

MapmyIndia™

GEOSPATIAL DATA OFFERINGS



April
2018



Introduction

Data cannot be explanatory until converted into information. Noteworthy to say a picture can cover more than 1000 words and a map can portray more than 10 pictures. Conversion of data to empathise relevant information and blending with maps adds tremendous value to comprehend and explore shrouded possibility underneath.

Business and strategic planner, business analyst for their sales, marketing and distribution businesses requires prompt understanding of the geographies with value added data to manage business entities and assets more effectively to enhance their business vertically as well as horizontally, servicing customer more efficiently for their retention and vis-à-vis acquisition planning. Here, spatial data becomes almost an exigency.

GIS development team in MapmyIndia is working continuously to collate and process various datasets to complement GIS vector layers to support enterprises for the business challenges related to geographies viz.

Accurate and authentic GIS Maps are the best way to visualize or analyse any information related to distribution network, sales and distribution planning, marketing.

Augmenting the map with significant information adds colossal value to the study of any geography for various GIS and non-GIS analysis like:

- **Search** to find out known/ unknown locations and what is around the searched location
- **Geocoding** of business related assets
- Visualization of current business coverage over the geographies
- Visualization of **competition?**
- Analyzing Sales **performance and demand** in various geographies
- Research of **market share** in various markets/ geographies
- Various geo-marketing analyses like: catchment analysis, site selection analysis etc.

Different industry vertical require different kind of data and information and we at MapmyIndia can support them to cater their map and data needs. MapmyIndia helped equipped map-data and has understanding of many of the industry verticals like: Insurance, Retail, Logistics, QSRs, Banking, Micro Finance, Telecom, E-commerce, FMCG, Urban Planning, Municipal Administration and Governance, Smart City Development (IoT & Smart Governance), Health Care, Market Consultants, Travel and Tourism, Education, Media, Automotive, Disaster Management etc.

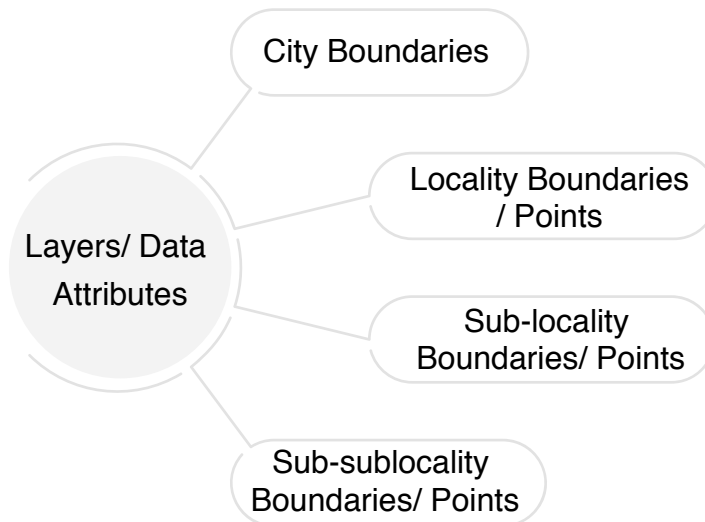
To adapt the need of businesses and geographies (Urban and Rural markets), MapmyIndia manages the data in multiple information categories like: Urban Profile data, Postal data, profile data, Affluence data, Rural Potential Index, Socio-economic, Demographics etc., which in-turn can support and add value while decision making and planning for different verticals as per business requirement.

Information Categories

Due to diversity of business requirement and satisfying the adhoc business needs, same datasets may not be used for every business problem. To assist such cases, MapmyIndia has grouped the information datasets into multiple category and sub-category indicators. Below are some of the Categories and their Sub- Categories with overview

