

Map Kerala 2023 Updates

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Manoj Karingamadathil
Sahya Digital Conservation Foundation



KochiFOSS Oct2022



[Abraham Raji](#)

Map Kerala Portal

An [OpenDataKerala](#) initiative by
Sahya Digital Conservation Foundation

.

Site built and maintained by

- [Abraham Raji](#)
- [Akshay S Dinesh](#)
- [Manoj Karingamadathil](#)
- [Vivek K J](#)

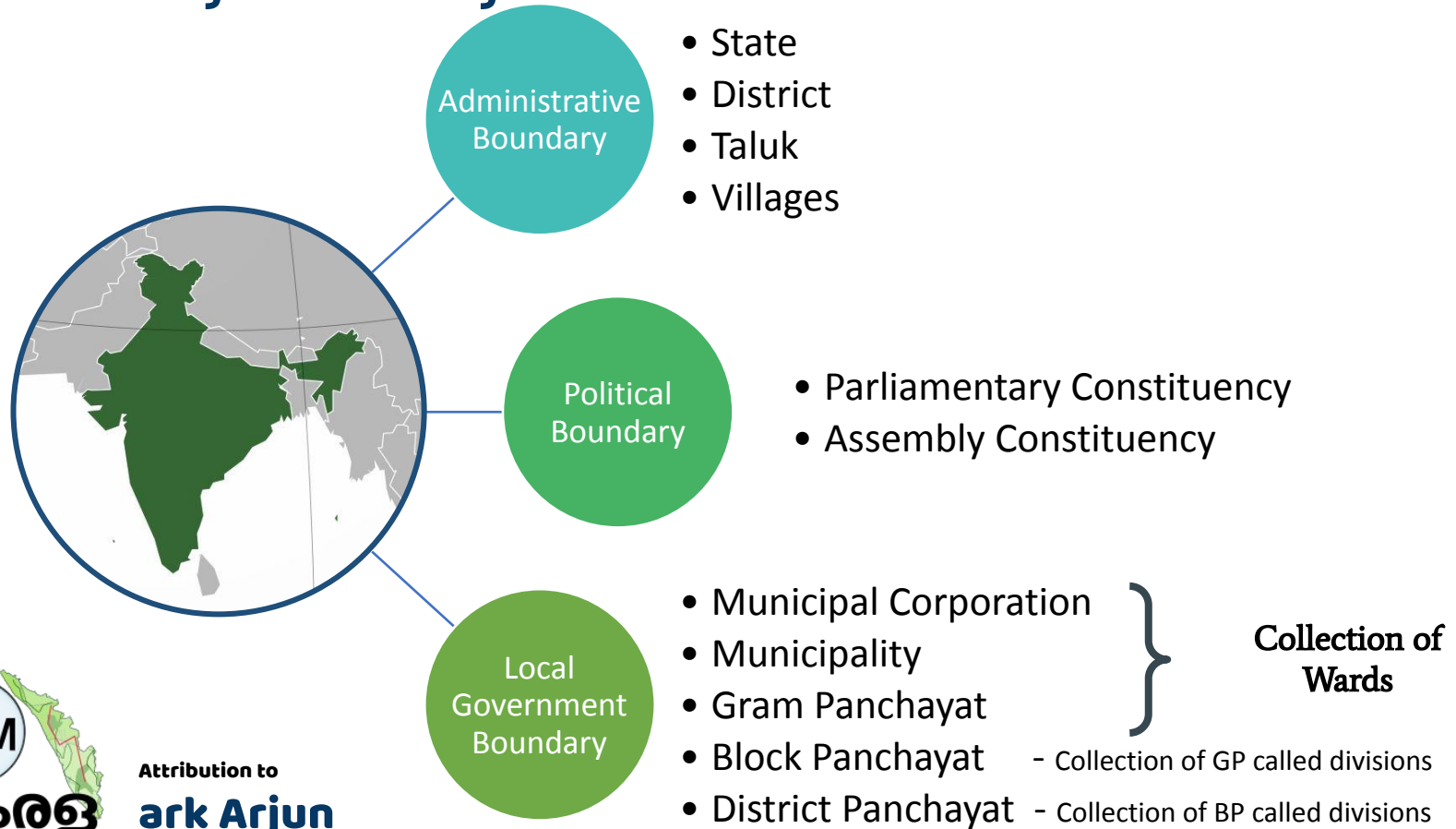
Why?

