Mapping Futures:

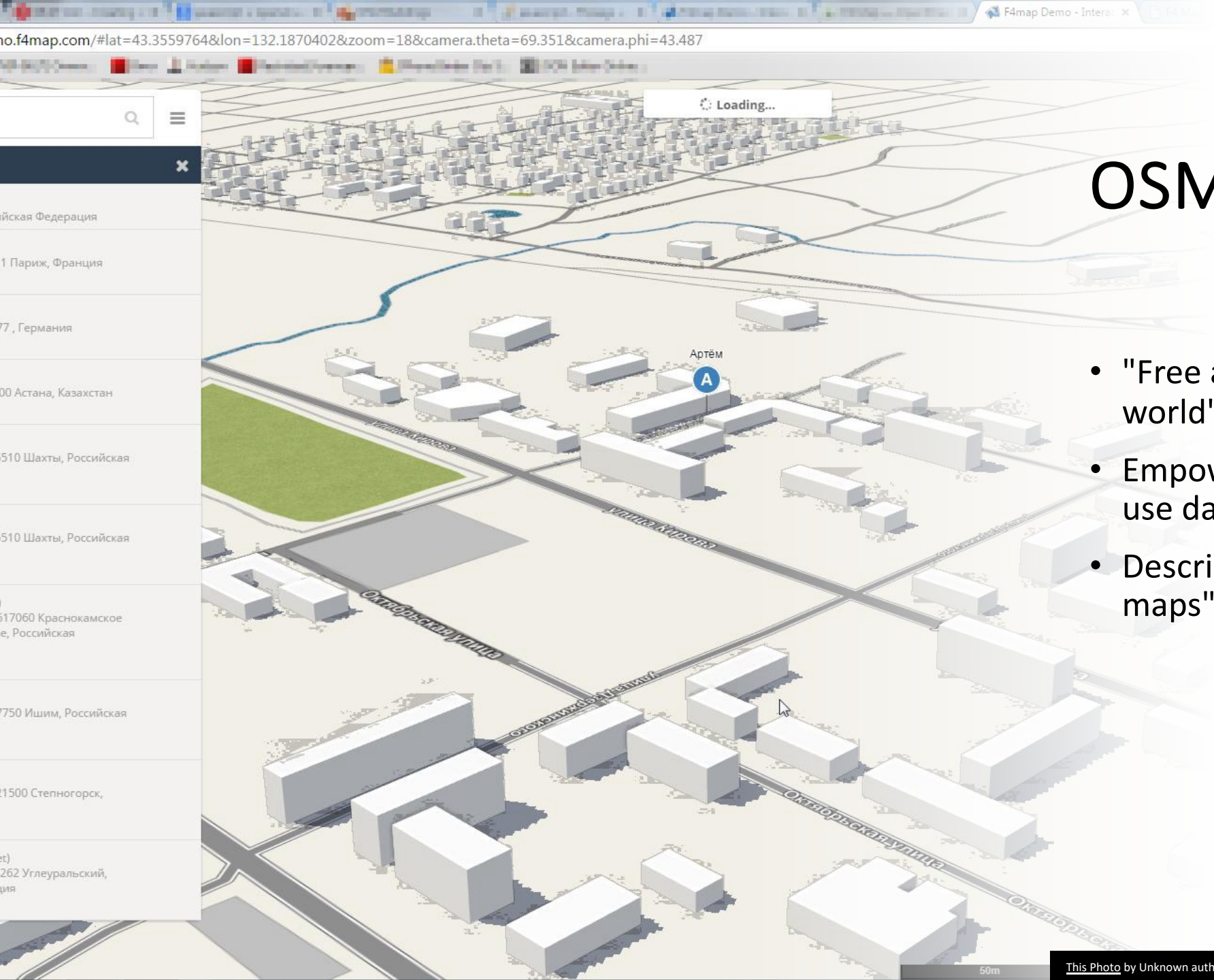
Empowering Students and Communities through OpenStreetMap and GIS

2007-09-14

Introduction to OpenStreetMap

- "Have you heard of OpenStreetMap (OSM)?"
- Comparison with Google Maps
- Introduction to a user-created worldwide detailed database

This Photo by Unknown author is licensed under CC BY-NC-ND.