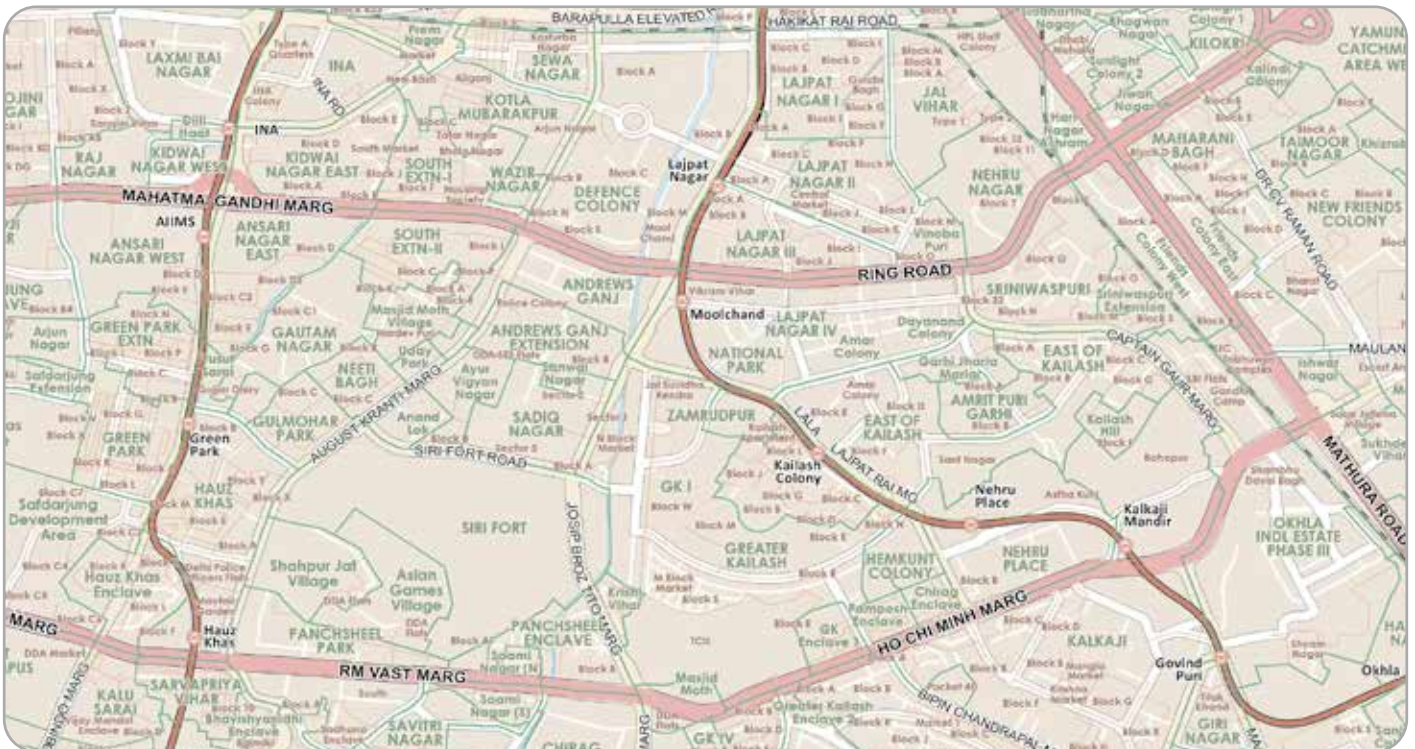
Urban Profile Database

Defining an urban area with drill down best possible precise information with detailed information to cater the exigency of urban markets to read and understand the urban place as high level of addressing structure, urban profile database is created



Overview

To study urban market and understand the in-depth information, urban dataset supports to get insight.



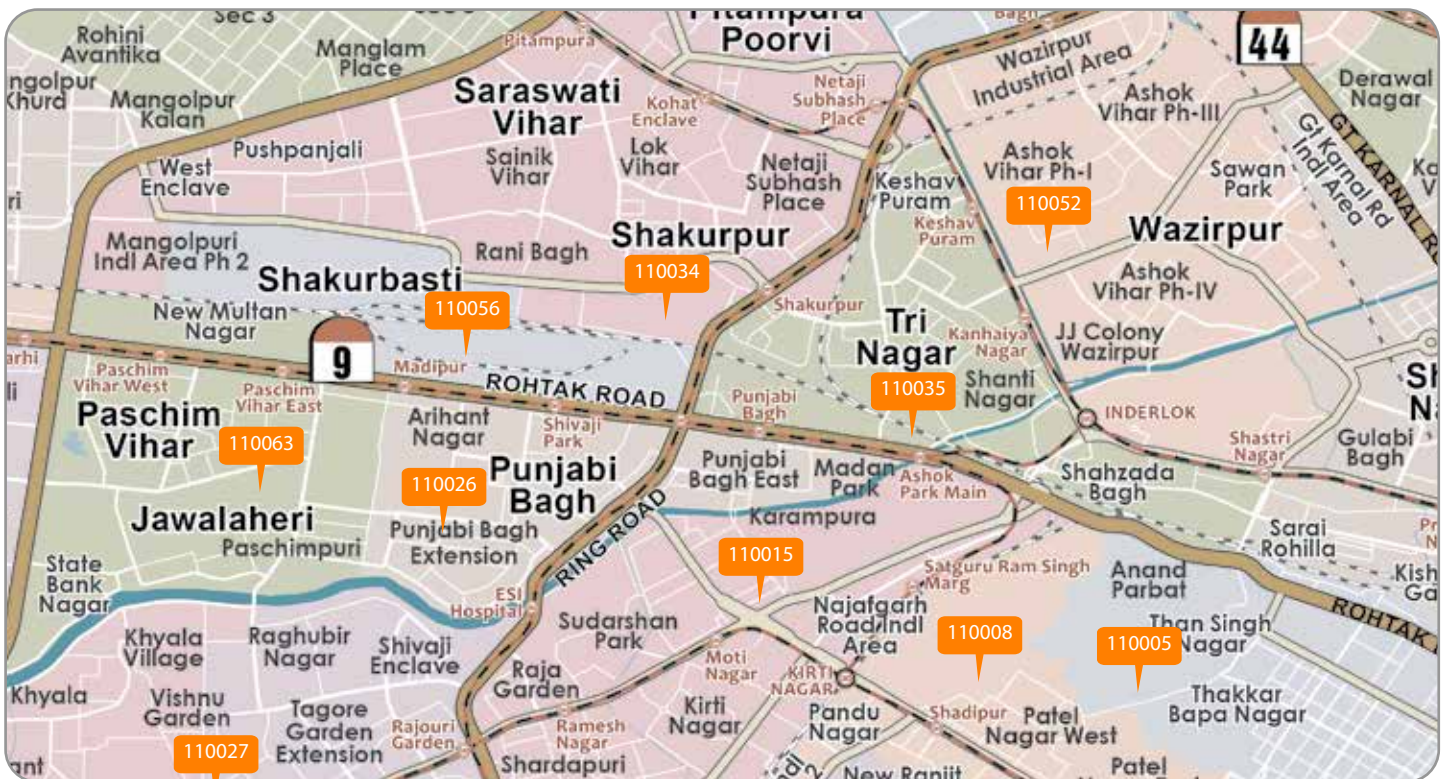
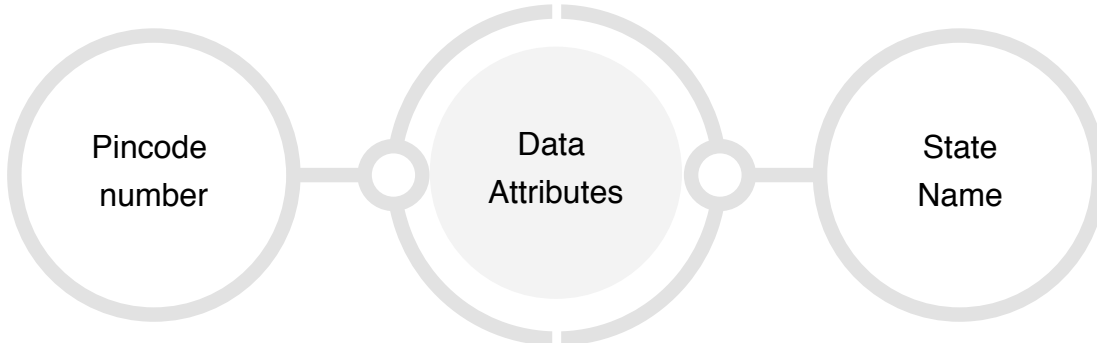
Source:

Data and Information collected through physical survey

Postal Database

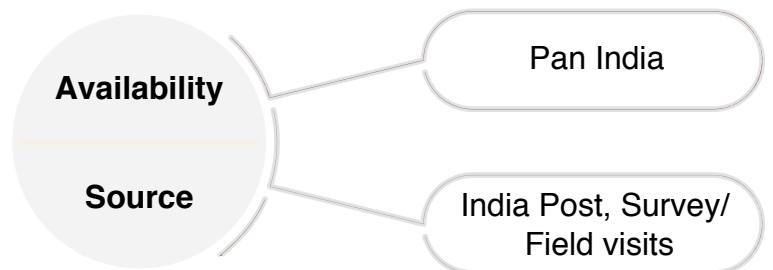
Postal Index Number (PIN) or PIN Code is a 6 digit code of Post Office numbering used by India Post. First digit indicates one of the regions, first 2 digits together indicate sub-region or one of the postal circles, first 3 digits together indicate a sorting / revenue district and last 3 digits refer to the delivery post office.

India has almost 24K unique pincodes covering length and breadth of Indian geography.



Application

Postal database becomes one of the key components of address structure for identification of location, delivery of goods, for banking purposes. Especially, insurance, courier companies and e-commerce companies use pincode as prime indicator for customer registration, delivery of consumables



Profile Database

We have every possible business, administrative and travel destination mapped with high level of accuracy and attribute richness. We possess over 12 million Points of Interest fragmented under 180+ categories.

Layers/ Data Attributes

Hotels, Restaurants, Medical Facilities, Transport Services, Religious Places, Commercial & Shopping Places, Residential Apartments, etc

