

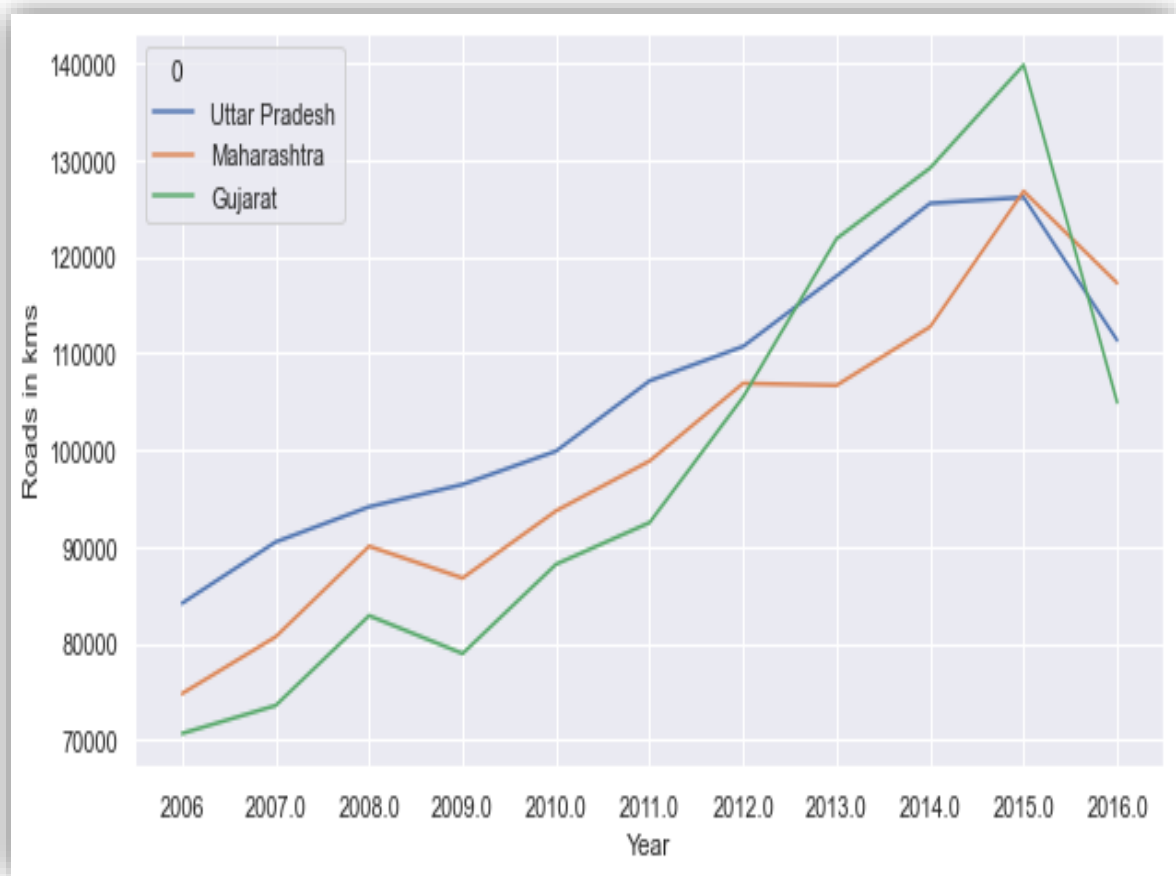
Electricity Generation

Electricity Generation

- ❖ Top 3 states according to the Total electricity generated by them between the years 2006 to 2016

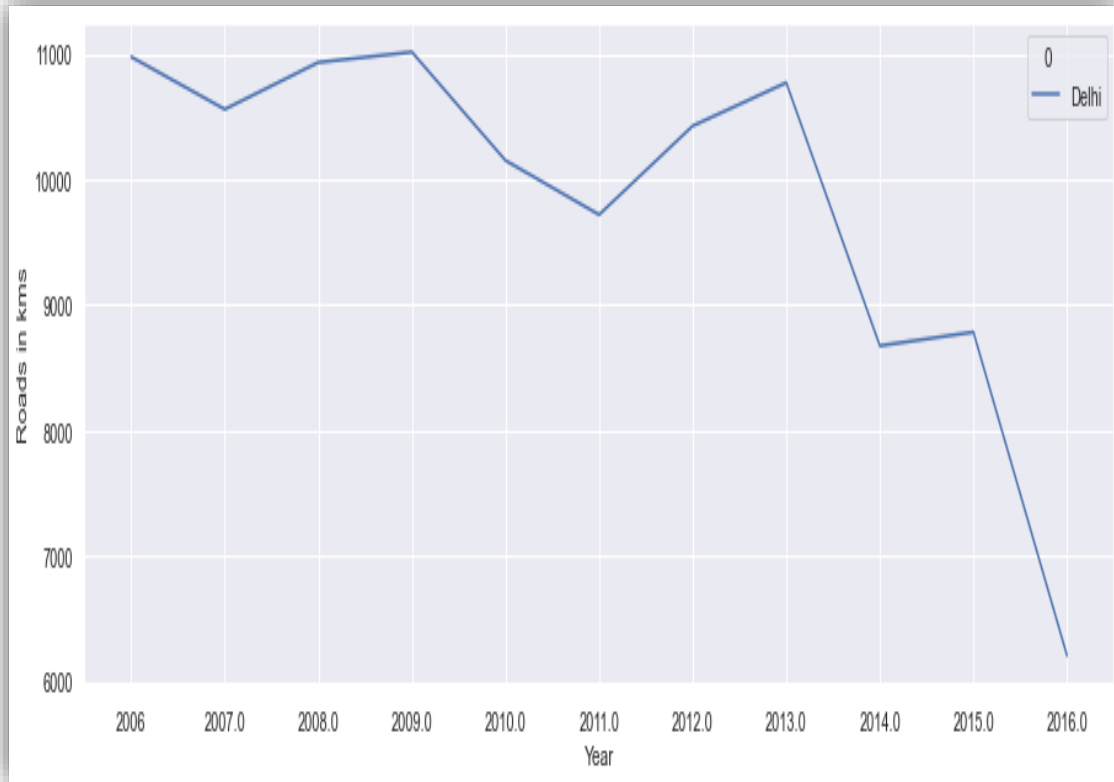
Sr No.	State	Total Electricity Generated in MW
1	Uttar Pradesh	11,63,717
2	Maharashtra	10,95,011
3	Gujarat	10,87,795

Electricity Generation in top 3 states



❖ For All 3 top electricity generating states we can see that rate of electricity generation keep on increasing from year 2006 to 2015 and then decreases in year 2016.