- Easy access to downloading granular and specific map data
- Popularization of OpenStreetMap
- Improving data availability through public audit and participation
- Demonstrating the potential and value of linked open data

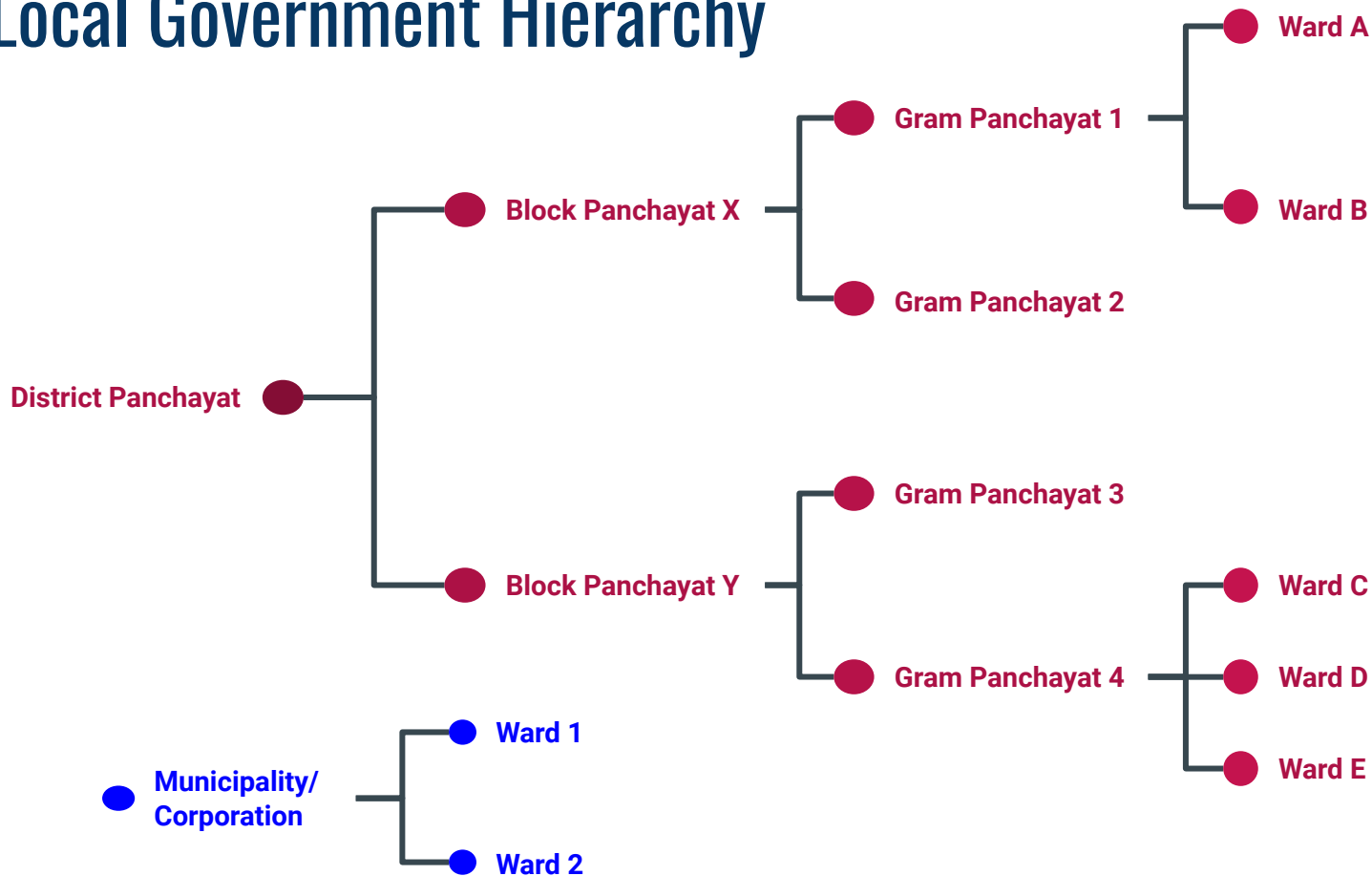
<https://map.opendatakerala.org/>

- Site Run by a Wikidata + Python pipeline + Basic Hugo Template + Client-side Javascript + overpass turbo (OSM) + leafletJS
- Usage in Malayalam Wikipedia
- Wikidata IDs for local govts.
- Linking OpenStreetMap with Wikidata QIDs.
- Other Attributes like Census, Literacy, Election datas
- A Linked Data Portal for Kerala