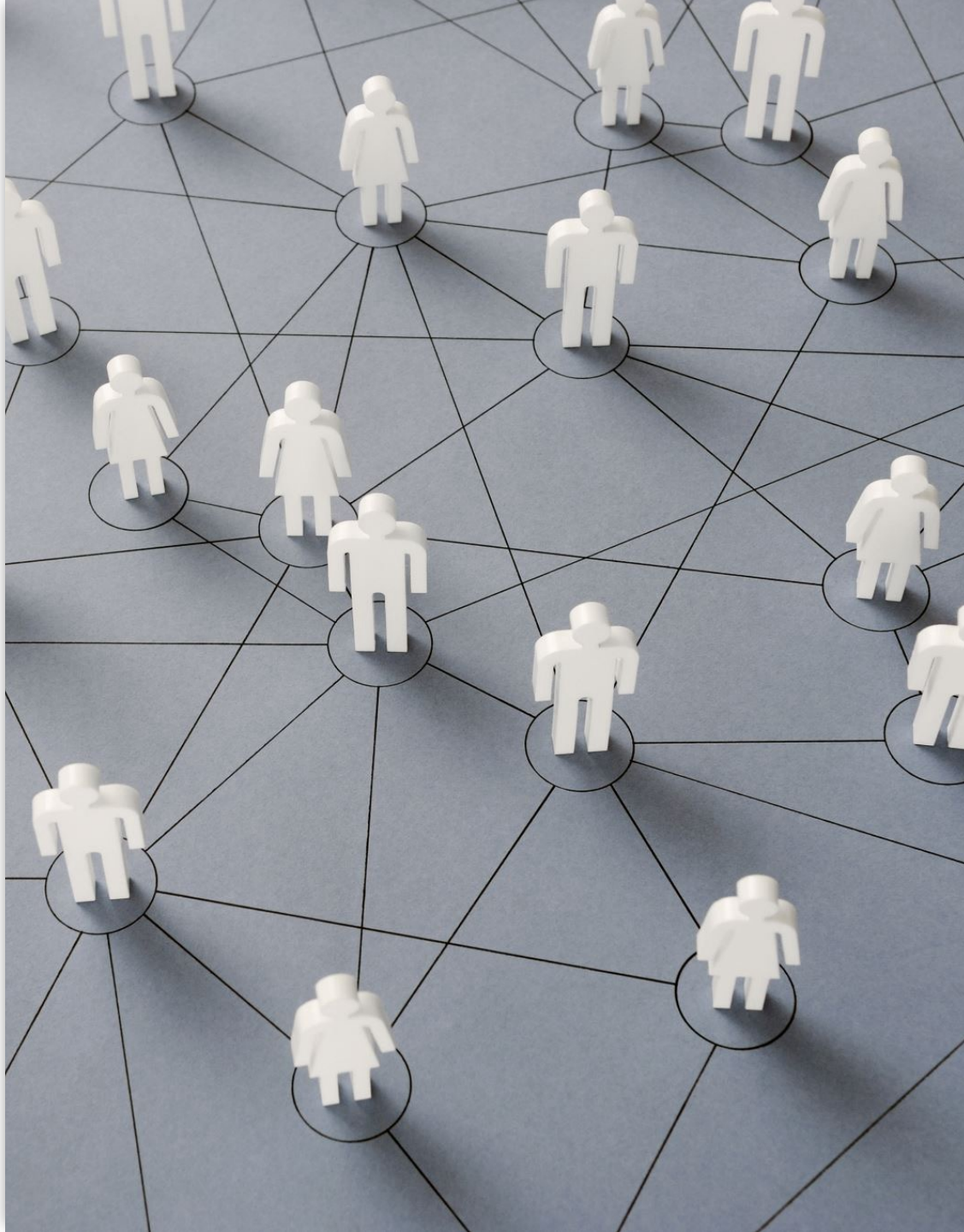
OSM Overview

- "Free and open web map of the world"
- Empowering users to add and use data freely
- Described as the "Wikipedia of maps"

This Photo by Unknown author is licensed under CC BY-SA.