Electricity Generation in Delhi

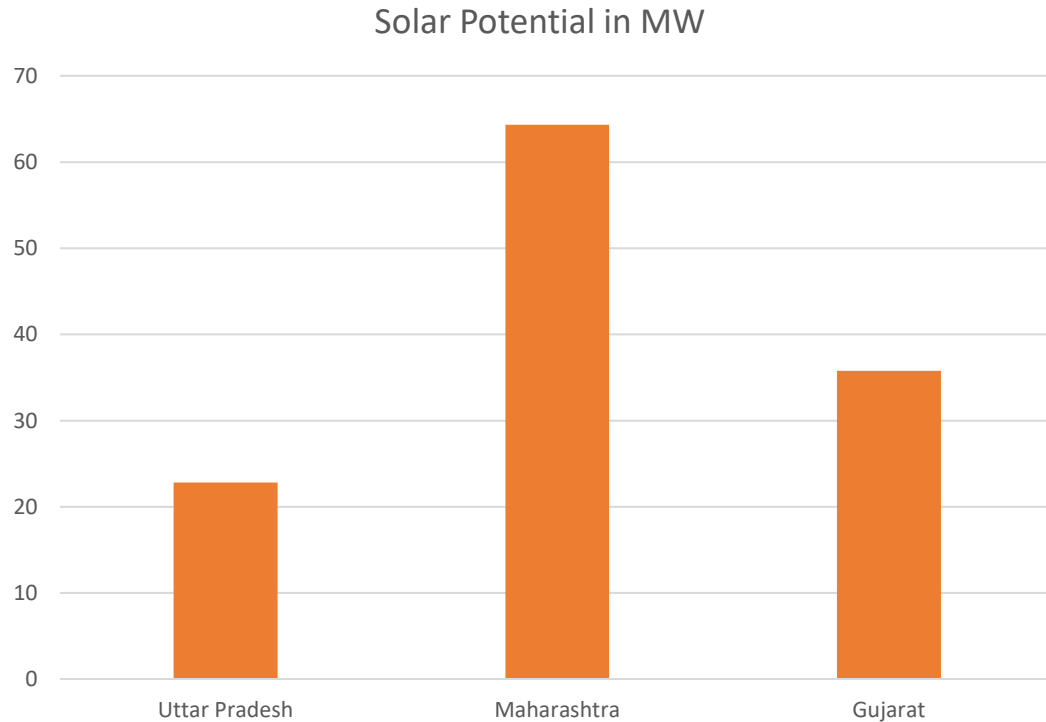


- ❖ For Delhi electricity generation rate is quite fluctuating up and down over the years.
- ❖ Overall there is a huge decrease in electricity generation in Delhi from year 2006 to 2016

Electricity Generation capacity

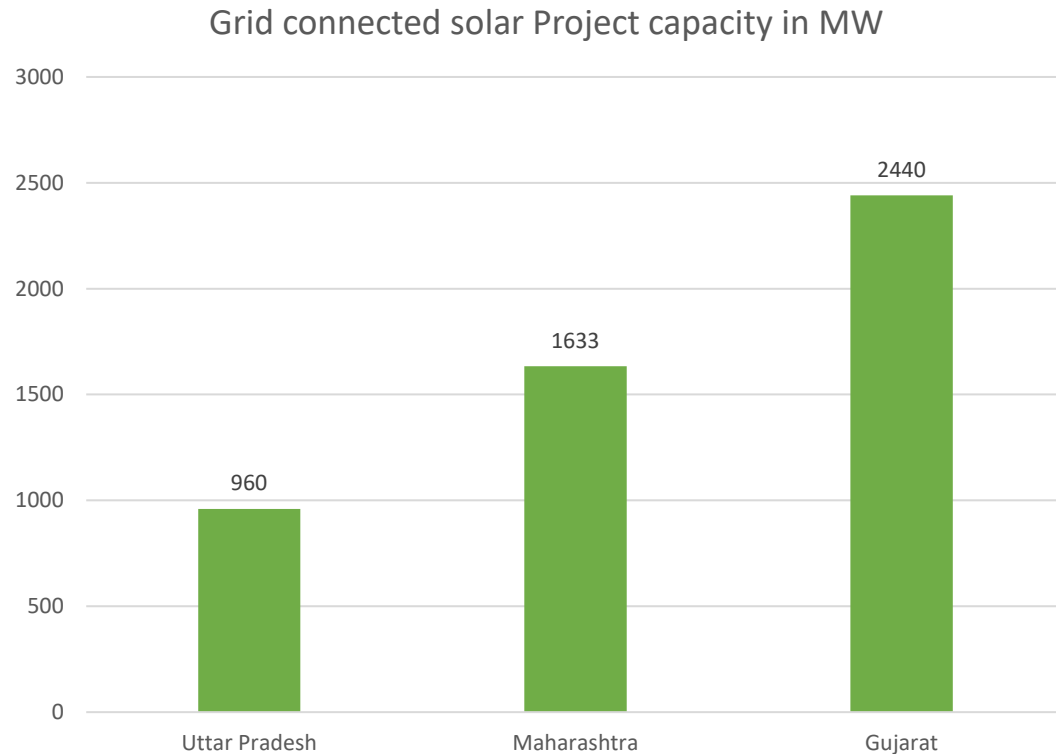
Sr No.	State	Total electricity generated (MW)	Solar Potential in MW	Grid connected solar Project capacity in MW	Rooftop Capacity in MW	Solar pumps installed in No's
1	Uttar Pradesh	1163717	22.83	960	83.23	9588
2	Maharashtra	1095011	64.32	1633	186.24	1000
3	Gujarat	1087795	35.77	2440	202.47	3537

