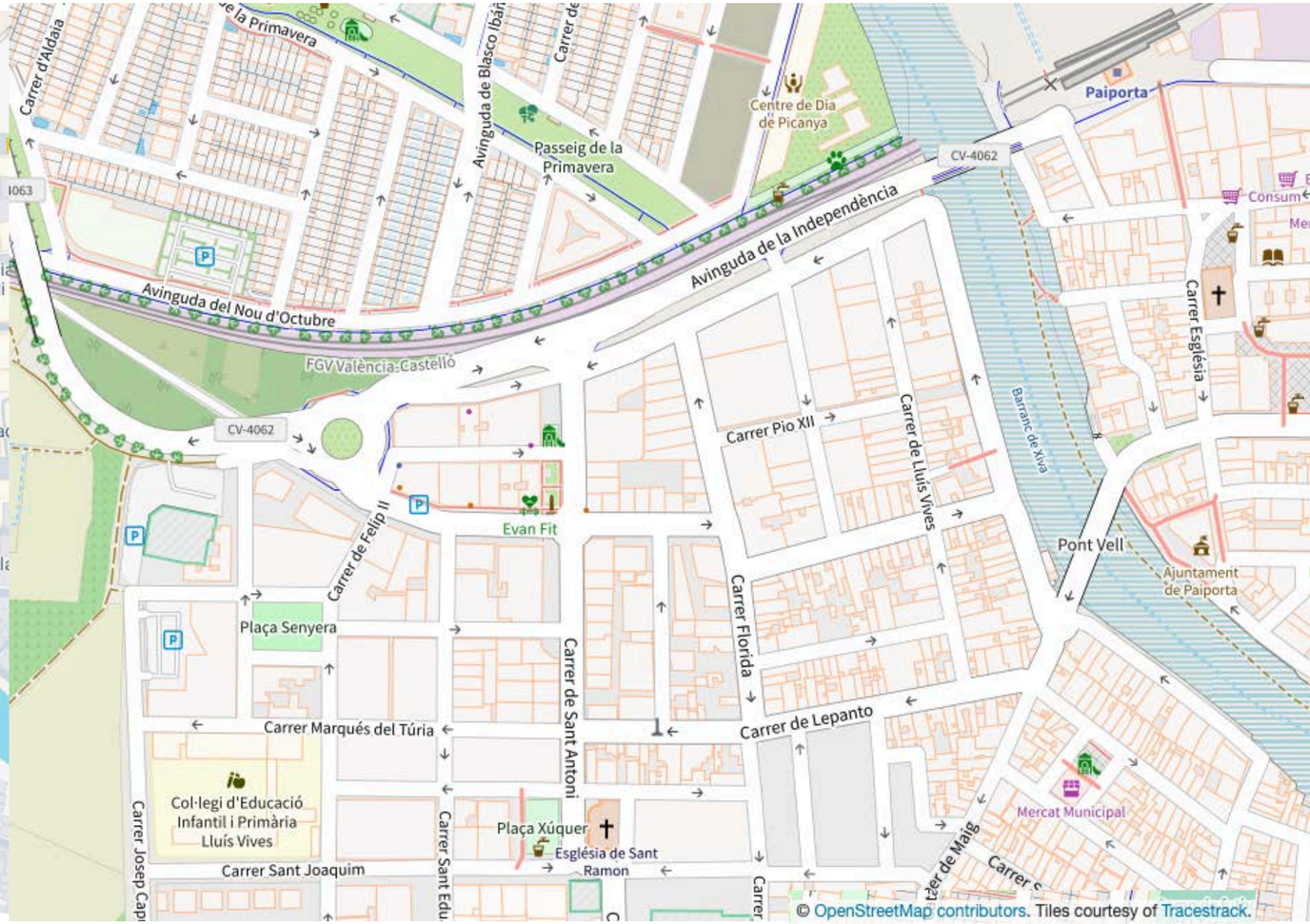
Reason 1

More detailed maps in general





Google Maps

OpenStreetMap

Reason 1

Pedestrian Routing - Google Maps vs CoMaps (OSM)

Routing over car roads: 29 min

Routing over "Senderos": 22 min

"Take me to G&T"

Google Maps

CoMaps (OSM)