OSM Community Engagement

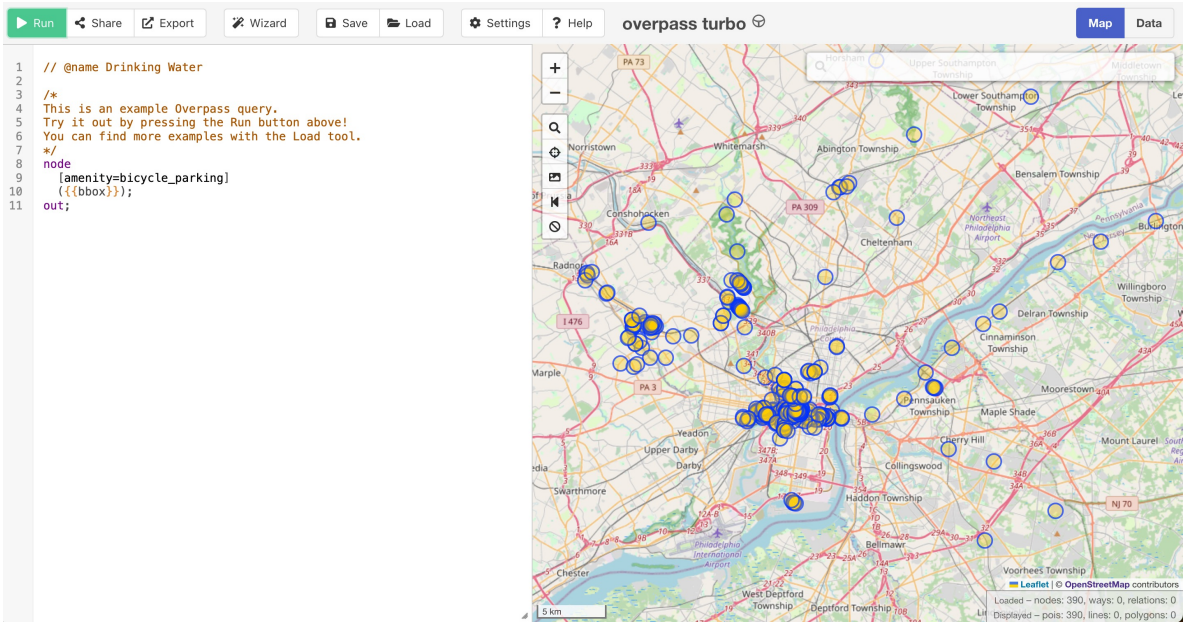
- "Managed by volunteers worldwide"
- "Internet connection and email address - all you need to contribute"
- Emphasis on user-driven data collection