Solar Potential in MW



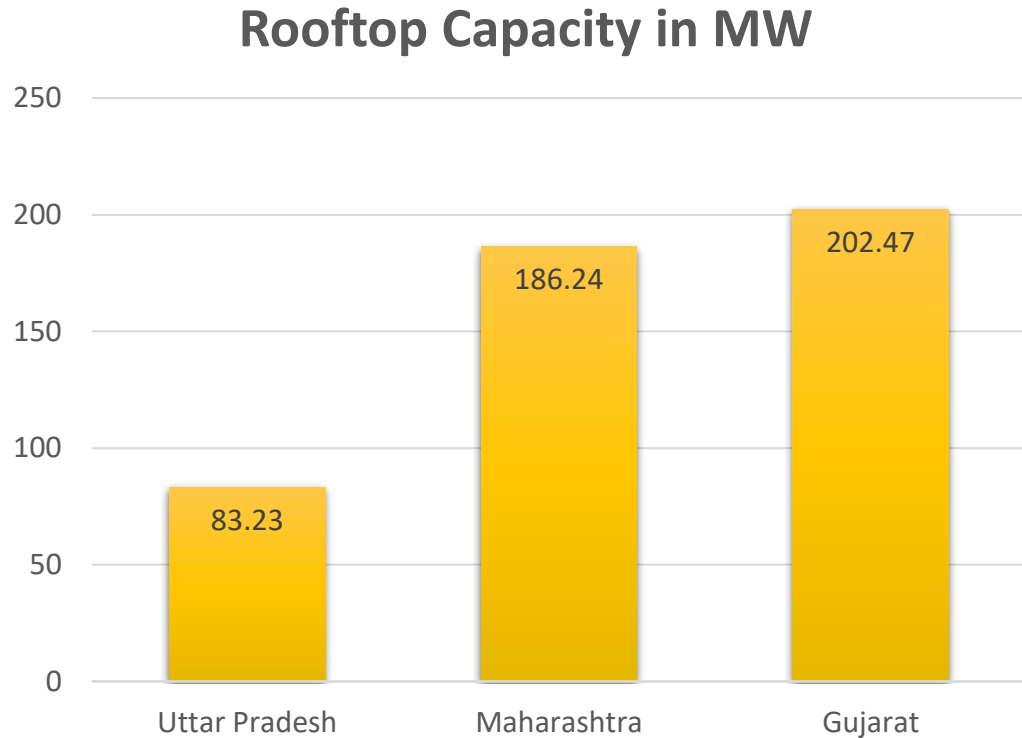
- ❖ We can see Maharashtra has very good solar energy potential
- ❖ The reason for this is its geographical location and major area is having large span of summer.

Grid connected solar Projects Capacity in MW



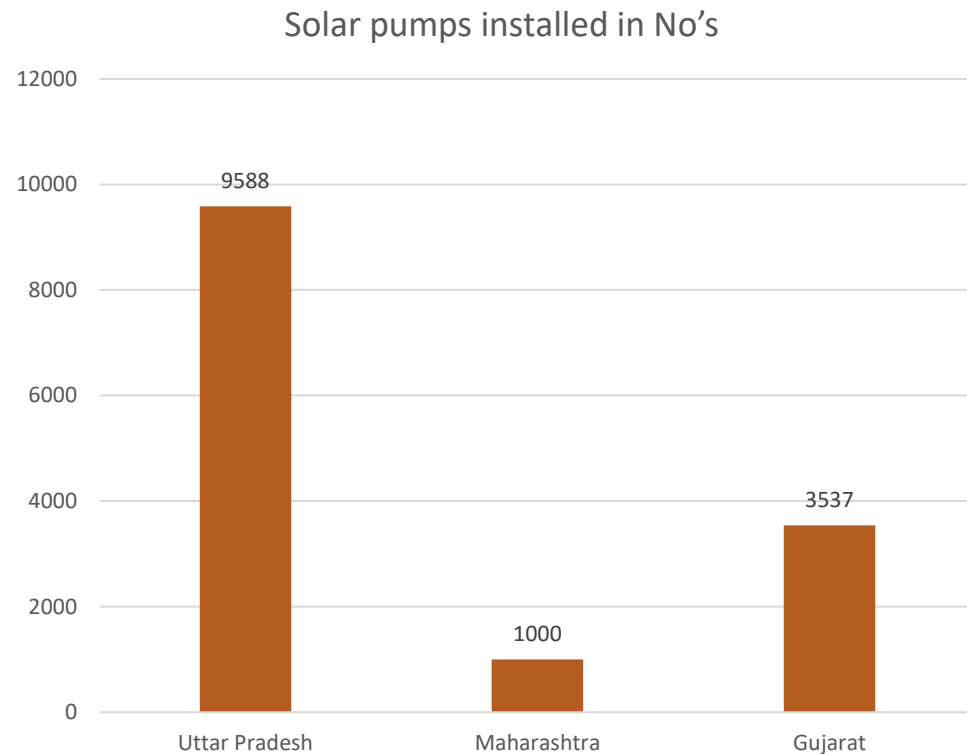
- ❖ Grid connected solar project are mostly in Gujarat
- ❖ Maharashtra and Uttar Pradesh is also having good number of this solar projects

Rooftop Capacity in MW



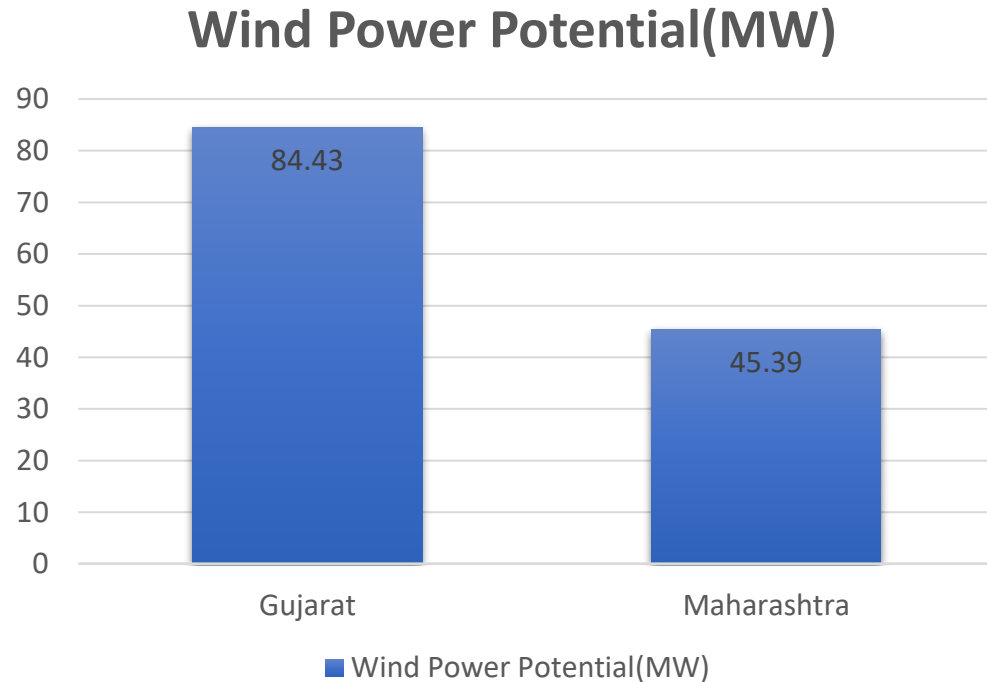
- ❖ For Maharashtra & Gujarat Rooftop capacity is almost same as this are much developed states
- ❖ Also people & industries in this are more aware about the benefits of solar energy.