The Boundary Hierarchy



Local Government Hierarchy

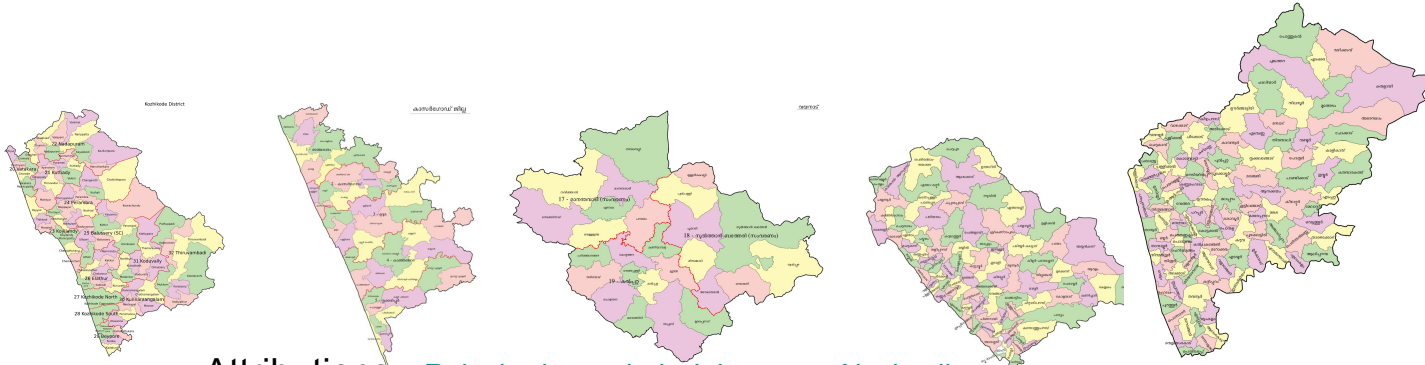


Kerala's - Local Governments

Kerala has 941 Village Panchayats (Grama panchayats) and in the urban areas, it has 87 Municipalities and 6 Corporations, a total of 1034 Local Self Government Institutions.

- Malayalam wikipedia had a initiative to create articles for all LSG in 2005.
- In 2011, malayalam wikipedia has initiated a project for the creation of SVG/PNG maps of all local governments in Kerala.

<https://ml.wikipedia.org/wiki/WP:MAPS>



Attributions - [Rajeshodayanchal](#), [Jaisuvyas](#), [Ajaykuyiloor](#)

Wikidata ID creation for all local governments.

Wikidata entries for all LSG were created and updated with properties like population, literacy , no of admin units.

- LSG is divided in smaller admin units called Wards.
- 1034 LSGs is having a 21000 wards
- Wikidata entries for all 21000 wards were created during 2020.
- Maps were added to commons from Openstreetmap during the same time.

Data Model -

https://www.wikidata.org/wiki/Wikidata:WikiProject_Kerala/Sub_projects/LSGs



Linking Openstreetmap with Wikidata ID

- All 1034 LSG maps were added to Openstreetmap by OSM volunteers.
- Wikidata IDs were added all mapped entities
- Ward mapping has been completed from 8 out 14 districts. (21000+ wards mapping)

Open data maps of local bodies created

TIMES NEWS NETWORK

Kochi: Open street mapping (OSM) community in Kerala has created geospatial open data maps of all local bodies in the state numbering over 1200. The maps would be released as a public repository on Kerala Pivari on Sunday.

The maps are useful in presenting spatial or geographic data as interactive maps and infographics that tell stories and reveals patterns.

While institutions like Information Kerala Mission (IKM) and Kerala State Remote Sensing and Envi-



The maps would be released as a public repository today

ronment Centre (KSRSEC) had prepared local-body boundary maps up to ward levels, their non-availability on public domain and their unwillingness to share them with other departments had caused much difficulties.

Interestingly, most of the mapping using publicly available documents was carried out by a German national, Heinz Vieth, who volunteered to help the community.

"The mapping exercise took around four months. We launched the initiative as open maps for layering data related to Covid-19 as it

was not publicly available," said Naveen Francis, one of the key volunteers for the project.

While the maps were created by Francis, Manoj Karingamadathil and Heinz Vieth, OSM volunteers in the state helped in naming and tagging.

"Kerala and Rajasthan were the most awesome regions in India. I am helping to map India as a sign of gratitude," said Vieth.

Once ward-level layers are added, such maps would also be useful during local-body elections. "Volunteers have already created ward-level digital maps for Kan-

hangad municipality and Kochi corporation and ward-level maps would be available soon," said Karingamadathil. The vector maps are also being added to Wikipedia pages of panchayats in the state.


