OPENSTREETWHAT?

MAPPING THE WORLD WITH OPEN DATA

RAFA GUTIERREZ & JUSTIN MILLER

MAPBOX

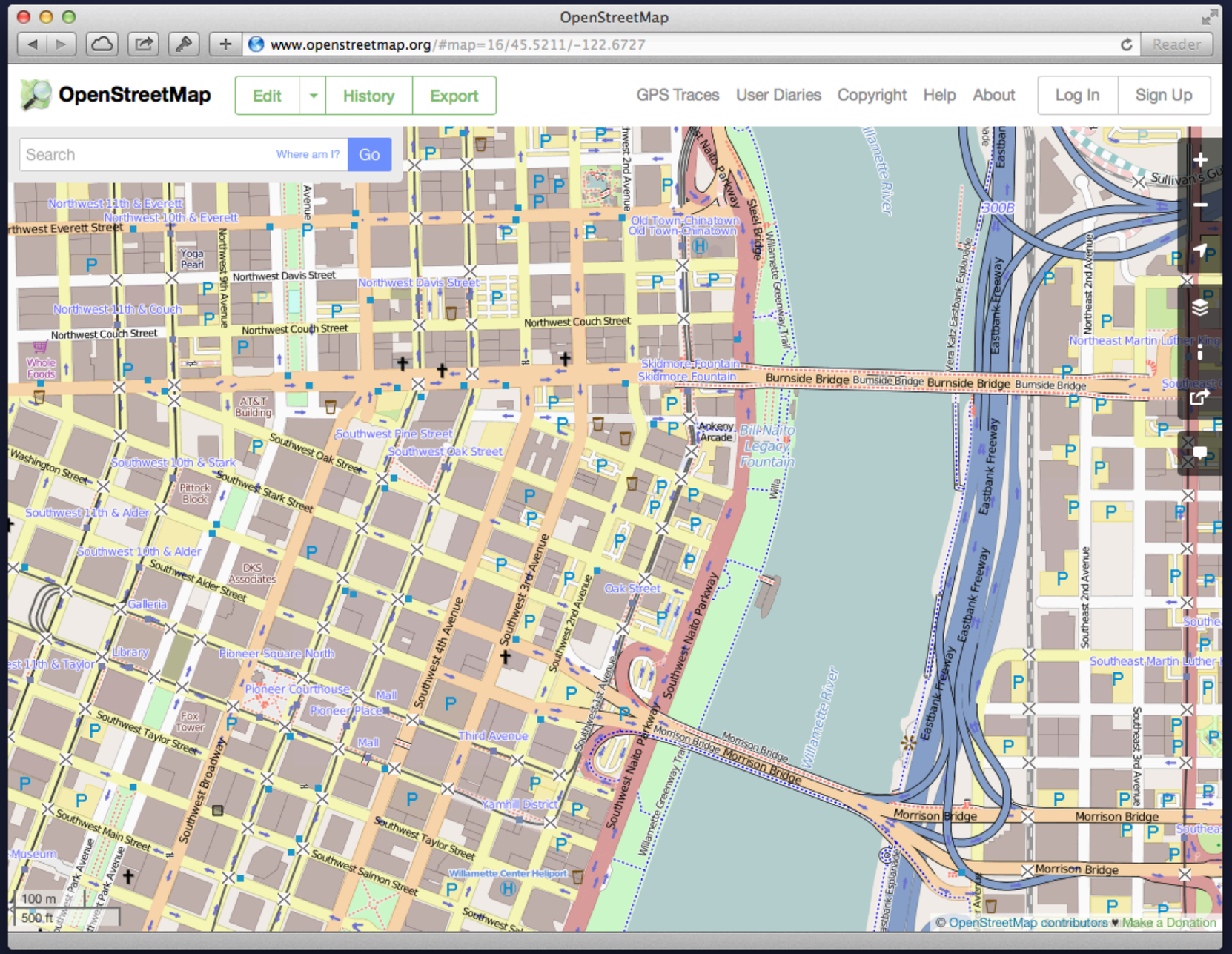
INTRODUCTIONS

OVERVIEW

- What is OSM?
- Sign up & start editing!
- Data ins & outs
- Making use of the data