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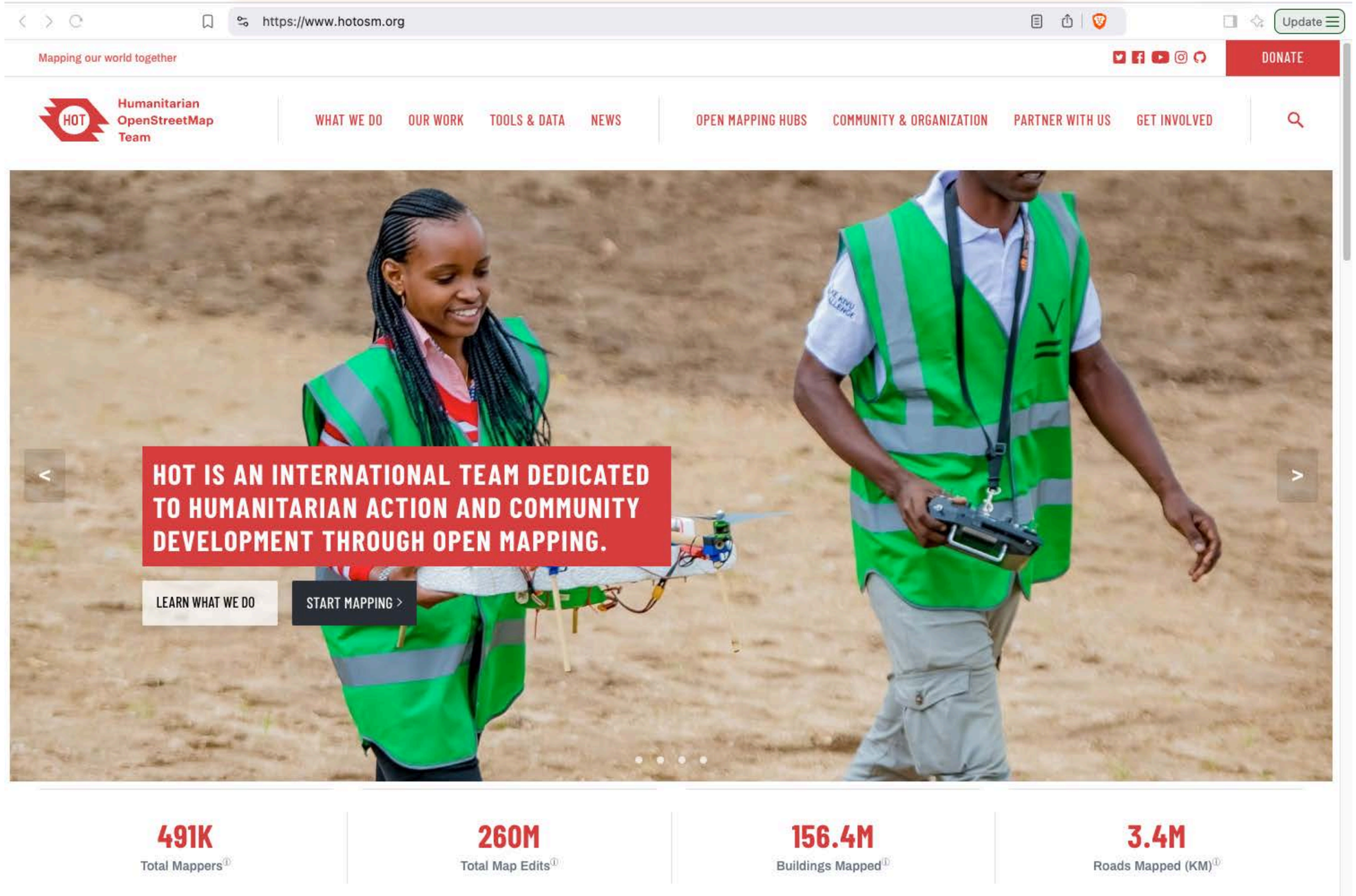
Reason 2

Disaster Response and Humanitarian Mapping



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Reason 2

Disaster Response and Humanitarian Mapping

Humanitarian OpenStreetMap Team
23,363 followers
2mo •

#OSM Community, we urgently need your help to map roads and pathways in #Valencia and other affected municipalities due to severe flooding from #DANA. Your contributions can make a huge difference in the response efforts! Let's map: http://bit.ly/SPNFloods24

https://tasks.hotosm.org/projects/17948

Mapping our world together — Humanitarian OpenStreetMap Team Website

Tasking Manager — EXPLORE PROJECTS | MY CONTRIBUTIONS | LEARN | ABOUT | SUPPORT — justb

#17948 | OSM España — HIGH

SPAIN FLOODS 2024: VALENCIA ROADS AND PATHS (OTHER AFFECTED MUNICIPALITIES)

Spain Floods 2024 · Spain · disaster response

On 29 October 2024, torrential rain caused by an isolated low-pressure area at high levels brought over a year's worth of precipitation to several areas in southeastern Spain, including the Valencian Community. The resulting floodwaters caused the deaths of at least 205 people and substantial property damage. It is one of the worst natural disasters in the history of Spain by the number of confirmed deaths. See more in the October 2024 Spain floods Wiki.