The community had been requesting authorities to release such maps in machine readable format under open data licence since long but this was never done. The maps generated by the community would be available for download under Open Database Licence (ODbL) on websites openstreetmap.org and opendatakerala.org.

"The Spatial referenced digital maps we prepare are openly accessible and can be downloaded from the portal

***opendatakerala.org** and are being widely used in the Wikipedia pages of local bodies and COVID-19 visualisation portals. The availability of more accurate geospatial data would be of great help during disaster management"*

Displaying OSM map in Wikipedia

- Infobox template of LSG was edited to display the maps from OSM



WIKIPEDIA
The Free Encyclopedia

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Contents
Current events
Random article
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Languages

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Kochi Municipal Corporation

From Wikipedia, the free encyclopedia


The **Kochi Municipal Corporation** is the [municipal corporation](#) that manages a portion of the [Indian](#) city of [Kochi](#) (also known as [Cochin](#)). The Corporation manages 94.88 km² of Kochi city and has a population of 677,381^[1] within that area. It is the most densely populated city corporation in the state.^[2]

Contents [hide]


- History
- Structure
 - 2.1 Flag and emblem
 - 2.2 Naming
- Demography
- Election history
 - 4.1 2015 Local body elections
 - 4.2 2020 Local body elections
- Issues
- References
- External links

History [edit]


The port at [Kozhikode](#) held superior economic and political position in medieval Kerala coast, while [Kannur](#), [Kollam](#), and [Kochi](#), were commercially important secondary ports, where the traders from various parts of the world would gather.^[3] The Portuguese arrived at [Kappad Kozhikode](#) in 1498 during the [Age of Discovery](#), thus opening a direct sea route from [Europe](#) to [India](#).^[4] With the arrival of Portuguese on [Malabar Coast](#) in the late 15th century CE, the power of [Zamorin](#) began to decline and [Kochi](#) began to emerge as the largest port city on the coast.^[5] The [Cochin Municipal Corporation](#) was formed on 1 November 1967 merging municipalities of [Fort Kochi](#), [Mattancherry](#) and [Ernakulam](#). The municipalities of [Fort Kochi](#) and [Mattancherry](#) were one among the oldest in the country.



Kochi Municipal Corporation



കൊച്ചി നഗരസഭ



Kochi Municipal Corporation

State	Kerala
Districts	Ernakulam

The screenshot shows the website covid19kerala.info with a map of Kerala. A pop-up box for Thirunelli Panchayat in Wayanad District is displayed, listing the date as 2020-05-05 and notes about containment zones. The map shows numerous red dots representing hotspots across the state, with a legend for districts and hotspots at the bottom.

The geographic areas marked here are based on the list of Hotspots

കേരളത്തിന്റെ തദ്ദേശ നിരം

ഗ്രാമപഞ്ചായത്തുകൾ, നഗരസഭകൾ, കോർപ്പറേഷനുകൾ എന്നിവയുടെ കൂടുതൽ വിവരങ്ങൾ നൽകുന്ന പാട്ടിടങ്ങളിലെ നിരം നൽകുന്ന കേരള മാപ്പ്

കോർപ്പറേഷനുകൾ

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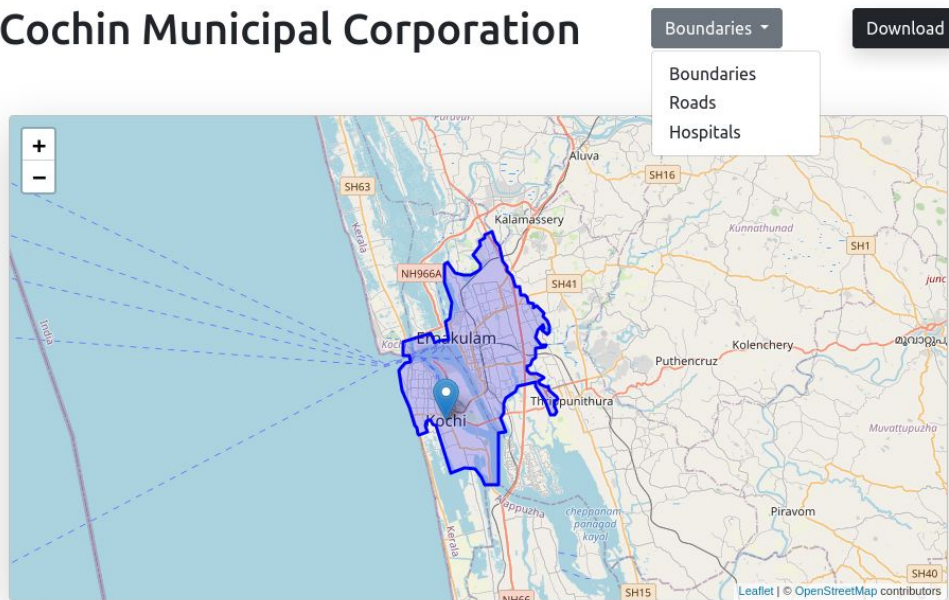
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Linked OpenData : Map Kerala Initiative

- OpendataKerala took an initiative to create LOD website.