Profile Database

Application

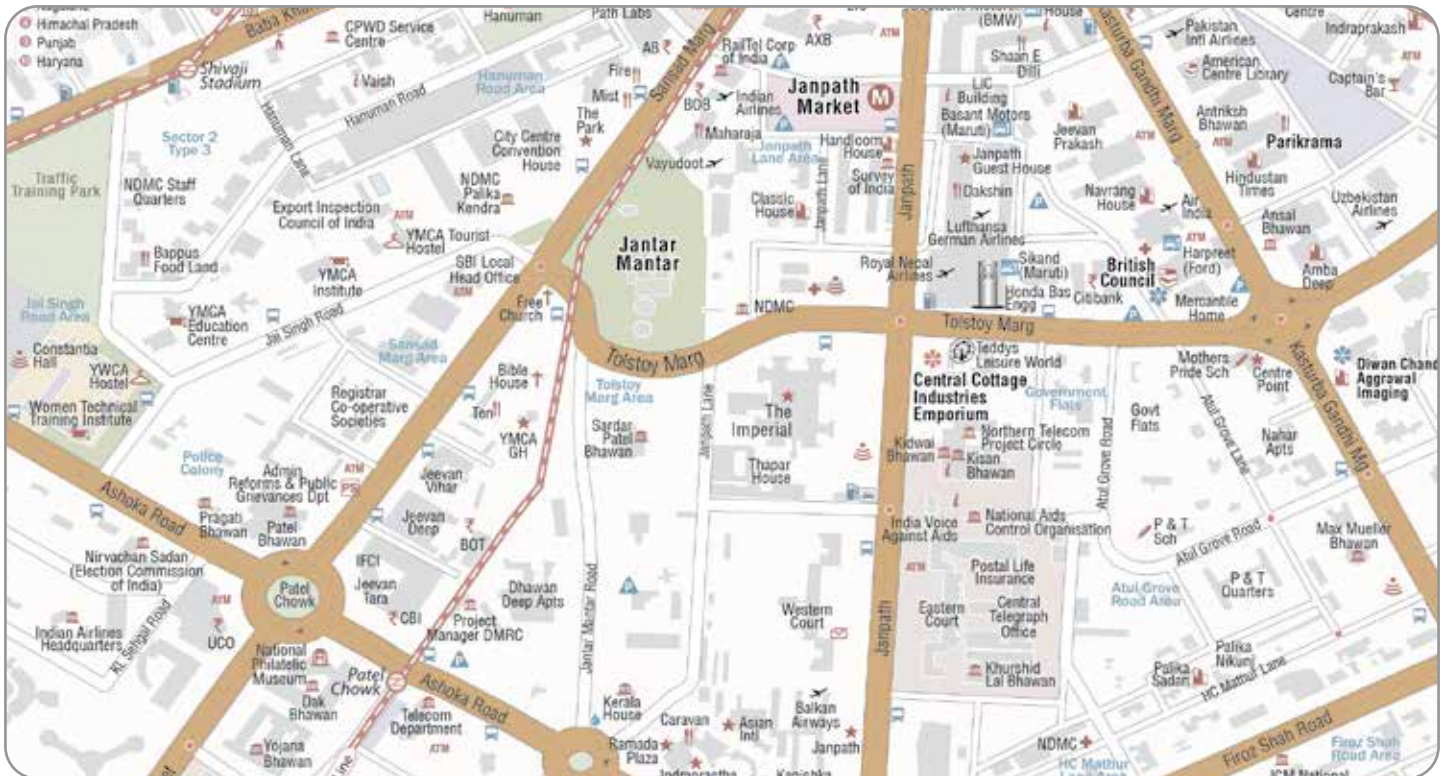
To identify any specific location, Point of Interest (POI or landmarks) plays a vital role. POI always performs an important role in address for navigation or last mile reach, for area and location profiling of different business vertical and their diverse requirements.

Availability

Pan India

Source

Field Visits/ Survey



Affluence Database

Business Intelligence experts at MapmyIndia conducts and manages field studies, data collection, analyse & compile various dataset and compute using in-house developed algorithm to calculate affluence ranges and associate the same with various GIS layers for the most effective use to help various analytical, research and planning exercises.

Data Attributes

Spending/ Purchasing Power

(No. of HH with annual HH income Greater than 10 Lac/5 to 10 Lac/ 1.5 to 5Lac/ Less than 1.5Lac)

Application

Organization like FMCG, Retail, Banking, Insurance etc. always research for the perspective customers that can be targeted for specific product or brands i.e. Premium products.

For Example - FMCG and Retail companies use such details for potential viability and growth, customer expansion and retention