Solar Pumps installed in No's



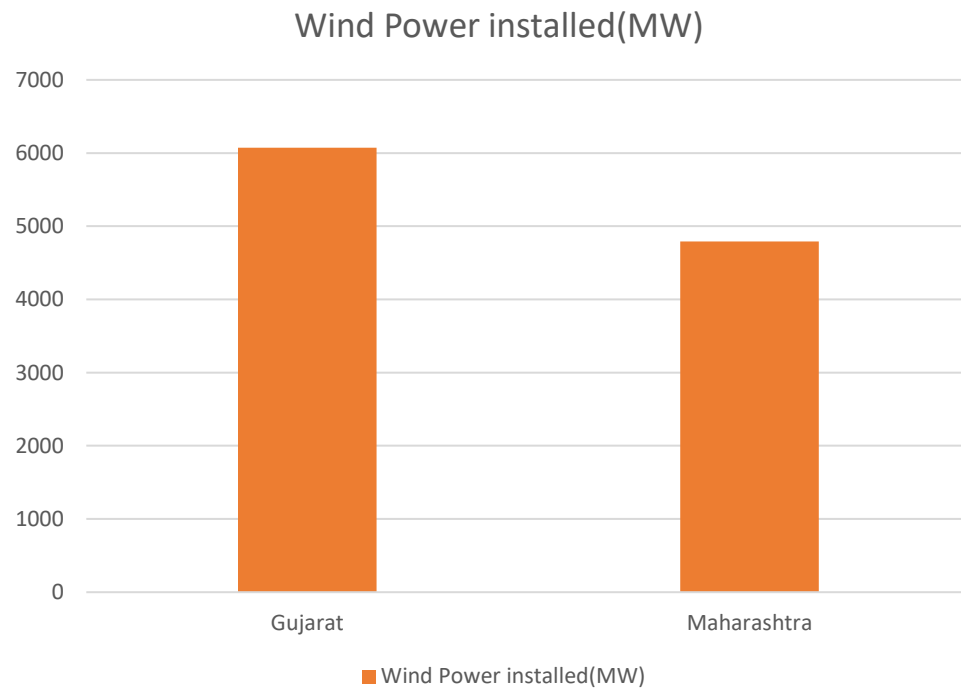
❖ Uttar Pradesh is leading in case of solar pumps this might be because of water irrigation requirement in this states.

Wind Power potential in MW



- ❖ For Gujarat wind potential is higher due to its geographical location.
- ❖ This state is aligned closely with Arabian sea.
- ❖ Maharashtra is also having large Coastal Region but the potential is low in overall considerations.

Wind power installed capacity in MW



❖ As discussed in last slide as Gujarat has higher wind potential so the wind power station installed are also higher in this state as compared to others.

Total investments towards renewable energy project implementations in top 3 states

Sr No.	State	Funds in lakhs(2017-18)	Funds in lakhs(2018-19)
1	Gujarat	2621.87	0
2	Uttar Pradesh	2828.32	0
3	Maharashtra	0.00	300

Union Territory Electricity Generation

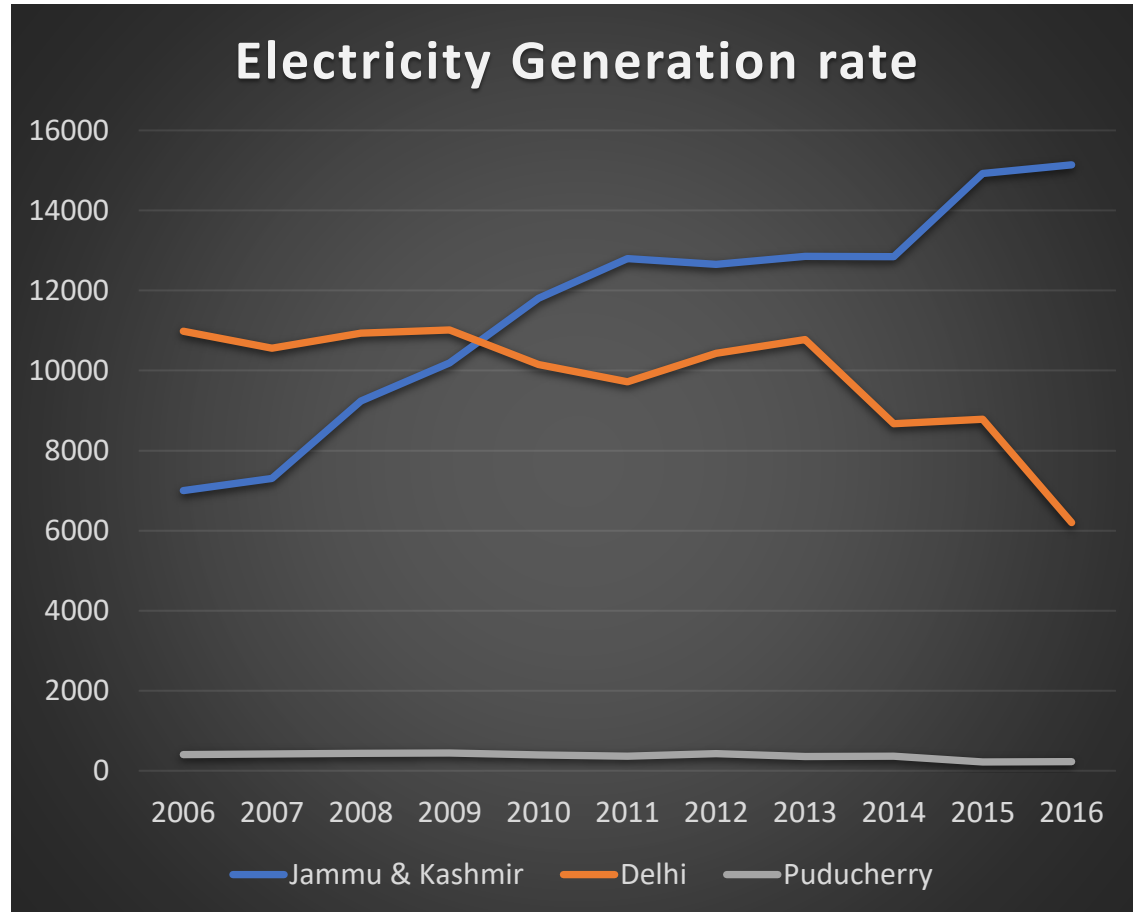
- **Top 3 Union Territories according to the Total electricity generated by them between the years 2006 to 2016**