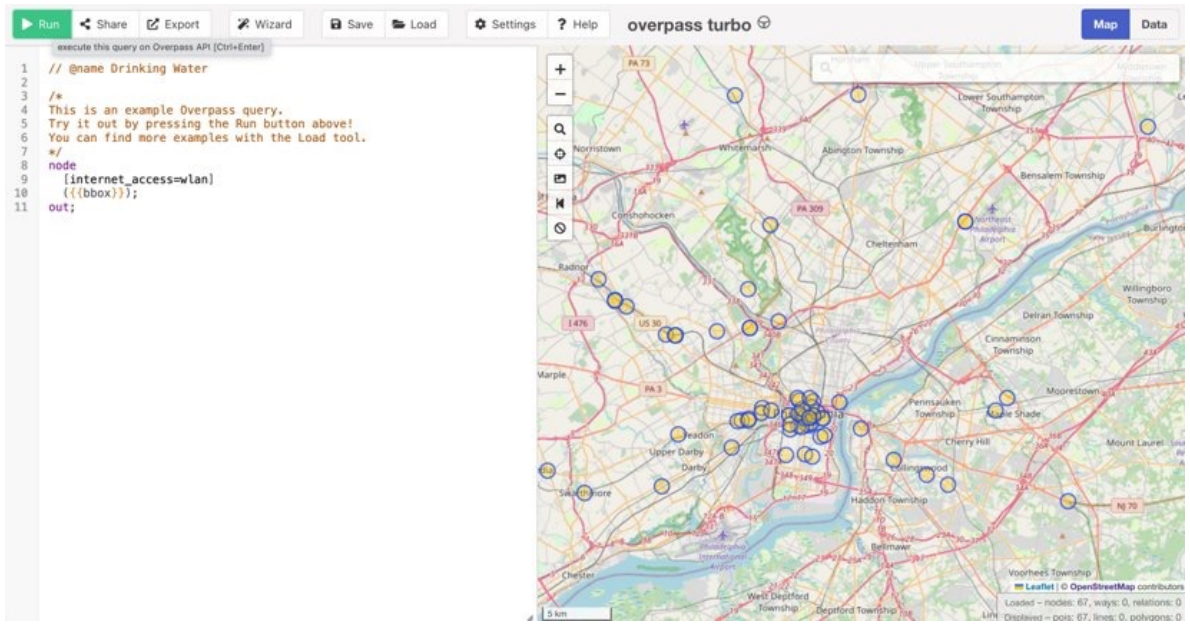


Why Choose OSM Over Google Maps

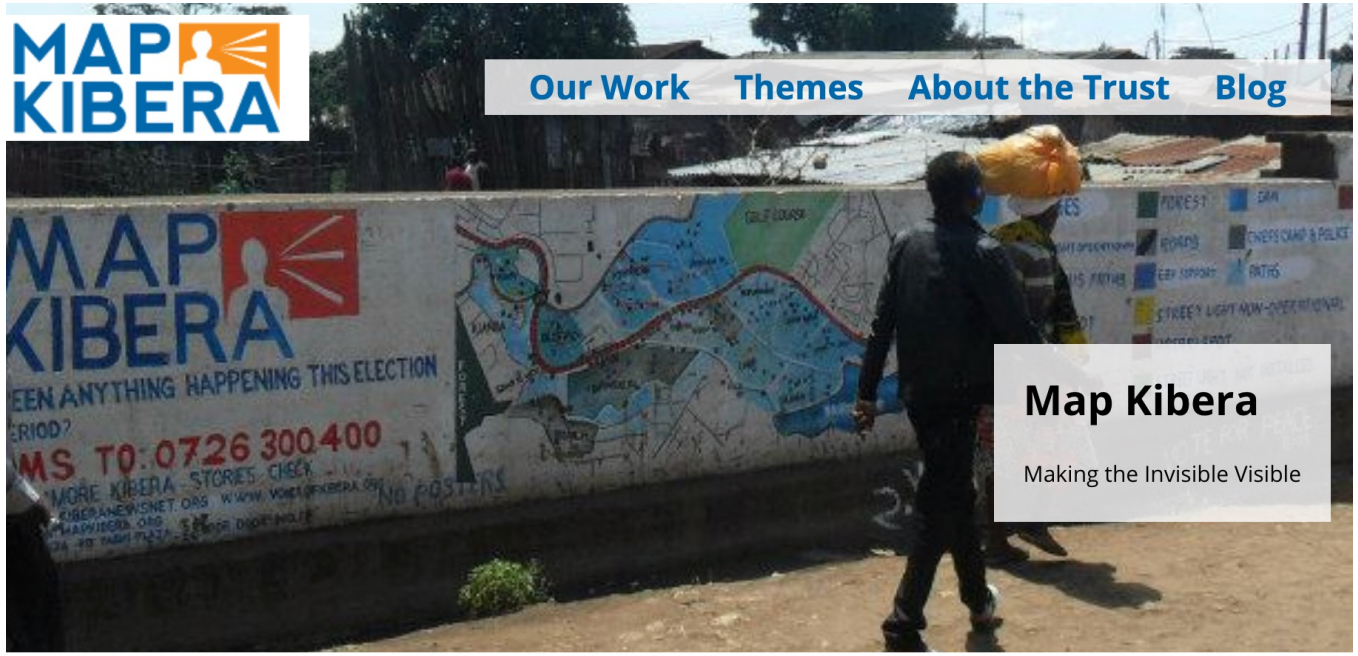
- "Avoid giving data for free to corporations"
- Open-content license vs. Google's data monetization
- OSM's free usage for any purpose