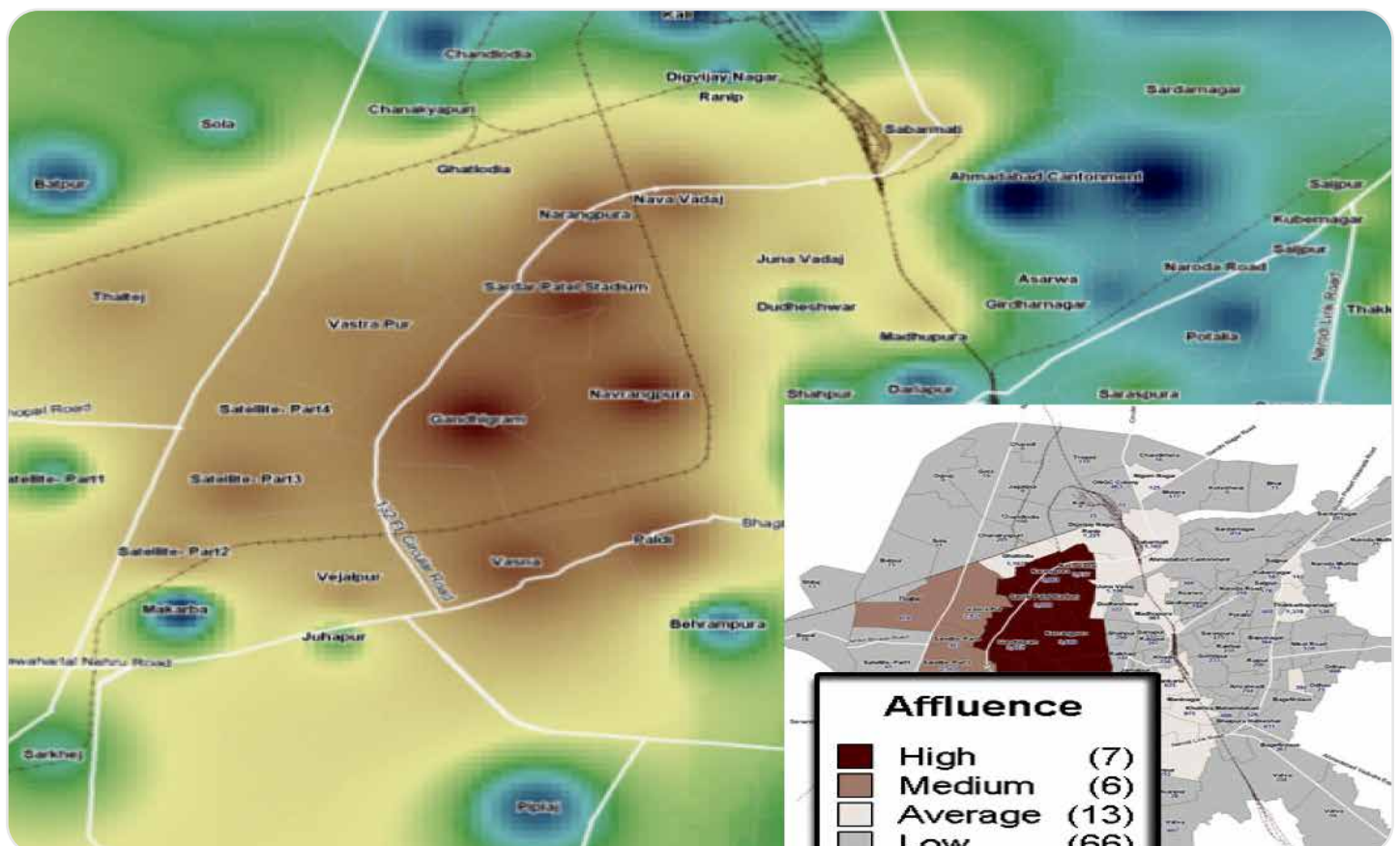
Availability

For limited cities at locality/ area level

Sources

Primary: Survey/ field visits

Secondary: Census data, City development plan

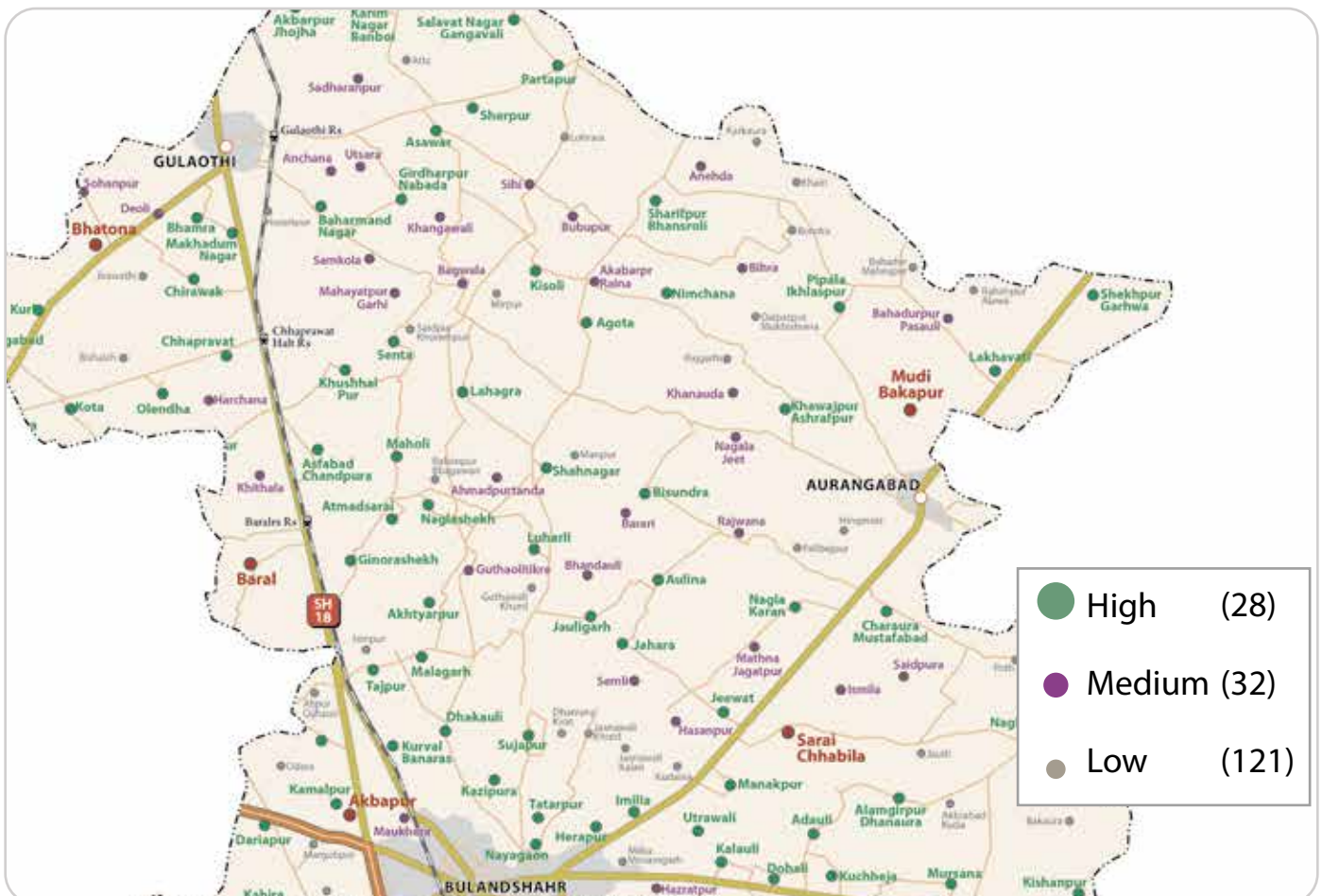
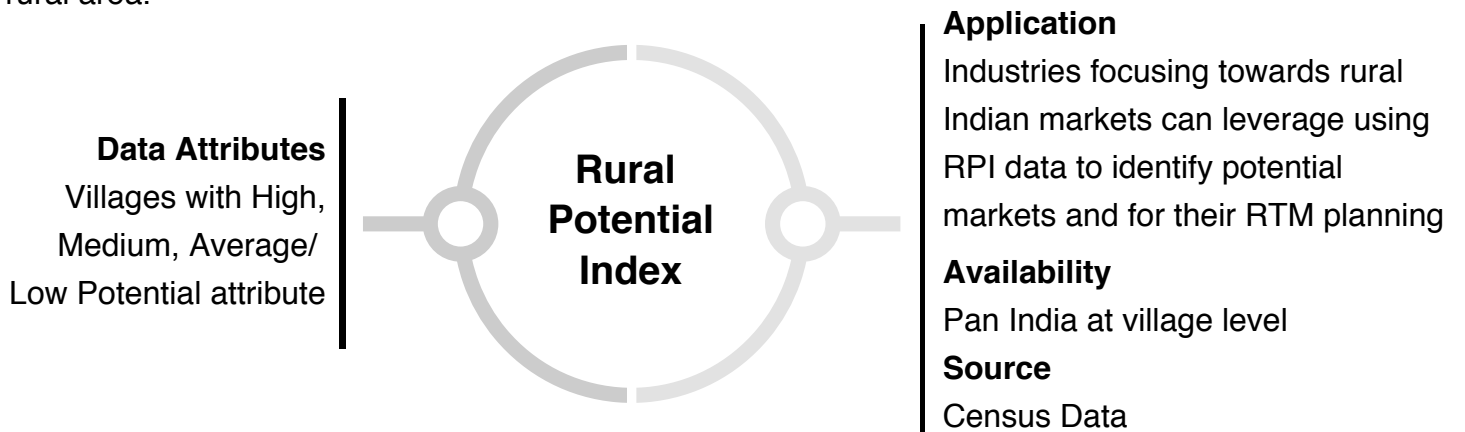


Rural Potential Index

In India, there are almost 0.6+ million villages with highly scattered rural population with low population density makes it difficult to select geographies to develop markets.

Demographics are available through census but, what about location and surroundings? Accessibility to the potential rural market? Organizational players in the markets follow their perception, words of mouth; some others study demographics, market research, study competition and existing sales trends to focus market.

(RPI) is essentially makes use of the most critical parameters affecting the rural market potential. The index is developed on the basis of demographics, socio-economic, consumption, awareness and means in rural areas. Results hence generated are moderated with other external market research data and use of digital technology, geo-spatial characteristics to determine the market potential of the rural area.



Socio - Economic Database

To define any market/ geography using the availability of amenities, social infrastructure, facilities etc., Socio-Economic data can be used to for any geography with combinations of census demographics data and other required parameters.