The OSM España community has identified it as a priority to complete the road network in the most affected region. Please contribute to this project to fill these data needs. See more in the España/Humanitario/DANA 2024 Wiki.

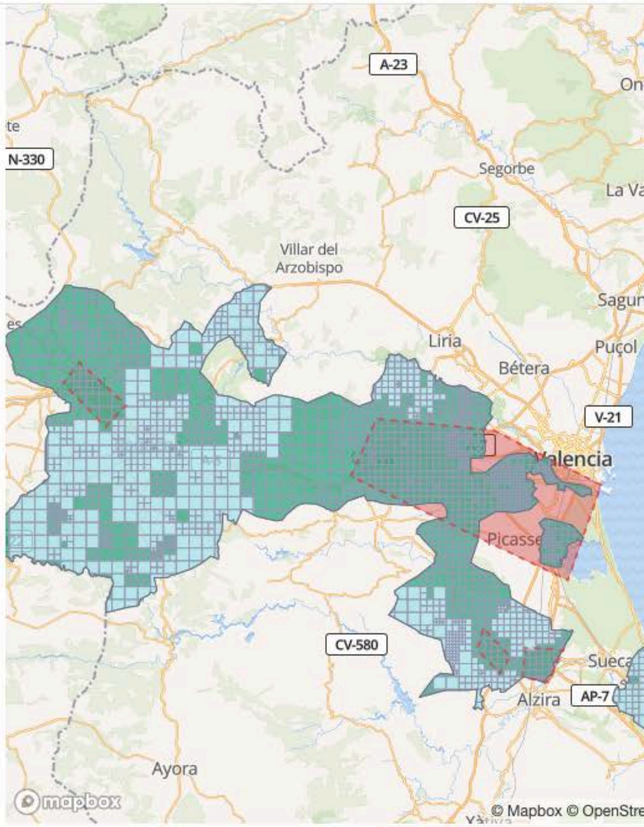
Please map the priority area marked in red first. When that area is nearly finished, move to the rest

TYPES OF MAPPING

IMAGERY
ESRI World Imagery

694 contributors — Last contribution 1 month ago

Moderate — No due date specified



Overview · Description · Coordination · Teams & Permissions · Questions and comments · Contribution — Share — Add to Favorites — Contribute

DANA Valencia (2024): OSM played a crucial role in mapping flood-affected areas

alpumapa.xyz

Reason 2

Real-Life Examples - DANA Valencia - Oct 29 2024

Telegram

OSM España
516 members, 71 online

Pinned message #1
Bienvenida/o al grupo de mensajería instantánea de la Comunidad de OpenStreetMap en España NORMAS DEL GRUPO: 0- Este grupo es para hablar...

Translate to English

(tres toros, qué coincidencia!)

H ;) 21:41
Gente!! Activemos nuestro propio "HOT". A causa de la DANA varios puentes han caído y otras carreteras han desaparecido y van a tardar en volver. Especialmente zona de Valencia/Albacete

La pasarela de Picanya ya la he quitado yo. 21:42

Si conocéis otra zona no dudéis de actuar sobre puentes y otros elementos que tardarán en volver. yo he añadido destroyed al bridge=yes quedando
destroyed:bridge=yes 1 21:47

He ido aquí ...pero no he visto nada. ¿No había una página con todas estas etiquetas? 21:50
https://wiki.openstreetmap.org/wiki/Disaster-specific_tags

Jordi M 21:53
Yo solo he encontrado información útil en la página de 'destroyed' (https://wiki.openstreetmap.org/wiki/Key:destroyed:*)

Por cierto, 'destroyed:*' también debe de ponerse en la etiqueta highway, ¿no?

H ;) 21:54
sí

así lo he hecho, he dejado el nombre solo 21:54

la V-30 estará fuera de servicio algún día pero yo no la modificaría a no ser que se cayera algún puente 21:54

Tenemos trabajo. Id siguiendo las indicaciones de los vídeos 22:02
https://www.levante-emv.com/videos/camp-turia/2024/10/29/puente-vilamarxant-completamente-agrietado-limite-110838782.html

> Levante-EMV
> **El puente de Vilamarxant, completamente agrietado y al límite de derrumbarse**

fer 22:24
> H ;)
> Si conocéis otra zona no dudéis de actuar sobre puentes y otros elementos que tardarán en volver. yo h...