OSM Use Cases



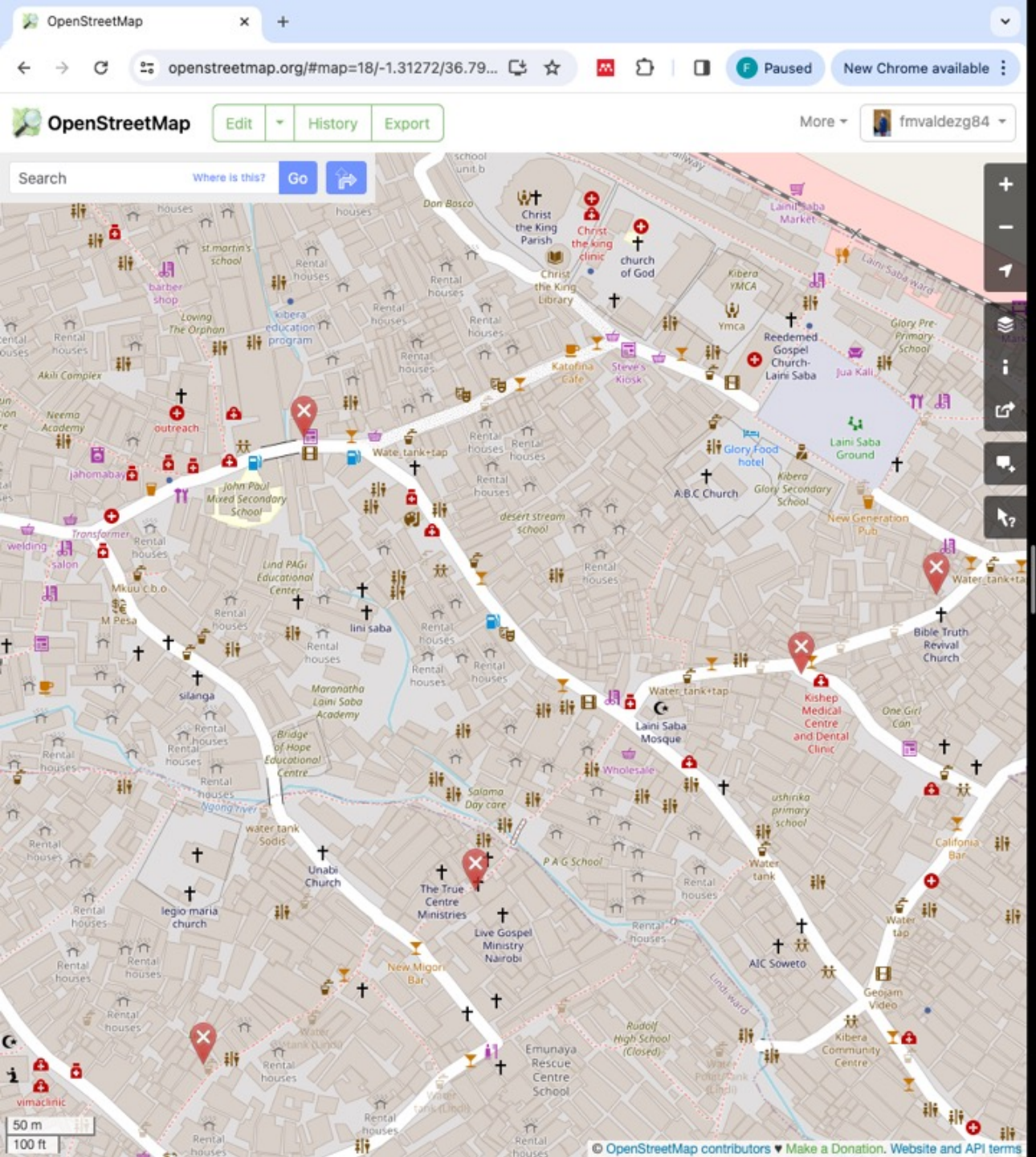


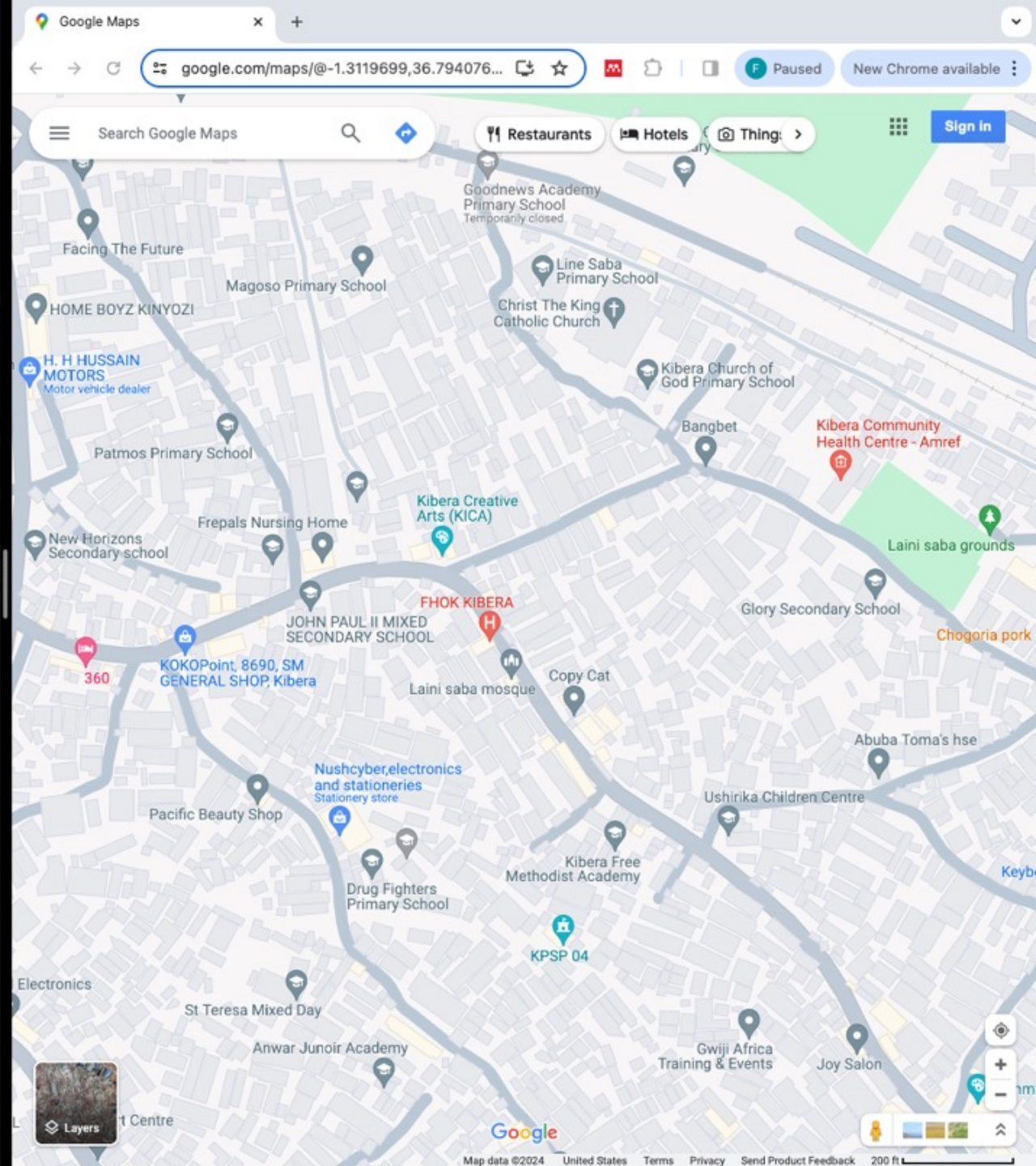
Overpass Turbo



User-Driven Detailed Information

- "Users decide what information is important to add/update"
- Contrasting Google Maps and OSM in specific regions
- Example of detailed mapping in Kibera, Nairobi