OSM OVERVIEW

- Founded in 2004
- It's like Wikipedia for maps
- Over 1M registered contributors
- Over 30K monthly active users
- Not just a **map**, but also the **data**


OpenStreetMap
www.openstreetmap.org/#map=16/45.5211/-122.6727
Reader
OpenStreetMap
Edit
History
Export
GPS Traces
User Diaries
Copyright
Help
About
Log In
Sign Up
Search
Where am I?
Go
Northwest 11th & Everett
Northwest 10th & Everett
Northwest Everett Street
Yoga Pearl
Northwest 9th Avenue
Northwest Davis Street
Northwest 11th & Couch
Northwest Couch Street
Whole Foods
AT&T Building
Old Town Chinatown
Steel Bridge
Willamette Greeway Trail
Willamette River
Skidmore Fountain
Burnside Bridge
Aokerry Arcade
Bill Naito Legacy Fountain
Southwest Pine Street
Southwest Oak Street
Southwest 10th & Stark
Southwest Stark Street
Washington Street
Pittock Block
Southwest 11th & Alder
Southwest 10th & Alder
Southwest Alder Street
DKS Associates
Galleria
Library
Pioneer Square North
Pioneer Courthouse
Mall
Pioneer Place
Fox Tower
Southwest Taylor Street
Southwest 3rd Avenue
Southwest 4th Avenue
Southwest 2nd Avenue
Southwest 1st Avenue
Southwest Naito Parkway
Oak Street
Third Avenue
Yamhill District
Southwest Broadway
Southwest Main Street
Southwest Salmon Street
Willamette Center Heliport
Museum
Eastbank Freeway
Morrison Bridge
Northeast 2nd Avenue
Southeast 2nd Avenue
Southeast 3rd Avenue
Northeast Martin Luther King
Southeast Martin Luther
100 m
500 ft
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SIGN UP!

@ OPENSTREETMAP.ORG

OpenStreetMap | Sign Up

https www.openstreetmap.org/user/new

Reader

OpenStreetMap | Edit | History | Export | GPS Traces | User Diaries | Copyright | Help | About | Log In | Sign Up

Sign Up

Email Address:

Confirm Email Address:

Not displayed publicly (see privacy policy)

Display Name:

Your publicly displayed username. You can change this later in the preferences.

Password:

Confirm Password:

Alternatively, use OpenID to login

Sign Up

Free and editable

Unlike other maps, OpenStreetMap is completely created by people like you, and it's free for anyone to fix, update, download and use.

Sign up to get started contributing. We'll send an email to confirm your account.

DATA COMES FROM:

- Individual editors
- "Local knowledge"
- Some automated bots
- Sprints and edit-a-thons

DATA IS USED BY:

- Individuals
- Governments
- Businesses (Foursquare, Craigslist, Flickr)

DATA IS STORED:

OPENSTREETMAP.ORG/WIKI/SERVERS

DATA IS LICENSED:

- ODbL (Open Data Commons Open Database License)
  - Free to copy, distribute, transmit, and adapt
    - © OpenStreetMap Contributors
- If you alter or build upon, release result under ODbL

DATA COMES OUT:

OPENSTREETMAP.ORG/WIKI/PLANET.OSM

PLANET OSM

- PBF & XML
- XML is 400GB (29GB compressed)
- Weekly update dumps

EXTRACTS

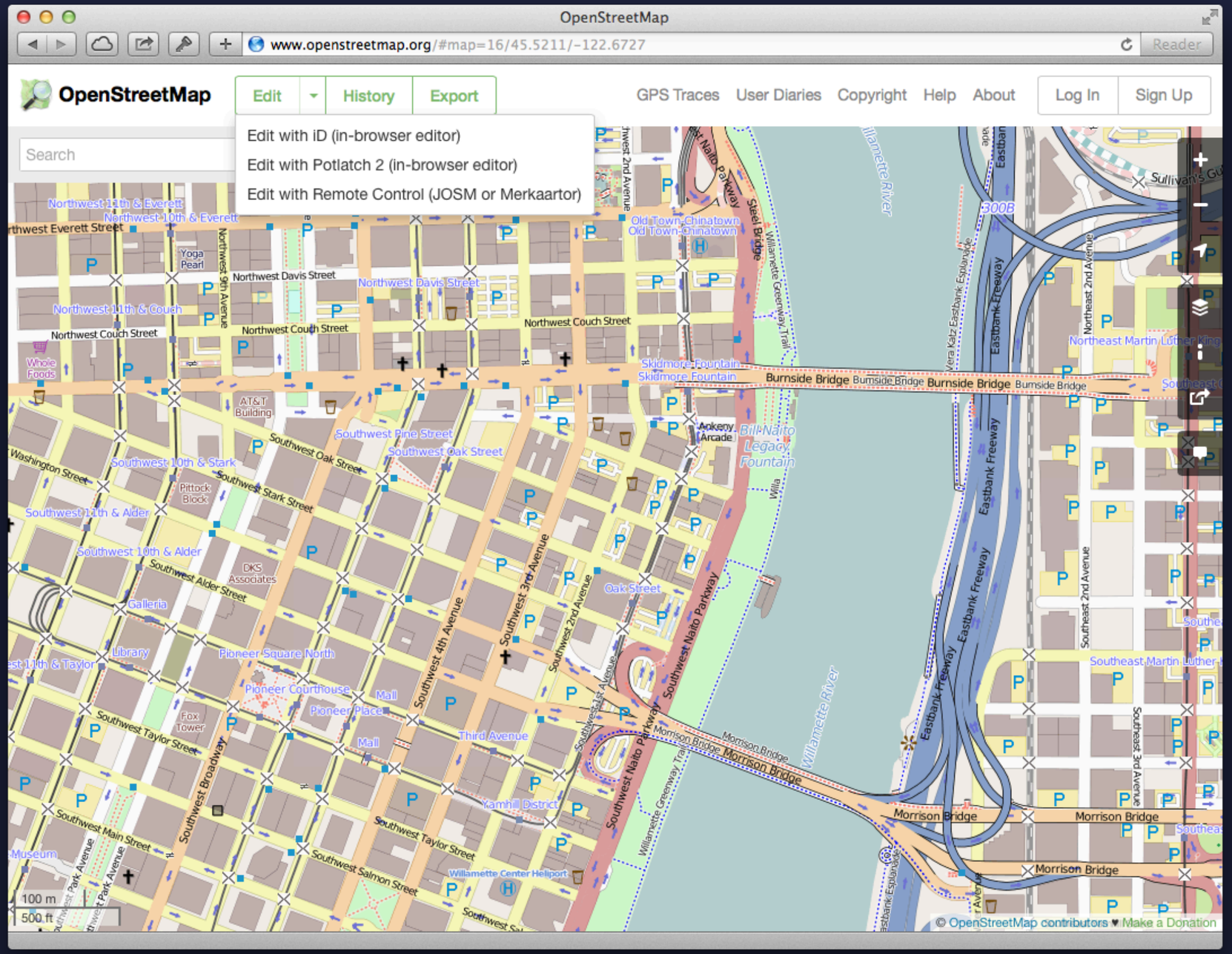
- Regional (e.g. Europe, US/CAN)
- Most countries & individual cities
- mapzen.com/metro-extracts
- metro.teczno.com
- Available in various formats including GeoJSON

OK, WHERE DO I EDIT?