Cochin Municipal Corporation



MapKeralaAlpha

Your open data..

A Gateway to Geospatial Map Data of Kerala

Powered by Wikidata and OpenStreetMap

- experiments at <https://map.opendatakerala.org>



Kerala/Grants/HOTBoosterGrant2023/Proposal/Improving Map Kerala Portal (2023)

< Kerala | Grants/HOTBoosterGrant2023

Main Page
The map
Map Features
Contributors
Help
Blogs
Shop
Donations
Wiki discussion
Recent changes

Tools
What links here
Related changes
Special pages
Printable version
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Page information
Cite this page

Contents [hide]

- 1 Your project
 - 1.1 Describe the local challenge your project is addressing
 - 1.2 Describe your project
 - 1.3 Describe your sustainability plan
 - 1.4 What are your community-defined project goals, and how do you define project success?
 - 1.5 List the tools you intend to use during your project and why
 - 1.6 Explain how you plan to share your stories
- 2 Partnerships
 - 2.1 Describe who will use your data
 - 2.2 Describe any other partnerships and collaborations you plan to mobilise or establish for the purpose of the project
- 3 Expansion
- 4 Project plan and budget
 - 4.1 Budget breakdown
 - 4.2 Project plan
- 5 Declaration
- 6 Endorsements

Your project

Map Kerala is a community initiative to increase the engagement of open mapping contributors in Kerala by Linking OSM and Wikipedia (Wikidata). It works to increase the visibility of the impact of open mapping, reduces pain points in mapping contributions, and highlight the importance of community building. A geospatial gateway platform was launched in 2021 as a demonstration of the possibilities of linked open data in addressing climate change, disaster management, and sustainable development goals.

status proposed

OSMKeralaBoosterGrant

Improving Map Kerala Portal

Improving Map Kerala Portal and release the new version with enhanced features and code base

start-date

2023-07-01

goal

use_case

end-date

2023-12-30

budget (INR)

100000 INR

grant_type

Group

location(s)

Kerala

grantee

• [OpenDataKerala](#)

Map Kerala Alpha

A Gateway to Your Geospatial Map Data of Kerala

An [Open Data Kerala](#) Initiative

[Know more](#)

The portal is under active development. Features may be added or removed without notice. Contact opendatakerala@gmail.com for more information.



Alappuzha



Ernakulam



Idukki



Kannur



Kasaragod



Kollam



Kottayam



Kozhikode



Malappuram



Palakkad



Pathanamthitta



Thiruvananthapuram



Thrissur



Wayanad



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This portal is under active development. Features maybe added or removed without notice. Contact opendatakerala@gmail.com for more information.



Alappuzha



Ernakulam



Idukki





ആല ഗ്രാമ പഞ്ചായത്ത്

Ala Grama Panchayat | ആല ഗ്രാമ പഞ്ചായത്ത് | ആലപ്പുഴ ജില്ല | Alappuzha district

[Visit](#)

ആലപ്പുഴ നഗരസഭ

Alappuzha Municipality | ആലപ്പുഴ നഗരസഭ | ആലപ്പുഴ ജില്ല | Alappuzha district

[Visit](#)