OpenStreetMap
openstreetmap.org/#map=18/-1.31272/36.79...
Paused
New Chrome available
OpenStreetMap
Edit
History
Export
More
fmvaldezg84
Search
Where is this?
Go
Christ the King Parish
Christ the king clinic
church of God
Christ the King Library
Kibera YMCA
Ymca
Reedemed Gospel Church-Laini Saba
Glory Pre-Primary School
Katofina Cafe
Steve's Kiosk
Jua Kali
Laini Saba Ground
Glory Food hotel
A.B.C Church
Kibera Glory Secondary School
New Generation Pub
Water tank+tap
Bible Truth Revival Church
Kishep Medical Centre and Dental Clinic
Laini Saba Mosque
Wholesale
One Girl Can
Salama Day care
ushirika primary school
Water tank
California Bar
Water tap
AIC Soweto
Geojam Video
Kibera Community Centre
Rudolf High School (Closed)
Emunaya Rescue Centre School
The True Centre Ministries
Live Gospel Ministry Nairobi
New Migori Bar
Unabi Church
legio maria church
water tank Sodis
Ngong river
Bridge of Hope Educational Centre
Maranatha Laini Saba Academy
Lind PAG Educational Center
lini saba
silanga
Mkuu c.b.o
M Pesa
welding
salon
Transformer
John Paul Mixed Secondary School
outreach
jahomabay
Wate tank+tap
desert stream school
Laini Saba Market
Laini-Saba Ward
Kibera education program
Akili Complex
Neema Academy
Loving The Orphan
barber shop
st.martin's school
Dan Bosco
school unit b
Rental houses
vimacilinic
50 m
100 ft
© OpenStreetMap contributors ♥ Make a Donation. Website and API terms


Google Maps
google.com/maps/@-1.3119699,36.794076...
Paused
New Chrome available
Search Google Maps
Restaurants
Hotels
Things
Sign in
Goodnews Academy Primary School
Temporarily closed
Facing The Future
Magoso Primary School
Line Saba Primary School
HOME BOYZ KINYOZI
Christ The King Catholic Church
H. H HUSSAIN MOTORS
Motor vehicle dealer
Kibera Church of God Primary School
Bangbet
Kibera Community Health Centre - Amref
Patmos Primary School
Kibera Creative Arts (KICA)
Frepals Nursing Home
New Horizons Secondary school
Laini saba grounds
FHOK KIBERA
JOHN PAUL II MIXED SECONDARY SCHOOL
Glory Secondary School
Chogoria pork
360
KOKOPoint, 8690, SM GENERAL SHOP, Kibera
Laini saba mosque
Copy Cat
Abuba Toma's hse
Nushcyber,electronics and stationeries
Stationery store
Pacific Beauty Shop
Ushirika Children Centre
Kibera Free Methodist Academy
Drug Fighters Primary School
KPSP 04
Electronics
St Teresa Mixed Day
Anwar Junoir Academy
Gwiji Africa Training & Events
Joy Salon
Layers
Google
Map data ©2024
United States
Terms
Privacy
Send Product Feedback
200 ft