Data Attributes:

Attributes	Description
Bathroom facilities	No. of households using bathroom facilities
Cooking Fuel	No. of households using cooking fuel
Drinking Water	No. of households using different source of drinking water
Dwelling units	No. of households with 1/ 2/ 3/ 4/ 5/ 5+ dwelling units
Education	Education facilities (school/ colleges/ universities)
Floor Material	No. of households with floor material stone/ cement/ tiles etc.
HH Size	No. of households with HH size 1 to 9
Kitchen Facilities	No. of households using kitchen facilities
Married Couples	No. of married couples in household
Medical	Medical facilities (hospital/ clinics/ dispensaries/ medical store)
Ownership	No. of households with status as owned/ rented
Roof Material	No. of households with roof material tiles/ bamboo/ concrete etc.
Source of Lighting	No. of households using different source of lighting
Toilet Facilities	No. of households having or using toilet/ bathroom facilities
Transport	Availability of transportation (metro/ railway/ bus)
Transport	Transportation (type of road and density)
Wall Material	No. of households with wall material tiles/ bamboo/ mud/ concrete etc.

Application:

Used widely for research and business analytics across various industry verticals. Organization like FMCG, Retail, Banking, Insurance, etc. wants to research for the customers to identify potential viability, business expansion and much more.

Availability: Socio Economic data is available for pan India across all levels.

Source: Census Data



Demographics

Demographics data represent the population attributes at various administrative levels. Census of India is the most credible source of this information.

Data Attributes

Total Household, Total Population and Gender mix



Application

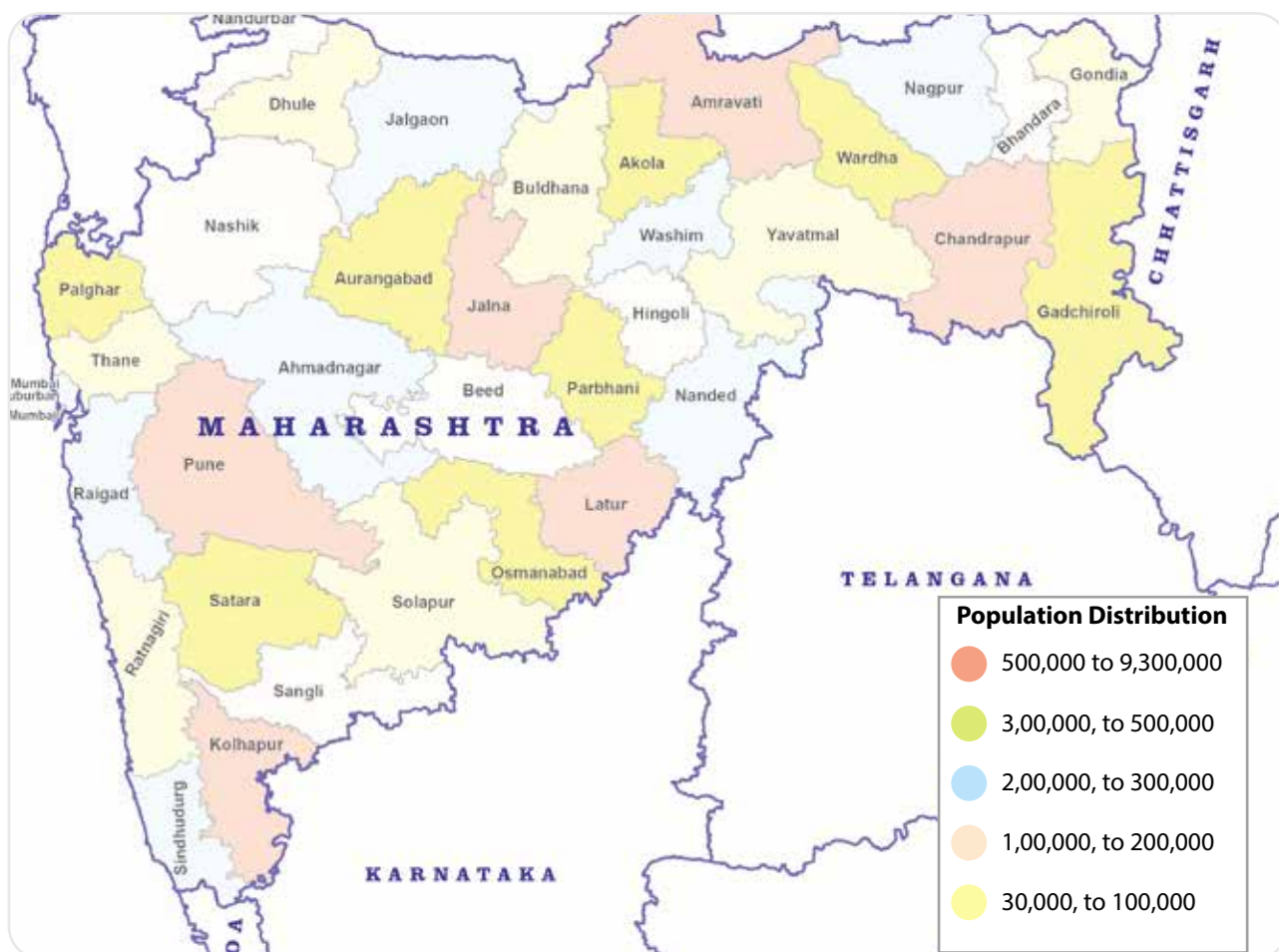
Demographics data is widely used for the research and planning by the government agencies, Scholars, business people, industrialists, and many more. Organization like FMCG, Retail, Banking, Insurance, etc. wants to research for the perspective customers that can be targeted for specific product or brands.