അമ്പലപ്പുഴ വടക്ക് ഗ്രാമ പഞ്ചായത്ത്

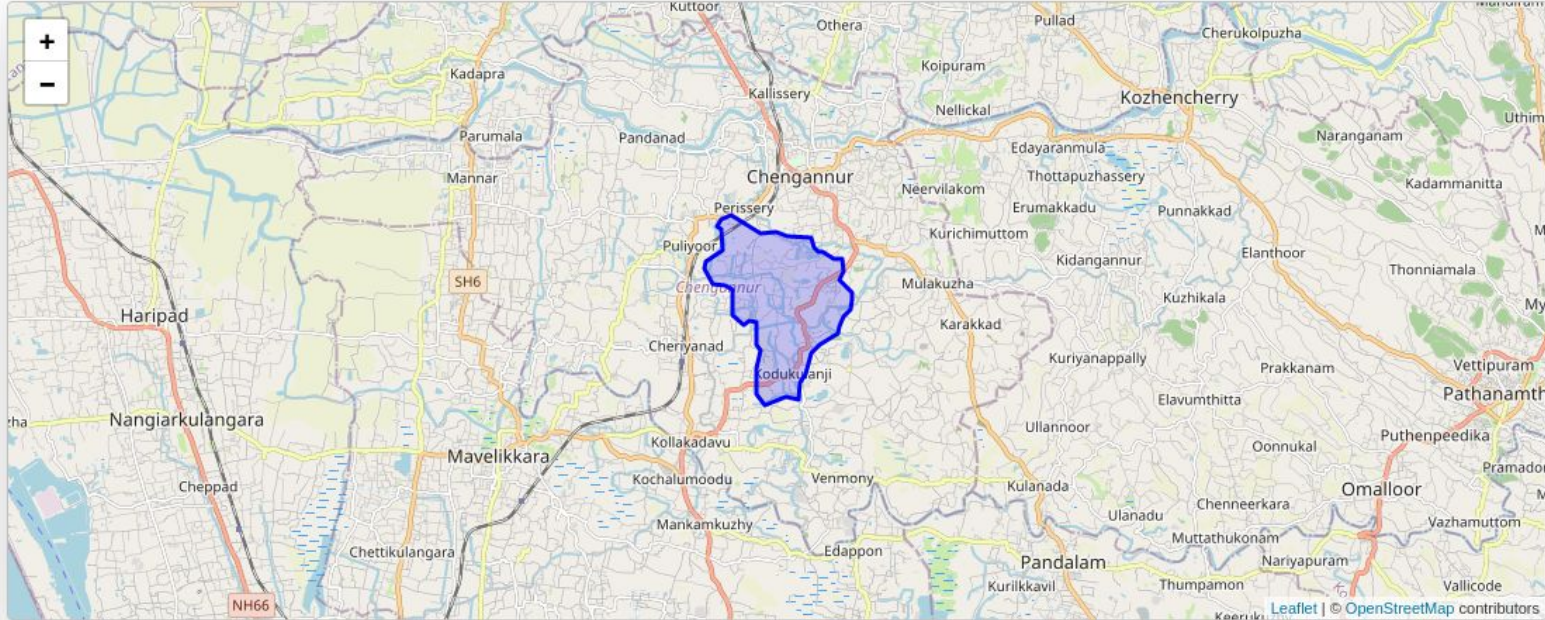
Ambalapuzha North Grama Panchayat | അമ്പലപ്പുഴ വടക്ക് ഗ്രാമ പഞ്ചായത്ത് | ആലപ്പുഴ ജില്ല | Alappuzha district

[Visit](#)

Ala Grama Panchayat

Boundaries 

Download



ആലപ്പുഴ ജില്ലയിൽ ചെങ്ങന്നൂർ ബ്ലോക്ക് പരിധിയിൽ വരുന്ന 10.44 ച.കി.മീ വിസ്തീർണ്ണമുള്ള ഗ്രാമപഞ്ചായത്താണ് ആല ഗ്രാമപഞ്ചായത്ത്.

[വികിപീഡിയയിൽ കൂടുതൽ വായിക്കാം](#)

Amenities

Ration shops Banks ATMs
Post Offices Petrol Pumps
Shops Sports
Drinking Water Free WiFi
Toilets

