

Open Data proposal to Kerala Govt.

Problem Statement

We are using as OSM Base map for lot of Govt website. Recently in Kerala Rescue website we have used in three places.

1. Request maps (<https://keralarescue.in/map/>)
2. Flood maps (<https://www.microid.in/keralaflood/#11.5/12.963/77.6585>)
3. Incoming rescue request map (<http://process.keralarescue.in/>)

We have around 2.18 lakhs kms of roads in Kerala and OSM has only mapped 48,000 kms. For better use of OSM base map we need more road data. This will help to identify places better. There is also plan from IKM to use Ushahidi for residential damage assessment. Ushahidi uses OSM as base map.

What Govt should

Government of Kerala (GOK) should release following data.

1. Road data (NH,SH,MDR,Urban roads or Rural Roads).
2. River data (To help in flood mapping)
3. Administrative boundaries
4. Political boundaries.

Website:- KSDI website <http://ksdi.kerala.gov.in> and PWD GIS website <https://103.35.198.65:8181/kpwd.gis/>

Under Open Database License.

OSM work on Kerala

Volunteers all over the world in past 14 years has mapped Kerala. In Kerala, National Highways and State highways are mapped completely. District layer has been mapped completely. There is a good coverage on Rivers, MDR,Urban Road and Rural roads. Colleges/Schools and Hospitals are also covered very well.

More details on <https://wiki.openstreetmap.org/wiki/Kerala>

Recent Works during 2018 Kerala Floods Mapping

Facebook and Microsoft is already helping to improve the road coverage in OSM. Facebook has used their machine learning algorithm on recent satellite imagery of Kerala to identify the roads. Facebook has shared the output publicly. Work is going on to import the road to OSM by volunteers. This will definitely increase road coverage in Kerala. But all roads will be tagged as

unclassified roads (Since we Facebook/Volunteer don't have the road classification, example NH,SH,MDR,Urban roads or Rural Roads). Microsoft is also working on improving road coverage in few districts like Idukki and Alleppey. This is a manual effort.

More details on 2018 Kerala Floods Mapping

https://wiki.openstreetmap.org/wiki/2018_Kerala_Floods_India

Roads in Kerala

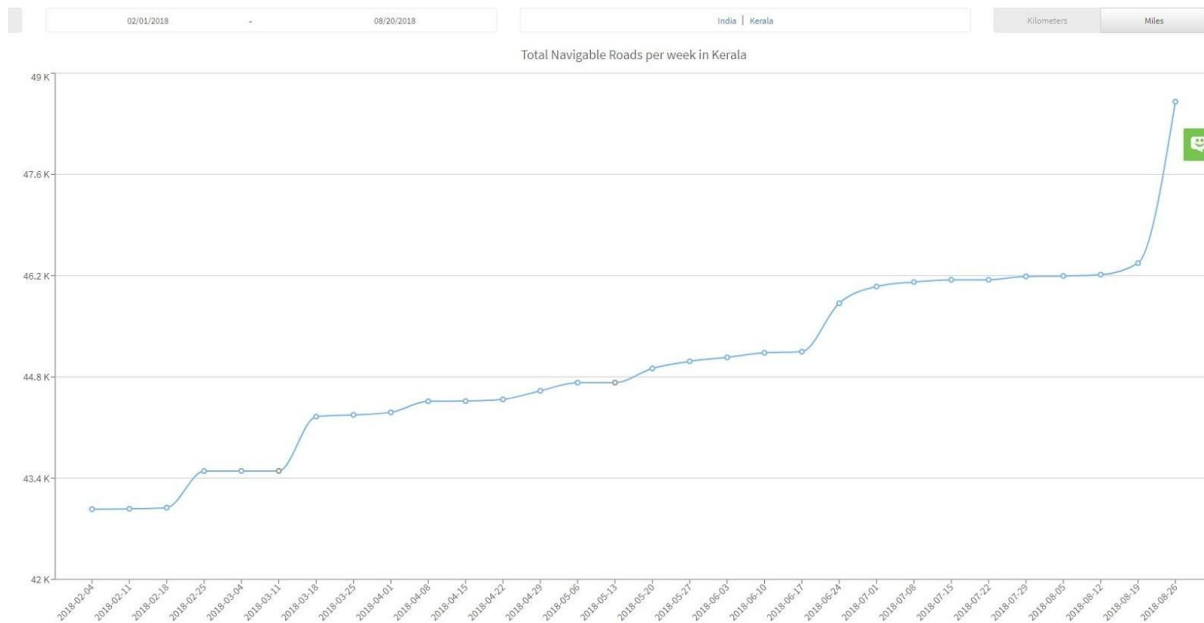
Agency-wise Distribution of State Roads in Kerala in 2016-17

Sl.No	Name of Department	Length (km)	%
1	Panchayats (LSGDs)	152,777.21	69.79
2	PWD (R&B)	31,812.11	14.54
3	Municipalities	18,411.87	8.41
4	Corporations	6,644.00	3.03
5	Forests	4,575.77	2.07
6	Irrigation	2,611.90	1.19
7	PWD (NH)	1,781.57	0.82
	Total	218,942.43	100

From State planning board website :- http://spb.kerala.gov.in/ER2017/web_e/ch51.php?id=50&ch=51 (Table 5.3)

OSM Current Status

<https://metrics.improveosm.org>



Examples of Govt releasing OSM data

1. US Govt release all road data via TIGER program <https://wiki.openstreetmap.org/wiki/TIGER>
2. *Building Canada 2020* initiative (BC2020i) is a community-led initiative that has a vision to **map in OSM all buildings in Canada by the year 2020.**
https://wiki.openstreetmap.org/wiki/WikiProject_Canada/Building_Canada_2020
3. In Indonesia, DAM SAFETY AND PUBLIC PROTECTION: INASAFE
<https://www.hotosm.org/projects/dam-safety-and-public-protection-through-inasafe/>
4. HOT distributed 177 maps to all village offices in Semarang. This concludes #InAWARE city-wide mapping project in the city with over 482,700 buildings, 4.4 million km roads, 433,202.5 km waterways, and 11,000 infrastructures are mapped on OSM.