- Jammu & Kashmir

- Delhi

- Puducherry

Union Territories



- ❖ Electricity generation rate is almost constant for Puducherry.
- ❖ For Delhi Electricity generation rate decreasing
- ❖ For Jammu & Kashmir there is continuous increase seen in electricity generation rate.

Electricity generation capacity in top 3 Union territory

States	Total electricity generated	Solar Potential	Grid connected solar Project capacity	Rooftop Capacity
Jammu & Kashmir	126749.11	111.05	14.83	-
Delhi	108240.65	2.05	126.89	-
Puducherry	4080.41	-	-	1.77

Roads Construction Analysis

Assumptions

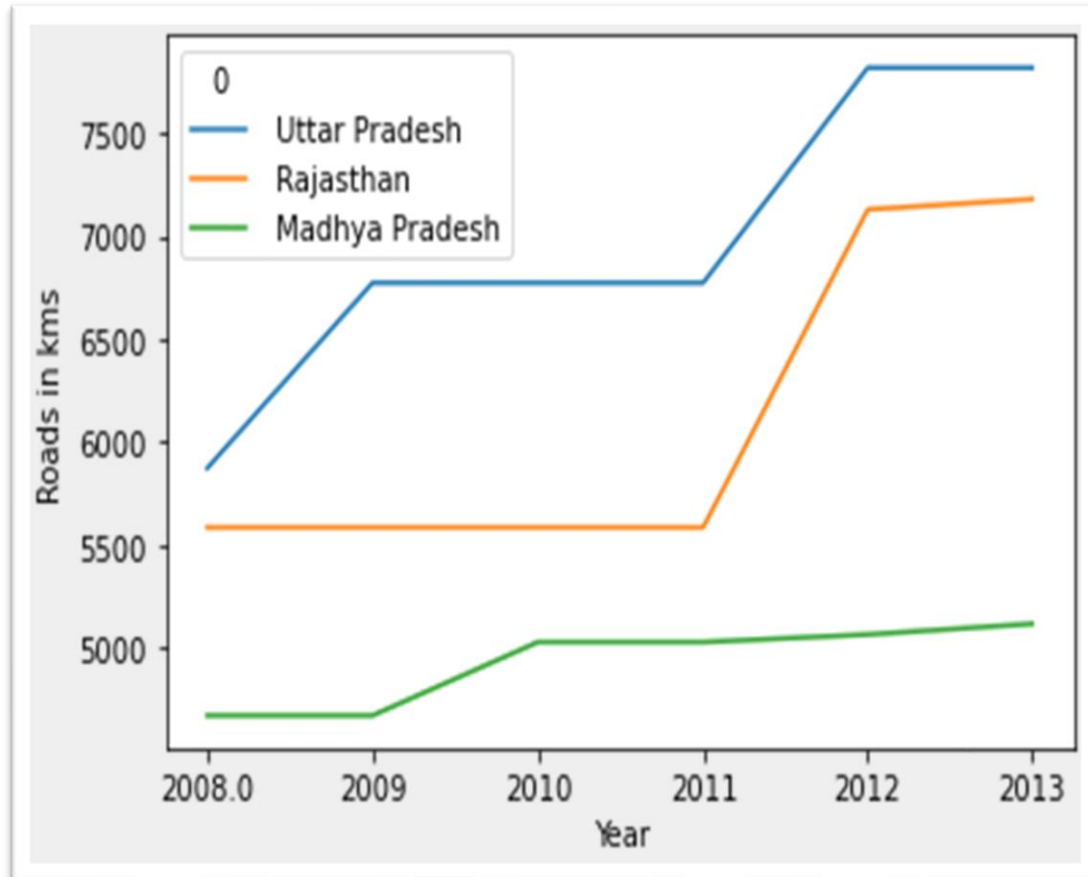
- Roads construction data for some union territories and smaller states are not available so I assumed it to be **zero** for those particular years.
- **Reason for assumption:** I did it because if we think logically as this states are smaller and not having developed cities so there will be lesser road construction every year as compared to other states and our main focus is to target top 3 states.