Major OSM Communities and Projects

youthmappers

MISSING MAPS

HOT Humanitarian OpenStreetMap Team

MAPPING USA
OPENSTREETMAP US

STATE OF THE MAP US 2024 SALT LAKE CITY · UTAH ·

Benefits of OSM in Education

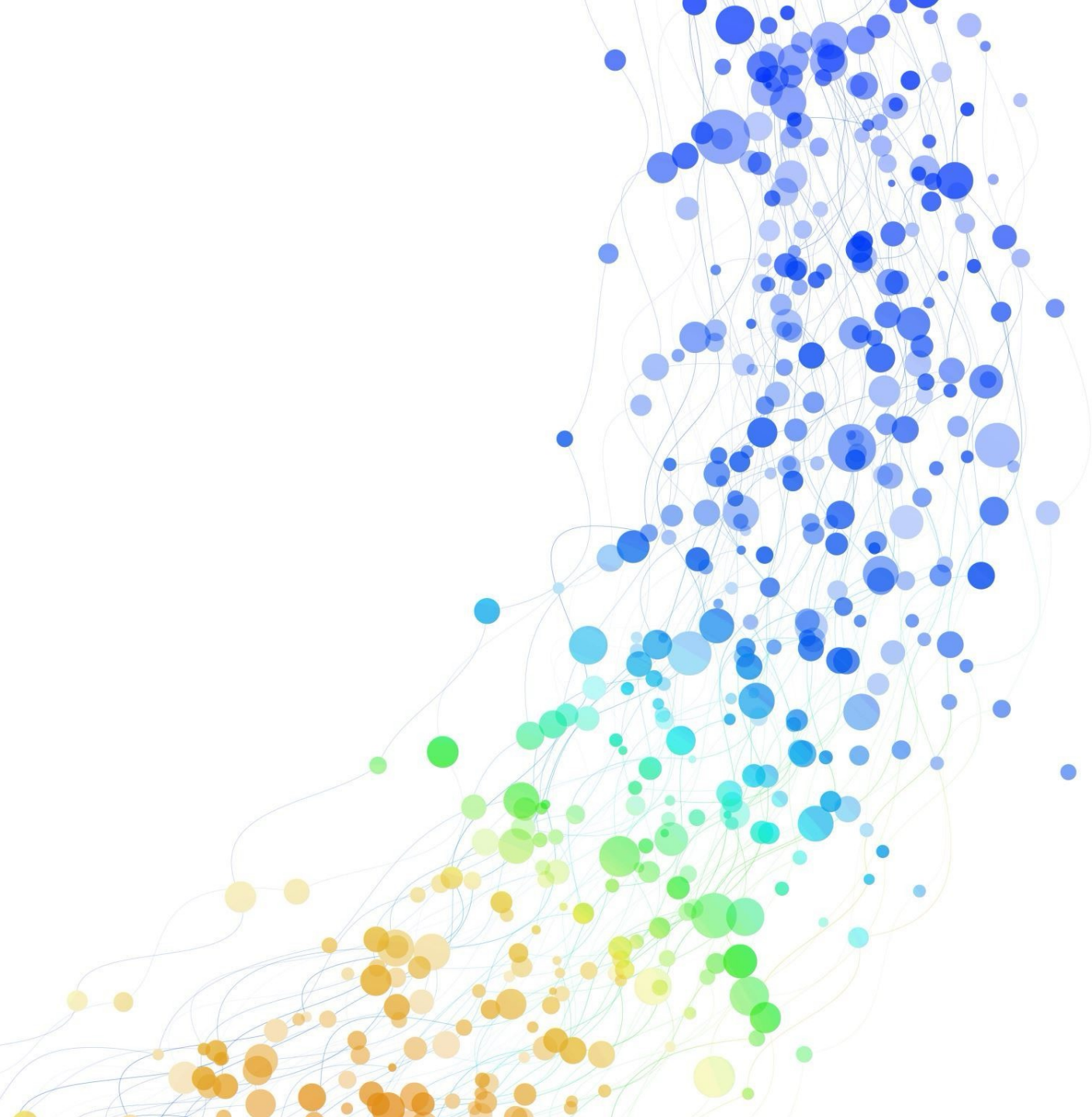
Benefits of OSM in Education

- Hands-On Learning Experience
- Community Engagement
- Cross-Disciplinary Applications
- Digital Literacy Enhancement
- Global Perspective
- Problem-Solving Skills
- Networking and Collaboration
- Open Data Advocacy

This Photo by Unknown author is licensed under CC BY.

Activities for students & faculty

- Volunteer mapping.
- Join a mapathon.
- Organize a mapathon.
- Field data collection
- Use the data (for app developing)
- Analyze OSM data



Thank You

GIS and Mapping at Temple Libraries

Need help with GIS, spatial data, or mapping?

Ask Temple Libraries' GIS Specialist:

Felipe Valdez

Book an appointment
guides.temple.edu/felipe

Email asktulibrary@temple.edu

- Finding geospatial data
- Using GIS and web mapping platforms, or choosing the right platform
- Library map collections & mapping subscriptions
- Analyzing and visualizing geospatial data
- Telling stories with maps
- Managing, and sharing geospatial data
- Instruction for students or research groups
- Teaching with GIS, maps, and spatial data
- Field data collection
- Details at library.temple.edu/gis

TRACTIQ
POLICYMAP
Social Explorer
SimplyAnalytics
QGIS

Mapping Workshops Spring 2024

- Creating Interactive Maps: in CollectionBuilder
  Wednesday, January 31, 10am
- Terrain 3D Printing with QGIS
  Friday, February 16, 10am
- Field Data Collection Tools
  Thursday, February 29, 10am
- Mapping the U.S. with Social Explorer
  Tuesday, March 5, 11am
- Mapping Data with Policy Map
  Wednesday, March 13, 2pm
- Mapping Business Data with Simply Analytics
  Tuesday, March 19, 2pm
- Maps and Laser Cutting with OpenStreetMap
  Thursday, April 18, 10am

Learn more and register at library.temple.edu/events

Temple University
Libraries