Yo hice esto mismo en 2 sitios por la dana del año pasado por el centro, luego lo arreglan y se quita el prefijo

Pinned message #1
Bienvenida/o al grupo de mensajería instantánea de la Comunidad de OpenStreetMap en España NORMAS DEL GRUPO: 0-

Translate to English

Jose Luis Infante admin
Así se ve desde el aire el destrozo que ha provocado la DANA en el by-pass | Las Provincias
https://www.lasprovincias.es/comunitat/aire-destrozo-provocado-dana-bypass-20241031111747-nt.html

> Las Provincias
> **Así se ve desde el aire el destrozo que ha provocado la DANA en el by-pass | Las Provincias**
> El Ministro Óscar Puente describió este punto como «crítico» por su situación

Esto lo tenemos?

01 November 2024

Jordi M
Lo estoy mirando

> Jose Luis Infante
> Esto lo tenemos?

Editado: https://www.openstreetmap.org/way/1317611449 y https://www.openstreetmap.org/way/1317611451

> OpenStreetMap
> **Way: Autovía del Mediterráneo (1317611449)**
> OpenStreetMap is a map of the world, created by people like you and free to use under an open license.

Matrix Telegram Bridge
Nukeador: Hola, comentaba con Jordi M como podemos ayudar en la zona del DANA, si usando el https://tareas.openstreetmap.es/explore para coordinar mapeos

Jordi M
Bienvenido Nuke. Reenvío tus mensajes para que la gente sepa que ya te has presentado en el grupo valenciano de OSM:

Jordi M
Forwarded messages

> Nuke 1/11/24
> Hola, pertenezco a la comunidad de datos abiertos PucelaBits en Valladolid, y nos preguntábamos cómo

alpumapa.xyz

Reason 3

OpenStreetMap Apps as Big Tech Alternatives

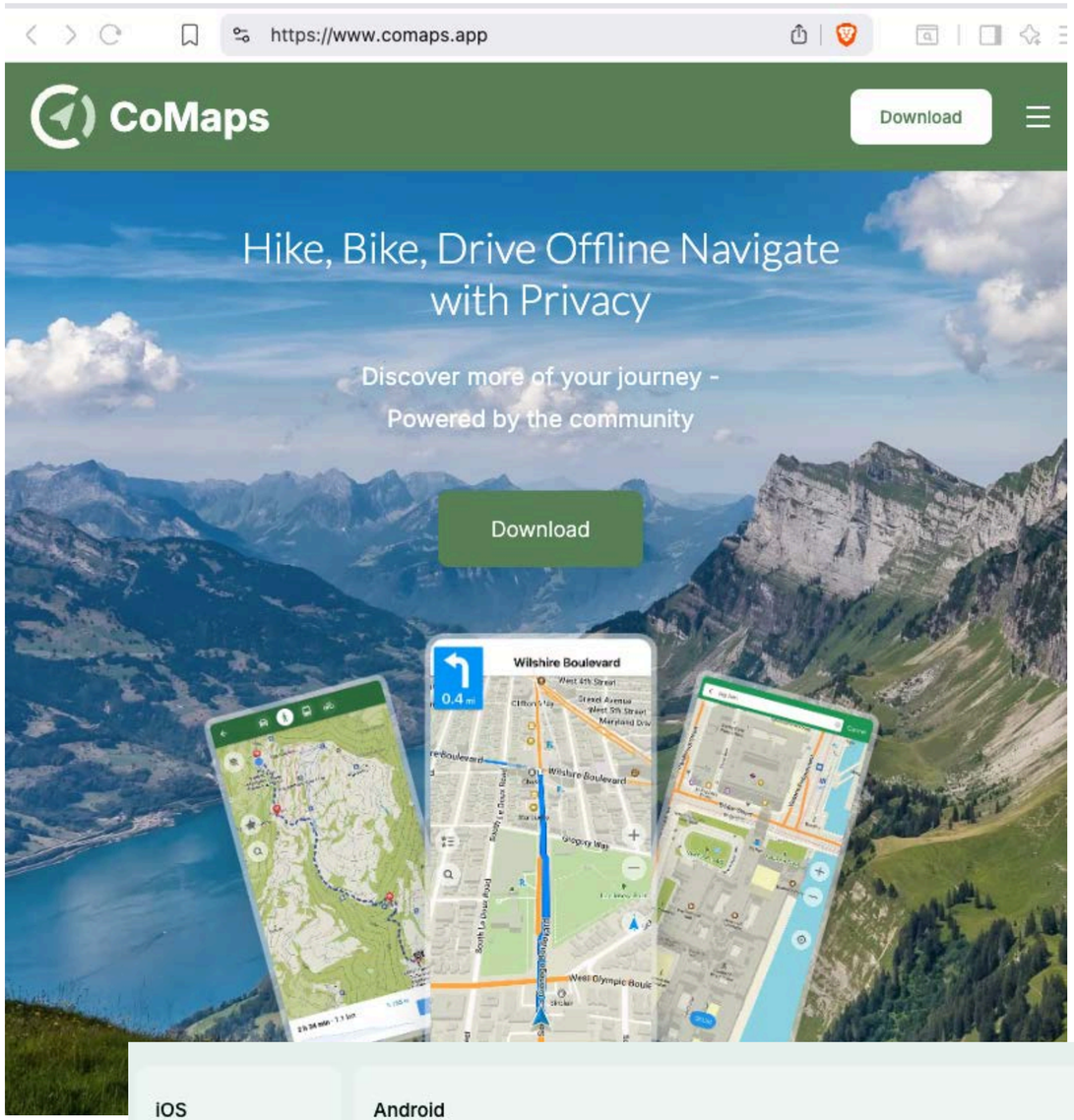
- People moving away from “USA Big Tech Apps”