ON THE WEB

RIGHT FROM OPENSTREETMAP.ORG

USING THE ID EDITOR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Copyright
Help
About
Log In
Sign Up
Search
Edit with iD (in-browser editor)
Edit with Potlatch 2 (in-browser editor)
Edit with Remote Control (JOSM or Merkaartor)
Northwest 11th & Everett
Northwest 10th & Everett
Northwest Everett Street
Northwest Davis Street
Northwest 11th & Couch
Northwest Couch Street
Old Town-Chinatown
Skidmore Fountain
Burnside Bridge
Southwest Pine Street
Southwest Oak Street
Southwest 10th & Stark
Southwest Stark Street
Southwest 11th & Alder
Southwest 10th & Alder
Southwest Alder Street
Galleria
Library
Pioneer Square North
Pioneer Courthouse
Pioneer Place
Mall
Fox Tower
Southwest Taylor Street
Southwest Main Street
Southwest Broadway
Southwest 4th Avenue
Southwest 3rd Avenue
Southwest 2nd Avenue
Southwest Naito Parkway
Third Avenue
Yamhill District
Willamette Center Heliport
Oak Street
Morrison Bridge
Willamette River
Eastbank Freeway
Northeast 2nd Avenue
Southeast 2nd Avenue
Northeast Martin Luther King
Southeast Martin Luther
Southeast 3rd Avenue
Northwest 9th Avenue
Northwest 2nd Avenue
Steel Bridge
Willamette Greenway Trail
Vera Katz Eastbank Esplanade
Yoga Pearl
Whole Foods
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Pittock Block
DKS Associates
Ankeny Arcade
Bill Naito Legacy Fountain
Sullivan's Gu
100 m
500 ft
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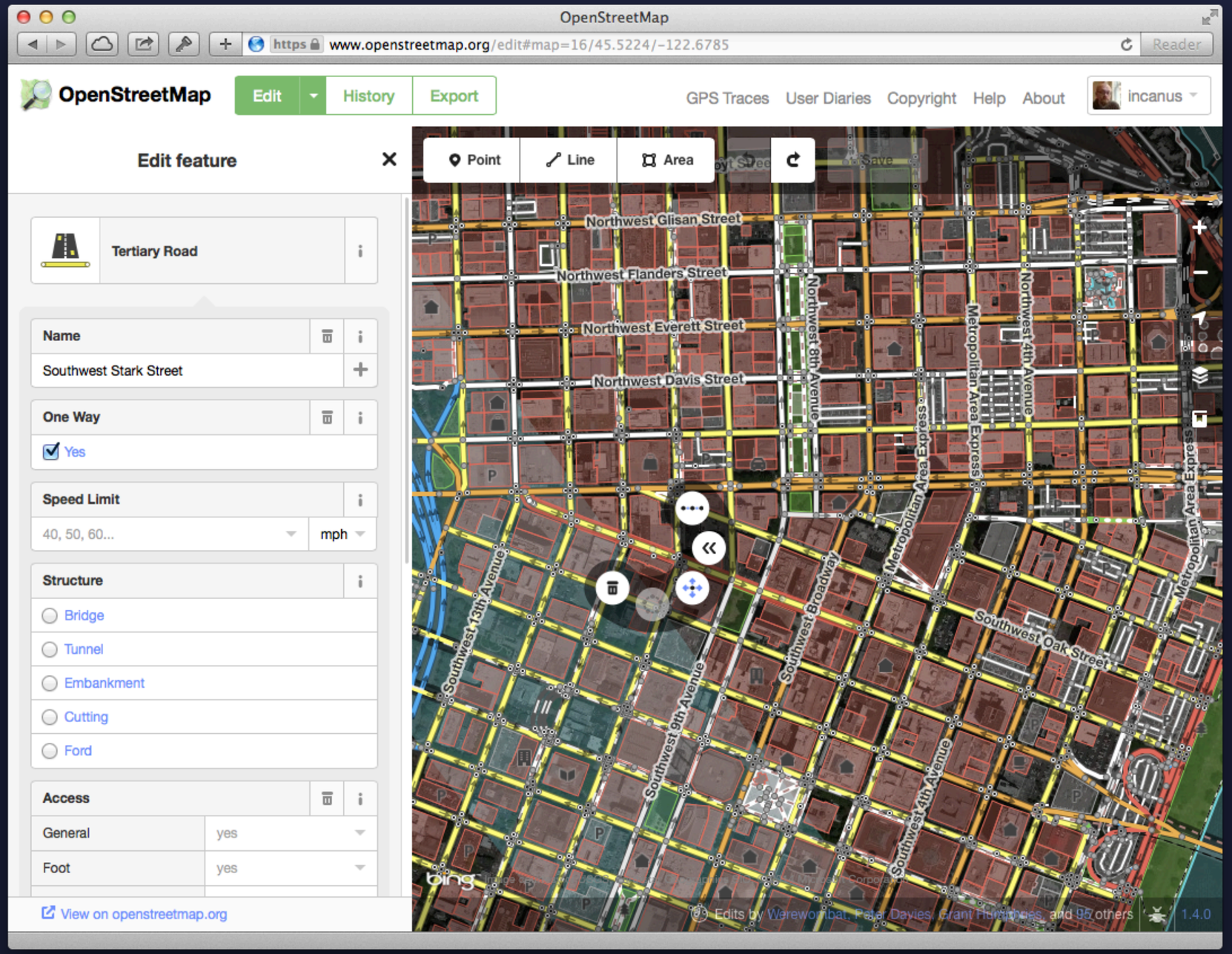
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Reader