Nature

Waterways/Rivers Ponds
Farmlands

Recreation

Community centres Libraries

Education

Schools Colleges
Kindergartens

Political

Boundaries
Government Offices

Religious

Religion

Emergency

Hospitals Power
Police Stations Fire Stations

Public Transport

Roads Rails Taxi
Petrol Pumps

Tourism

Hotels Restaurants
Parking Cinemas Toilets

Home

Users

575

↑ 16.6%

Event count

3.5K

↑ 20.6%

Conversions

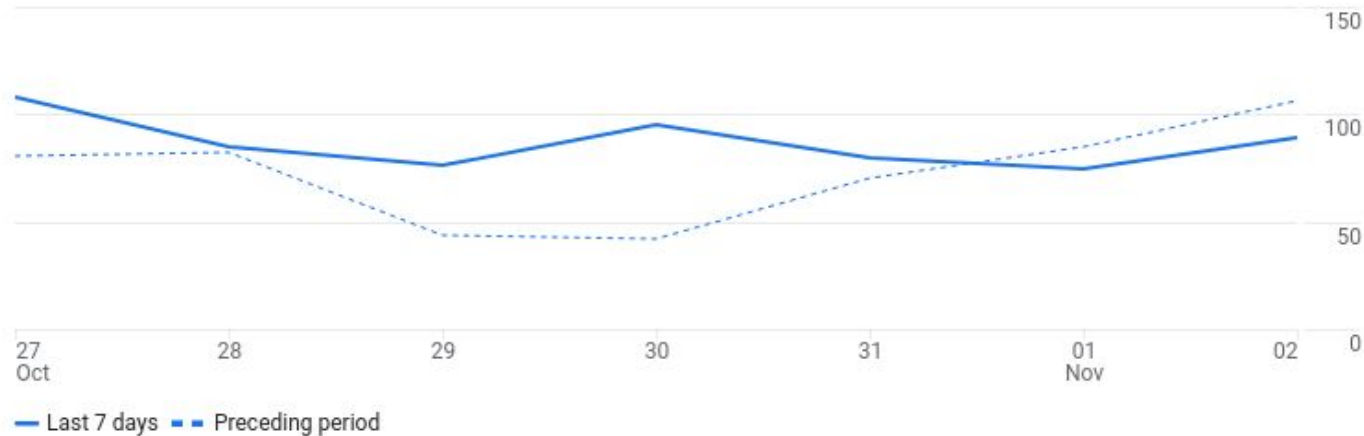
0

-

New users

545

↑ 18.7%



Last 7 days ▾

[View reports snapshot](#) →

Sessions▼ by

Session default ch... ▼



SESSION DEFAULT ...

SESSION

Organic Search	596	↑15.7
Direct	115	↑187.5
Referral	14	↑75.0
Unassigned	1	↓5
Organic Video	0	↓100.0



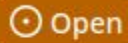
Last 7 days ▼

[View traffic acqu...](#)

Updates!

Landing page redesign

LSG Map in One Page and Navigation. #14



manojkmohan opened this issue on Jul 29, 2022 · 0 comments



manojkmohan commented on Jul 29, 2022

Landing Page of Kerala map



Background


- Multiple options
 - Kerala map with districts
 - LSG level map (with decreased points to decrease file size - otherwise home page will load slow!)
 - Clickable SVG (just kidding)
- Should be mobile responsive
- Should still allow displaying other information

Progress

- Copying OSM style

Map Kerala Alpha

Mattannur Municipality (Kannur)

Boundaries 

Download

Legacy Map

Experimental Map

കണ്ണൂർ ജില്ലയിലെ മട്ടന്നൂർ നഗരമുൾക്കൊള്ളുന്ന നഗരസഭയാണ് മട്ടന്നൂർ നഗരസഭ. 54.32 ചതുരശ്ര കിലോമീറ്റർ വിസ്തീർണ്ണമുള്ള ഈ നഗരസഭയിൽ ആകെ 35 വാർഡുകളാണുള്ളത്. 2011 കാണേഷുമാരി പ്രകാരം ആകെ ജനസംഖ്യ 47,078 ആണ്.

[വിക്കിപീഡിയയിൽ കൂടുതൽ വായിക്കാം](#)