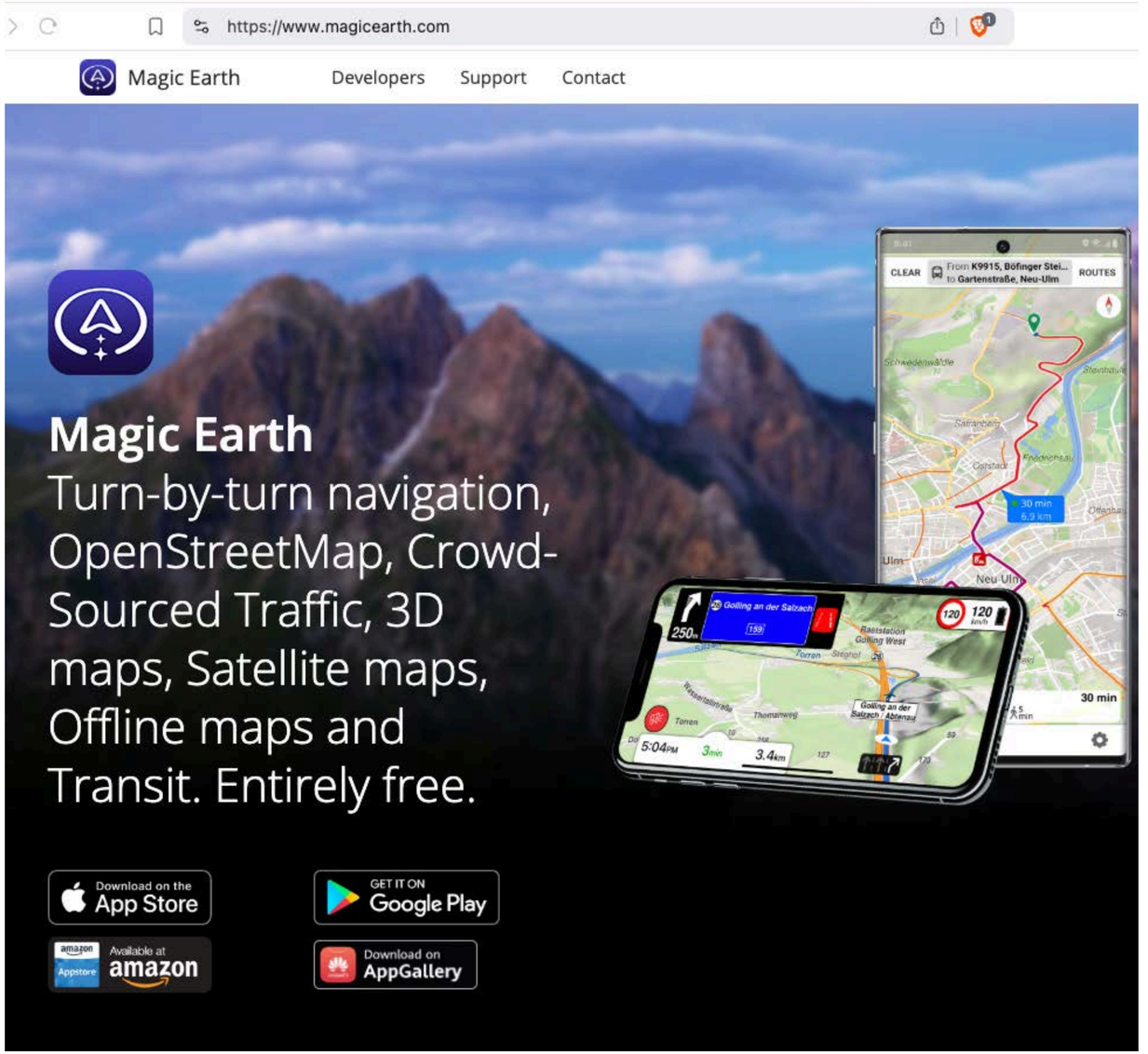
- Switch to alternatives
  - from Twitter/X/FaceBook to Mastodon
  - from WhatsApp to Signal
  - from Instagram to PixelFed
  - etc