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Edit
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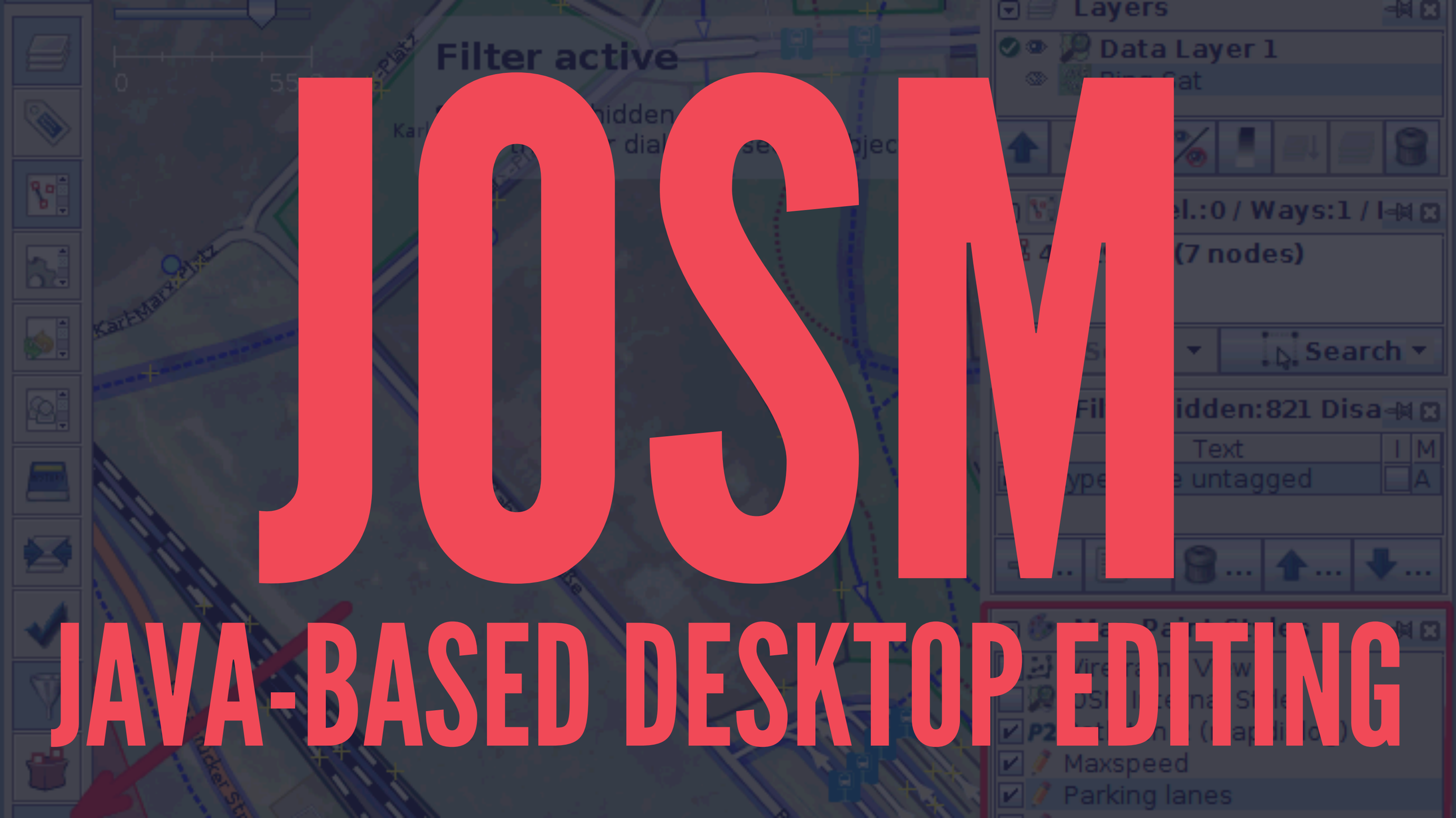
Export
GPS Traces
User Diaries
Copyright
Help
About
incanus
Edit feature
Tertiary Road
Name
Southwest Stark Street
One Way
Yes
Speed Limit
40, 50, 60...
mph
Structure
Bridge
Tunnel
Embankment
Cutting
Ford
Access
General
yes
Foot
yes
View on openstreetmap.org
Point
Line
Area
Northwest Glisan Street
Northwest Flanders Street
Northwest Everett Street
Northwest Davis Street
Northwest 8th Avenue
Northwest 4th Avenue
Metropolitan Area Express
Southwest 13th Avenue
Southwest 9th Avenue
Southwest Broadway
Southwest Oak Street
Southwest 4th Avenue
Edits by Werewombat, Paja, Davies, Grant Humphries, and 95 others
1.4.0