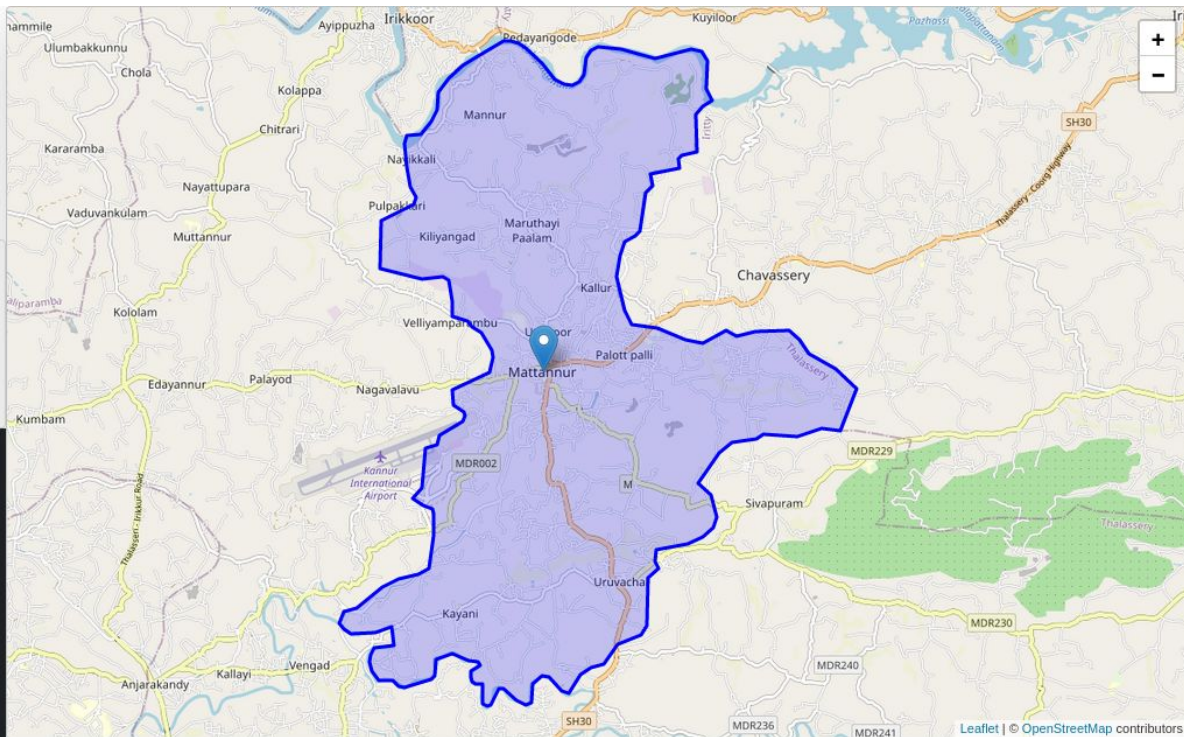


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Malayalam Rendering

Malayalam rendering map #1



naveenpf opened this issue on Aug 18, 2021 · 1 comment



naveenpf commented on Aug 18, 2021 • edited ▼

Member ...

Add map in malayalam

https://wiki.openstreetmap.org/wiki/Kerala/Translation_Efforts#Map_in_Malayalam

<https://osm-in.github.io/indic-map/#5.0296874999999998/23.196/73.394>



Background

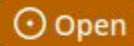
- Raster tile vs Vector tile
- OSM's standard tile layer is raster with English labels
- Other raster tile layer providers exist (including OpenMapTiles)
- Hosting custom tiles requires space
- Vector tiles allow much more fancy maps and interactivity
- But vector tiles also need to be hosted
- Rendering vector tiles requires custom mapping engines like Mapbox GL JS or Tangram
- Even then not enough Malayalam data is returned

Progress

- Ability to switch to Tangram based vector layer and plain OSM base layer
- Should figure out styling in Tangram better

SEO

Improve SEO #12



manojkmohan opened this issue on Jul 29, 2022 · 0 comments



manojkmohan commented on Jul 29, 2022

Add more keywords include Malayalam and English



Background

- Since hugo renders all LSGs, we get good first paint, etc. (SSG)
- Need to include as much data as possible during site build
- Don't want to introduce a server or affect build speed

i18n

L10N #5



manojkmohan opened this issue on Oct 31, 2021 · 0 comments



manojkmohan commented on Oct 31, 2021

L10N Support need to enable.



Background

- Need to allow both Malayalam and English websites
- But don't want separate URLs
- Have to be done in frontend
- Will use i18next library

Recent changes

Feature: Recent Changes #17



asdofindia opened this issue on Mar 10, 2022 · 1 comment



asdofindia commented on Mar 10, 2022

Considering multiple options to implement recent changes.

Augmented Diffs from Overpass seems to be relevant.

https://wiki.openstreetmap.org/wiki/Overpass_API/Augmented_Diffs

It is an abstraction over minuted diffs.

<https://github.com/osmlab/osm-stream> uses that and that's what powers <https://osmlab.github.io/show-me-the-way/>

There is also an augmented delta feature.

See also:

- <https://overpass-api.de/achavi/>
- <https://resultmaps.neis-one.org/osm-suspicious#1/8/-15>



5p4r70n commented on Aug 6, 2022 · edited

Background

- Need to try different options
 - “newer” query in overpass
 - Augmented diff?
 - Augmented delta?

Data Related Issues

- Broken QIDs (fix and monitor)
- ZWJ
- Automatic pipeline?
- Publishing to zenodo
- Attribution missing in downloads
- Documentation of everything

Other features to be added

- Adding filters within URL (shareable filters)
- Reset filters
- Better search box (with fuzzy search, etc)
- Amenity count
- KML download
- Offline mode
- Open source!!!!

Thanks for your attention!

DEMO????

Get in touch with us:

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@akshay

Manoj Karingamadathil

user:Manojk

@manojkmohan