National Highways

❖ **Top 3 states according to the Total kms of Road constructed:**

- **Uttar Pradesh**
- **Rajasthan**
- **Madhya Pradesh**

National Highways



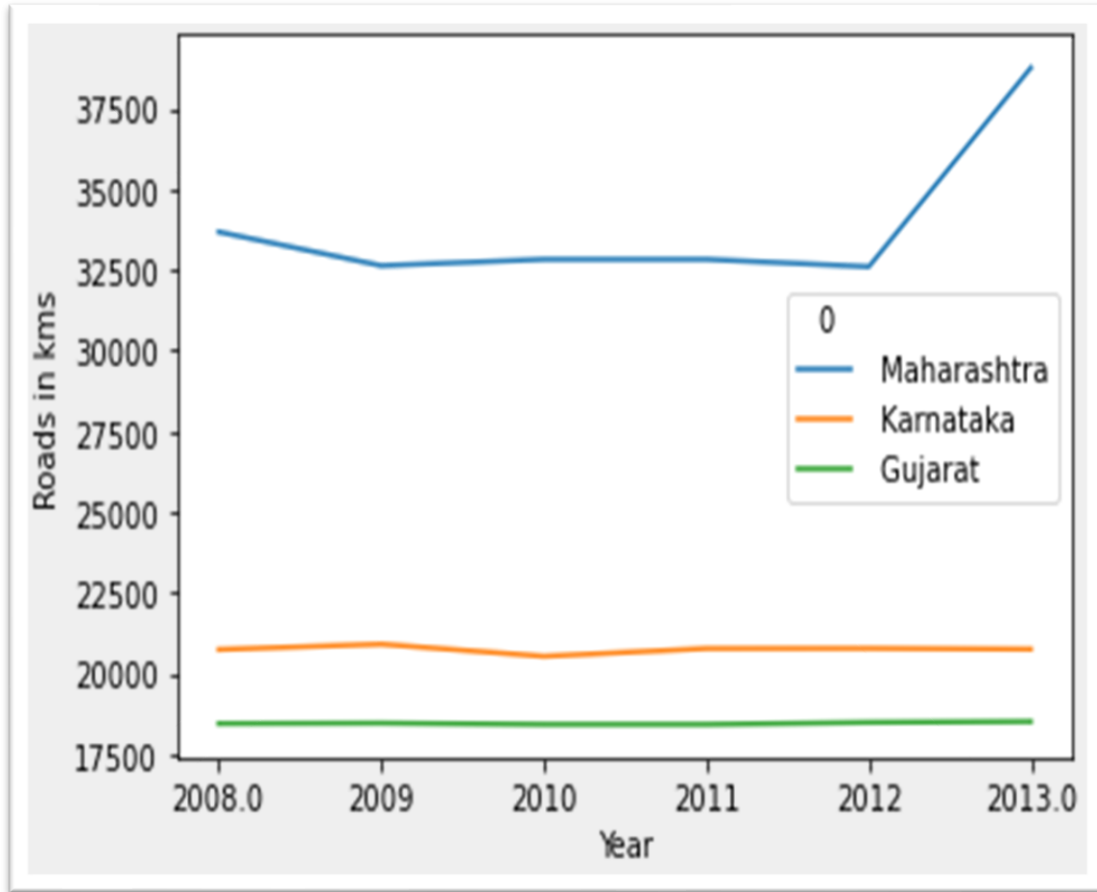
- ❖ Max Road Construction is done in Uttar Pradesh State
- ❖ In Uttar Pradesh & Rajasthan states there is drastic increase in road construction in the year 2012 as compared to previous trend.
- ❖ For Madhya Pradesh Road construction is almost constant each year after 2010.

State Highways

❖ **Top 3 states according to the Total kms of Road constructed:**

- Maharashtra
- Karnataka
- Gujarat

State Highways



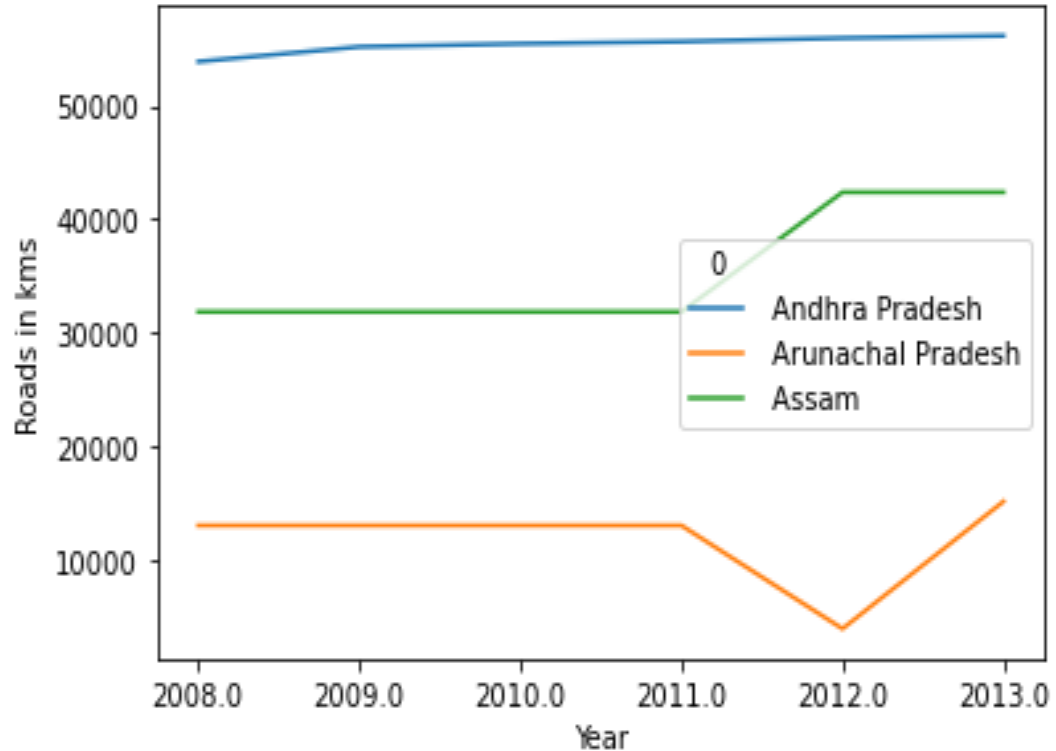
- ❖ Max Road Construction is done in Maharashtra State
- ❖ There is a sudden increase in Road construction rate in Maharashtra between year 2012 and 2013
- ❖ For Karnataka & Gujarat Road construction rate is almost constant every year.