- OpenStreetMap fits in this trend
  - from Google Maps to CoMaps, MagicEarth, OSMAnd..

Reason 3

OpenStreetMap Apps as Big Tech Alternatives





So?

Three Reasons - One Word

Never mind the $@*% , Let's take Mapping in our own hands*

Empowerment - Empoderamiento

alpumapa.xyz

Outdoor Apps Using OpenStreetMap

- CoMaps: offline maps with navigation for hiking and cycling
- Komoot: route planning for outdoor activities like hiking and biking
- AllTrails: provides trail maps and reviews for hiking and running
- Wikiloc: trail sharing and GPS navigation for outdoor enthusiasts
- OsmAnd: Offline maps with navigation and rich outdoor features

Editing and Contributing to OSM with Smartphone Apps

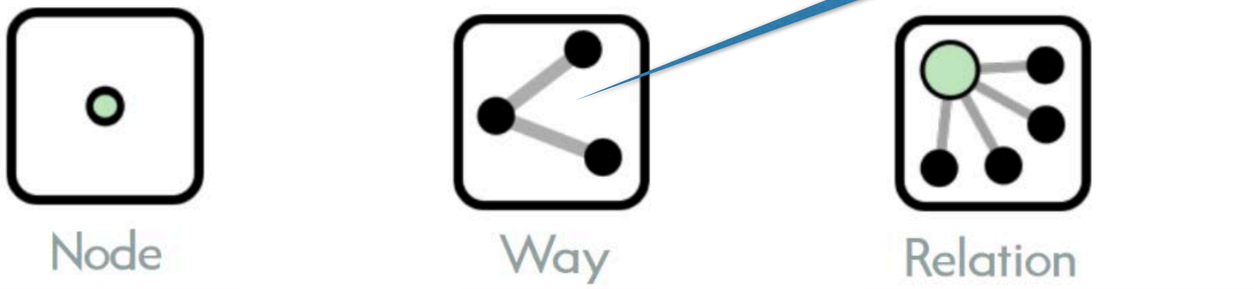
- **EveryDoor - every-door.app**
  add or edit businesses, amenities, and more
- **StreetComplete - streetcomplete.app**
  improve map by answering map-related questions
- **CoMaps - comaps.app**
  also allows direct edits to OSM data
- **Many more like Vespucci, Go Map, MapComplete.. ,,**

OpenStreetMap Inner Workings

- **IT IS ALL ABOUT DATA!**
  could have called project ***OpenGeoData***
- **OSM DATA IS IN ONE BIG DATABASE**
  maps like **openstreetmap.org** made with this data
- **ECOSYSTEM OF “APPS” TO EDIT OSM DATA**
  like Id, JOSM, EveryDoor, StreetComplete etc

Diving Deeper - How is OSM Data Structured?

1. Core Elements:



Also Closed Ways: Areas like Orchards, Buildings,..

	Node	Way	Relation
	“Points”	“Lines”	“Combinations”
Examples:	Church, Restaurant, Bench etc	Roads, Paths, Tracks, etc	Busline, Hiking Route

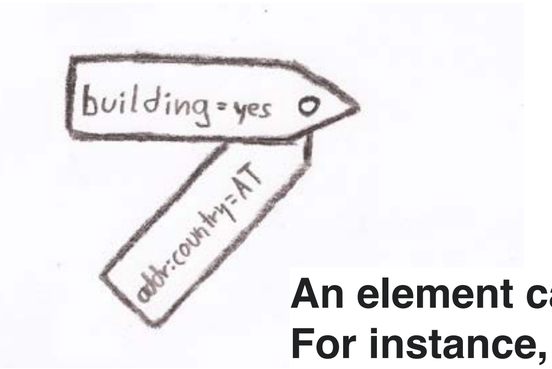
wiki.openstreetmap.org/wiki/Beginners_Guide_1.3

Nice Overview: jakobmiksch.eu/post/openstreetmap_overview/

Diving Deeper - How is OSM Data Structured?