JOSM

JAVA-BASED DESKTOP EDITING

MOBILE

- iOS: Pushpin
- pushpinosm.org
- Android: Vespucci
- code.google.com/p/osmeditor4android

NODES, WAYS, AND RELATIONS

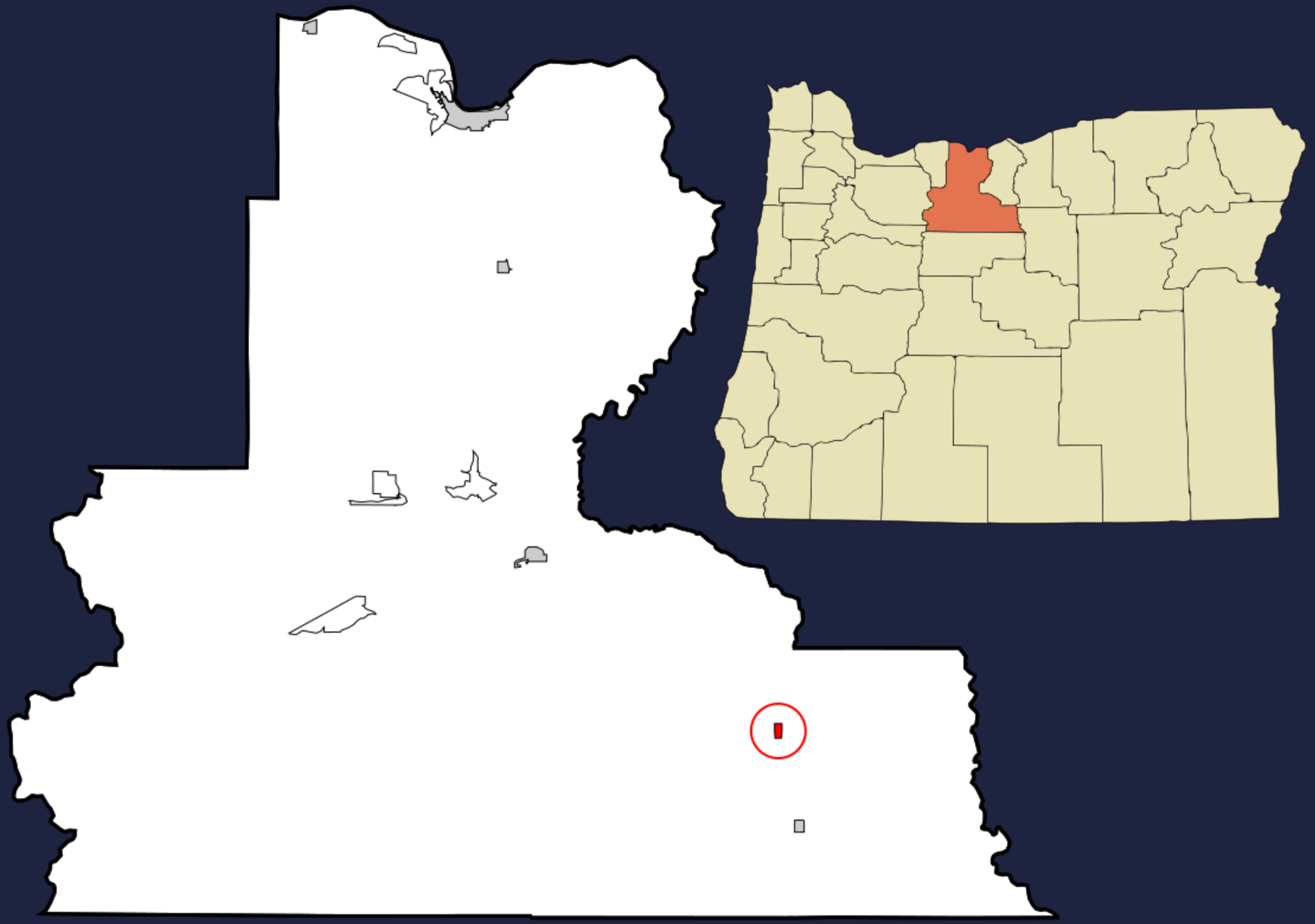
TAGGING

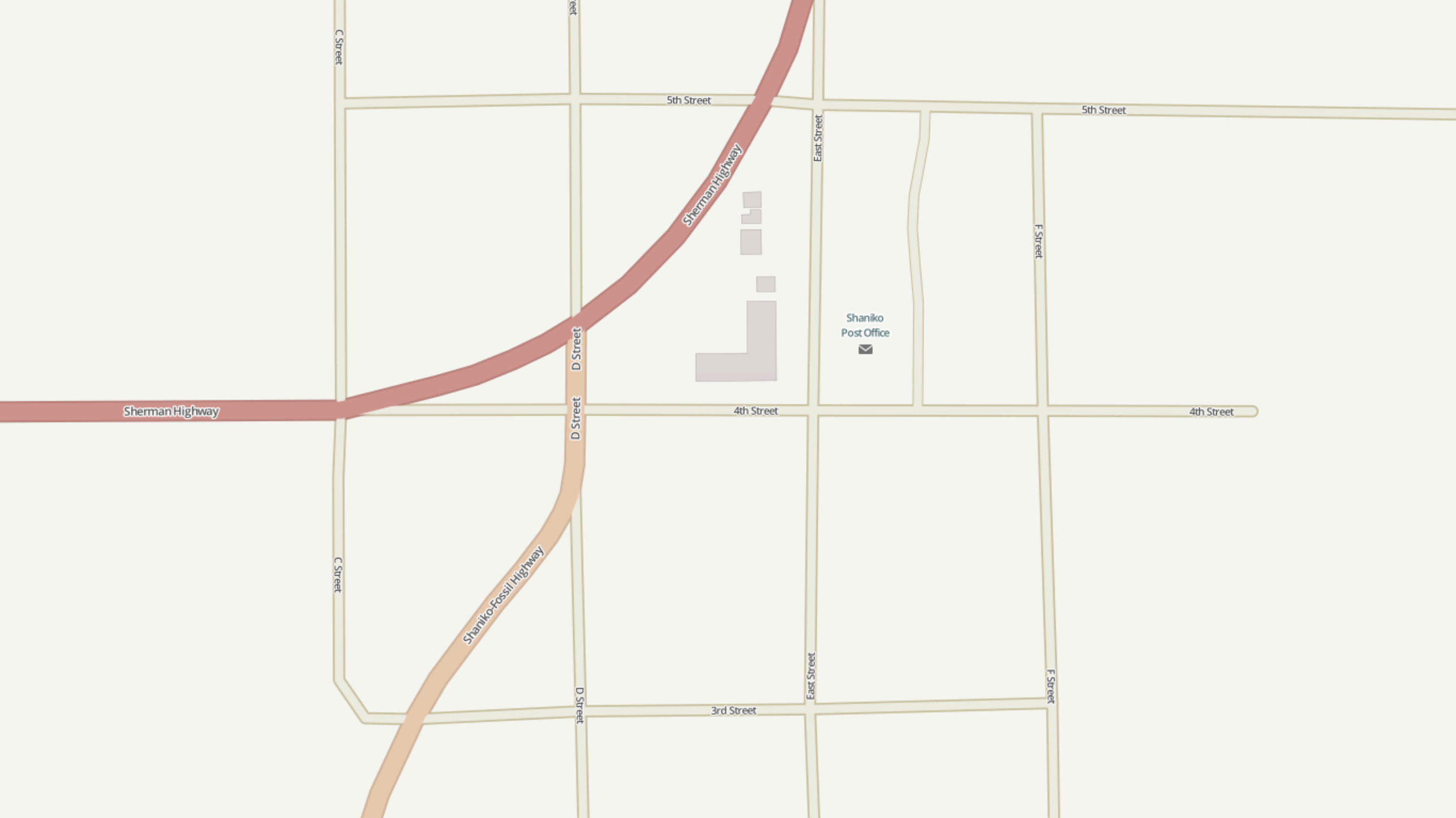
TAXONOMY=AWESOME

NOTES

OPENSTREETMAP.ORG/WIKI/BEGINNERS%27_GUIDE

SHANIKO, OREGON
Shaniko Post Office
D Street
4th Street




C Street
5th Street
5th Street
East Street
Sherman Highway
F Street
Shaniko
Post Office
D Street
Sherman Highway
4th Street
4th Street
D Street
C Street
Shaniko-Fossil Highway
East Street
F Street
D Street
3rd Street

5th Street
C Street
Sherman Highway
D Street
Shaniko Post Office
4th Street
Shaniko-Fossil Highway
East Street
F Street
3rd Street
D Street

EDIT BREAK!

AND WE'RE BACK!

DOING STUFF WITH OSM DATA

- Get data
- Use data
- Attribute data

MAPBOX.JS

BASED ON LEAFLET

OVERPASS-TURBO.EU

- Query live OSM data
- Get it out as GeoJSON
- Other formats as well as an API

JS OVERLAY EXAMPLE

GITHUB.COM/MAPBOX/OSB14

CODING BREAK!

WRAP-UP

OSM NEXT ACTIONS

- Keep improving OSM with your edits
- Look for edit-a-thons & easy ways to contribute
- Help with bigger efforts like PDX building import

CODING NEXT ACTIONS

- TriMet hackathon tonight!
- MaptimePDX
- mapbox.com/foundations/osm-and-mapbox
- Signup for Mapbox using MAPBOXOSB14

THANKS FOR COMING!

@INCANUS77 & @GEOGRAFA