Pwd Roads

❖ **Top 3 states according to the Total kms of Road constructed:**

- Andhra Pradesh
- Arunachal Pradesh
- Assam

Pwd Roads



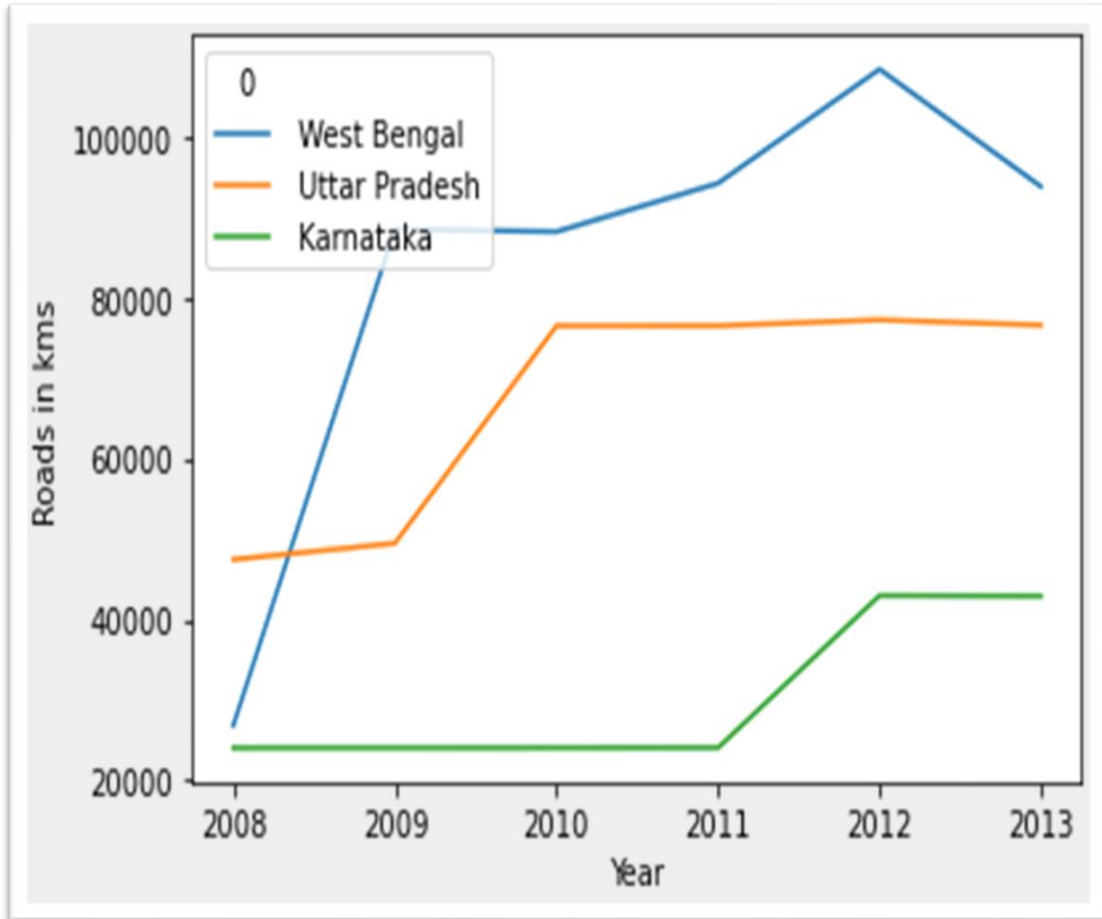
- ❖ Max Road Construction is done in Andhra Pradesh State
- ❖ There is a sudden decrease in Road construction rate in Arunachal Pradesh between year 2011 and 2012 & again increase in year 2013 to the same level as before year 2012
- ❖ For Andhra Pradesh construction rate is almost constant every year.
- ❖ For Assam Road construction increased in year 2012 and constant after that.

Urban Roads

❖ **Top 3 states according to the Total kms of Road constructed:**

- West Bengal
- Uttar Pradesh
- Karnataka

Urban Roads



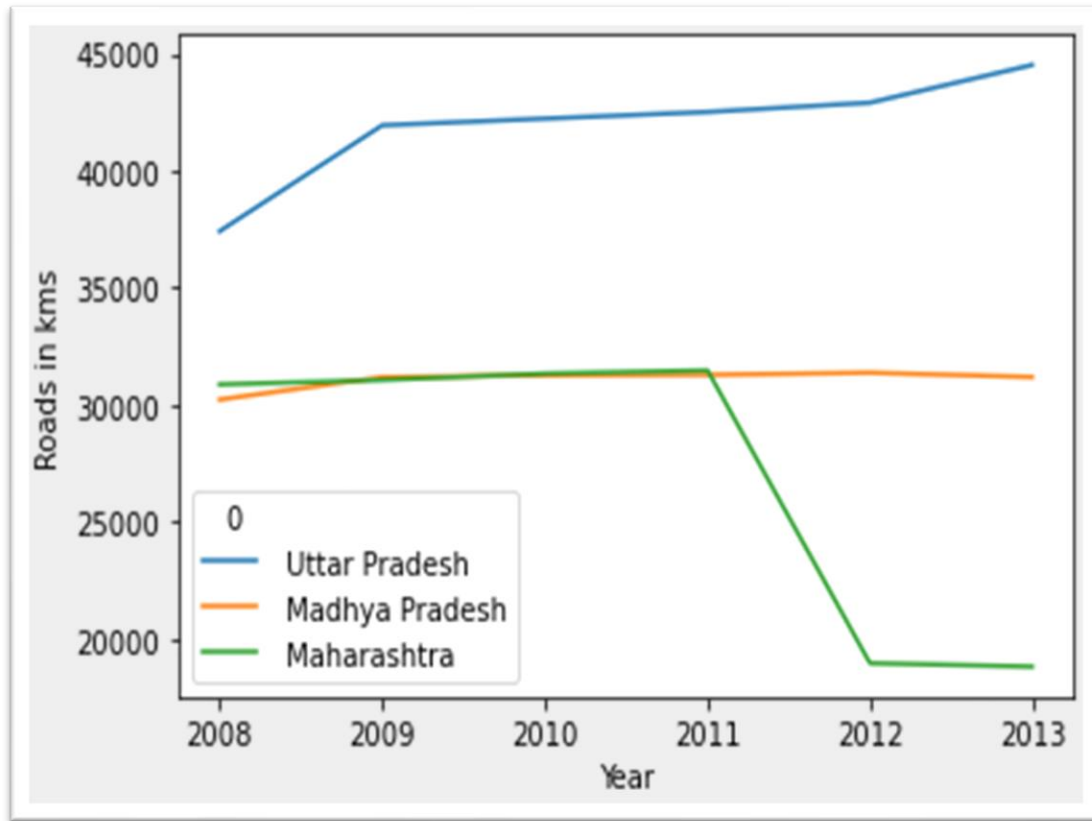
- ❖ Max Road Construction is done in West Bengal State
- ❖ For west Bengal there is a drastic change in Road construction in 2009 it increased 3.5 times of that in year 2008
- ❖ Again there is slow increase in Road construction rate from 2009 to 2012 for West Bengal
- ❖ For karnataka state Road construction rate doubles from year 2012