2. Tagging

The Elements Nodes, Ways, Relations have “Tags”



Tags are textual key-value pairs that describe properties of an Element

An element can have tags. A tag is a `key=value` pair describing what the element is.
For instance, mapping a mobile phone store can be done by creating a node,
and adding the following tags: `shop=mobile_phone`. `name=John Smith's phone centre`.

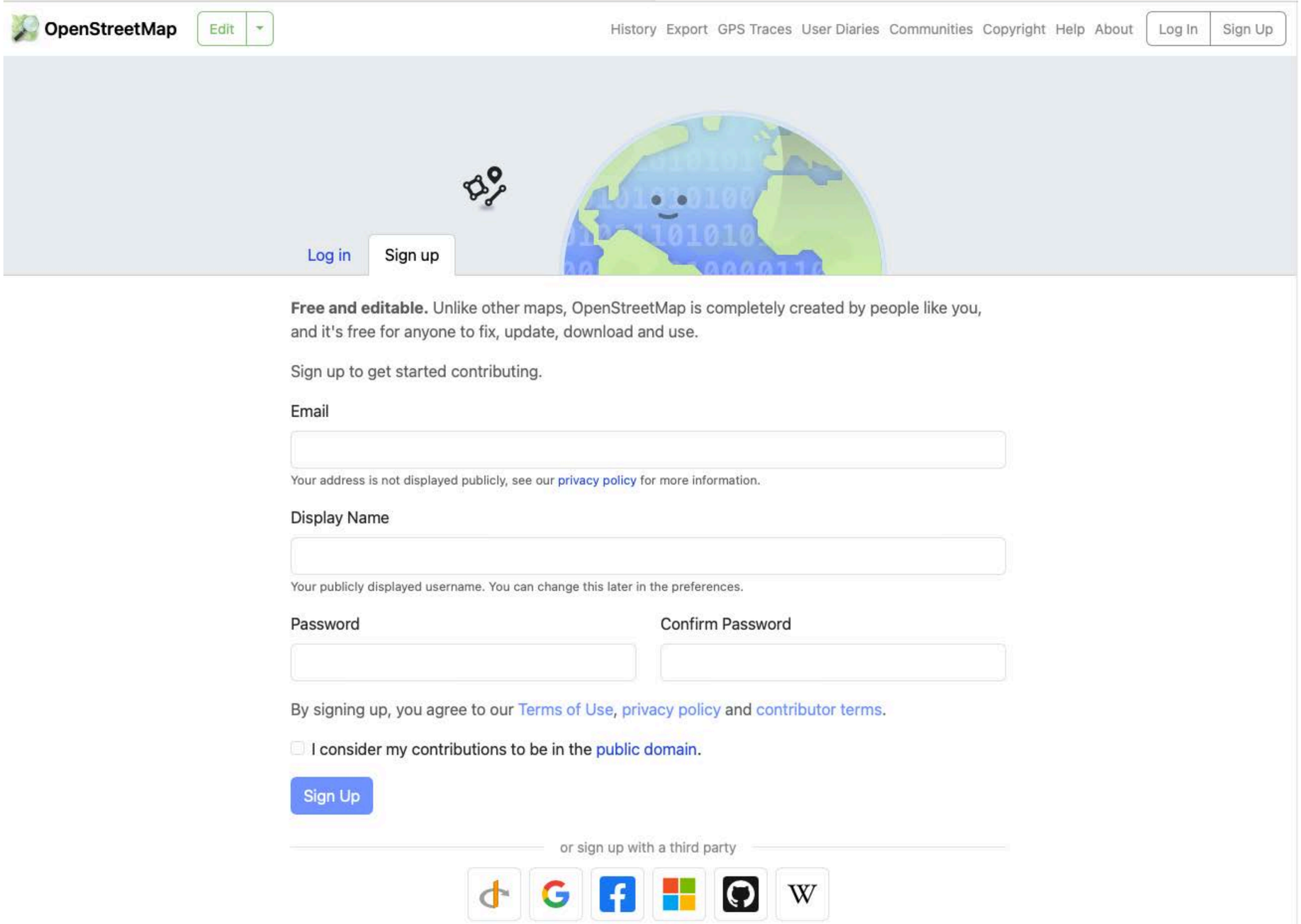
Here are some more examples:

- A parking lot can be a closed way tagged with `amenity=parking`
- A building can be a closed way tagged with `building=yes`
- A residential road can be a way tagged with `highway=residential`.
- A McDonald's branch can be a node tagged with `amenity=fast_food`, `brand=McDonald's`, `name=McDonald's`