Project Roads

❖ **Top 3 states according to the Total kms of Road constructed:**

- Uttar Pradesh
- Madhya Pradesh
- Maharashtra

Project Roads



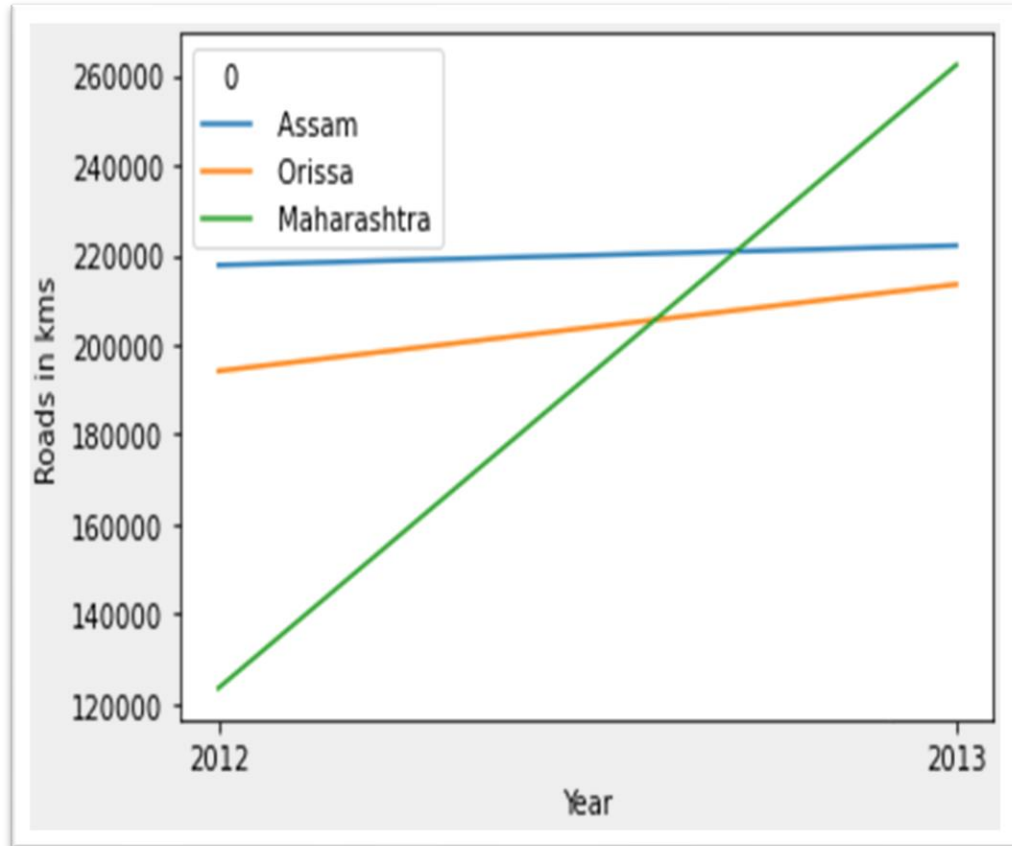
- ❖ Max Road Construction is done in Uttar Pradesh State
- ❖ For Madhya Pradesh Road Construction rate is almost constant
- ❖ There is slow increase in Road construction rate from 2009 to 2013 for Uttar Pradesh
- ❖ For Maharashtra Road Construction rate is decreased after year 2011

Rural Roads

❖ **Top 3 states according to the Total kms of Road constructed:**

- Assam
- Orissa
- Maharashtra

Rural Roads



❖ As the data is available only for 2 years Based on that we can say there is Major increase in Road Construction in Maharashtra in year 2013

❖ For Assam And Orissa Road Construction rate is increase slightly in year 2013.

Road Per Person

Sr No.	State	Total Urban Road	Total Rural Road	Total	Population as on 2013	Road per person
0	West Bengal	499755	356550	856305	91276115	0.009381
1	Uttar Pradesh	403603	200881	604484	199812341	0.003025
2	Karnataka	182189	326710	508899	61095297	0.008330
3	Delhi	175370	0	175370	16787941	0.010446
4	Gujarat	128011	105310	233321	60439692	0.003860
5	Maharashtra	122632	385868	508500	112374333	0.004525
6	Tamil Nadu	115043	282682	397725	72147030	0.005513
7	Orissa	110416	407597	518013	41974218	0.012341
8	Kerala	91027	280149	371176	33406061	0.011111
9	Madhya Pradesh	86336	214333	300669	72626809	0.004140
10	Andhra Pradesh	82660	332542	415202	84580777	0.004909

Sr No.	State	Total Urban Road	Total Rural Road	Total	Population as on 2013	Road per person
11	Rajasthan	75491	196345	271836	68548437	0.003966
12	Punjab	62556	122395	184951	27743338	0.006667
13	Bihar	57254	276338	333592	104099452	0.003205
14	Haryana	52193	9106	61299	25351462	0.002418
15	Chhattisgarh	45002	49757	94759	25545198	0.003709
16	Assam	36577	439821	476398	31205576	0.015266
17	Uttra Khand	25041	10984	36025	10086292	0.003572
18	Himachal Pradesh	12847	25730	38577	6864602	0.005620
19	Chandigarh	10056	0	10056	1055450	0.009528
20	Jammu & Kashmir	9995	19075	29070	12541302	0.002318
21	Pudducherry	4687	2414	7101	1247953	0.005690

Sr No.	State	Total Urban Road	Total Rural Road	Total	Population as on 2013	Road per person
22	Goa	3718	11097	14815	1458545	0.010157
23	Jharkhand	3146	24382	27528	32988134	0.000834
24	Mizoram	2022	4664	6686	1097206	0.006094
25	Tripura	1571	34932	36503	3673917	0.009936
26	Manipur	1093	14315	15408	2855794	0.005395
27	Sikkim	594	5744	6338	610577	0.010380
28	Nagaland	585	45903	46488	1978502	0.023497
29	Meghalaya	511	3406	3917	2966889	0.001320
30	A. & N. Islands	493	0	493	380581	0.001295
31	Arunachal Pradesh	244	8607	8851	1383727	0.006396
32	Daman and Diu	216	222	438	243247	0.001801
33	Lakshadweep	14	0	14	64473	0.000217
34	D. & N. Haveli	0	0	0	343709	0.000000