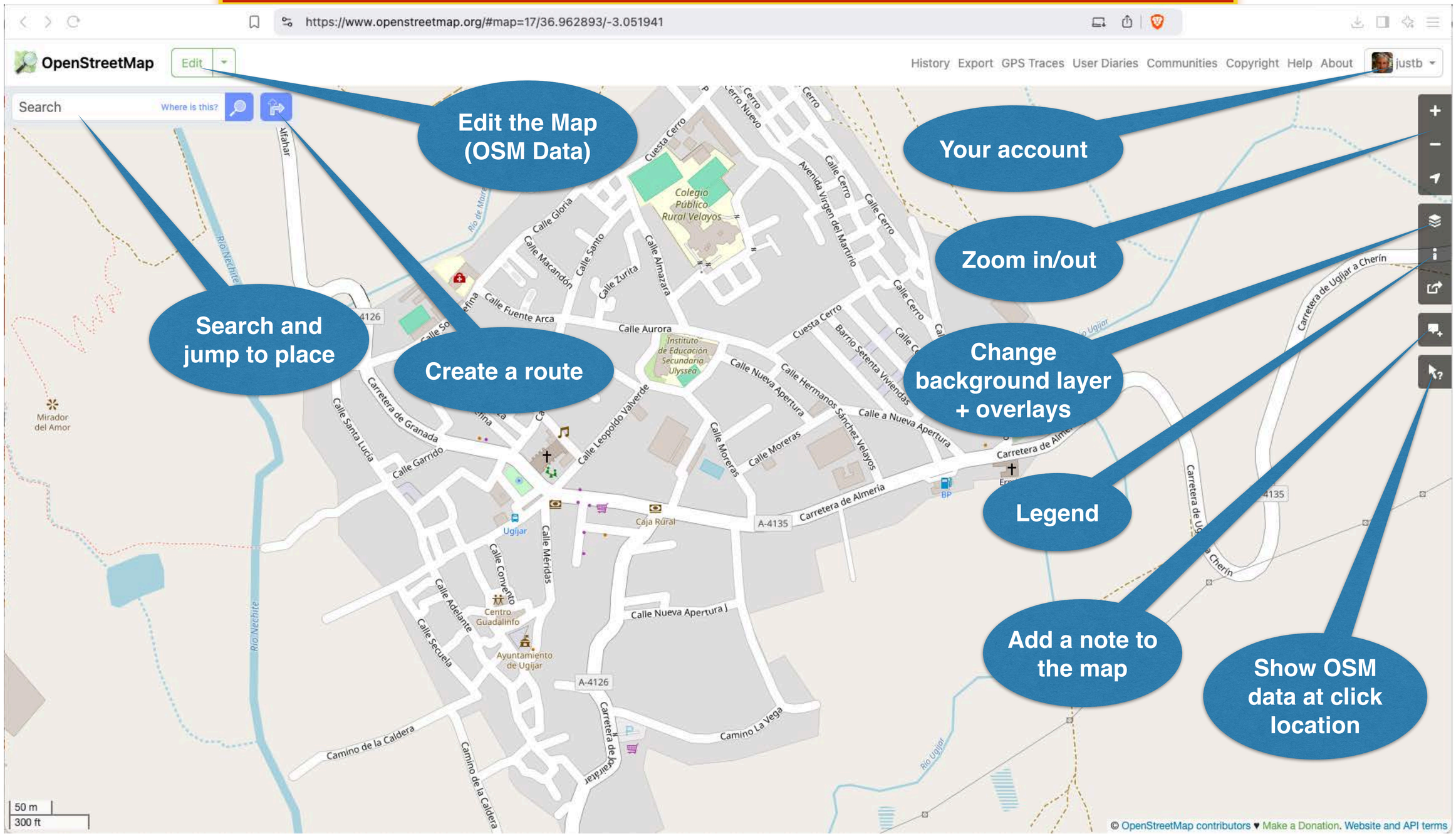
wiki.openstreetmap.org/wiki/Beginners_Guide_1.3

Nice Overview: jakobmiksch.eu/post/openstreetmap_overview/

Signup at openstreetmap.org/user/new



Navigating the openstreetmap.org website



ON TO THE WORKSHOP

GO TO alpumapa.xyz

Thanks! Questions?

Home: justobjects.nl
Mastodon: mapstodon.space/@justb4
LinkedIn: linkedin.com/in/justb4/

OSM Workshop: alpumapa.xyz