Availability

Demographics data is available for pan India across all levels

Source

Census of India



Traffic Data

MapmyIndia traffic offering covers historical traffic data collected, through billions of vehicle GPS logs, every day using variety of devices including vehicle data, car rental service data and processed for entire city road stretches with time interval of 15 minutes. Currently MapmyIndia has traffic data of 30+ cities

Data Attributes

Historic traffic data with average speed at various road stretch information

Application

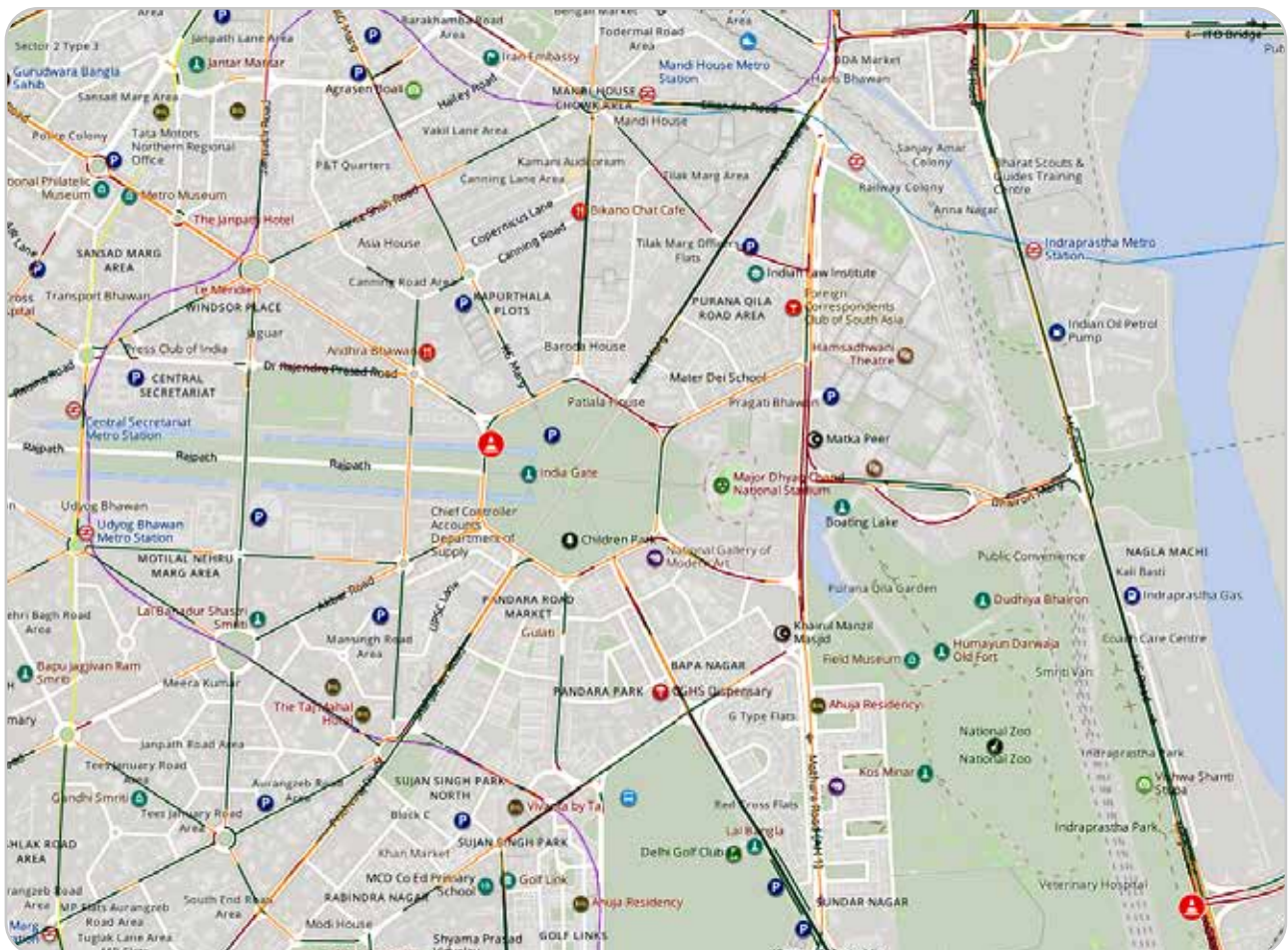
Historic traffic represent historical speed patterns organized into 15 minutes intervals for an entire week. The feature can be used to predict traffic flow based on historical information

Availability

City level (for limited cities)

Source

MapmyIndia GPS probes



Transport Network

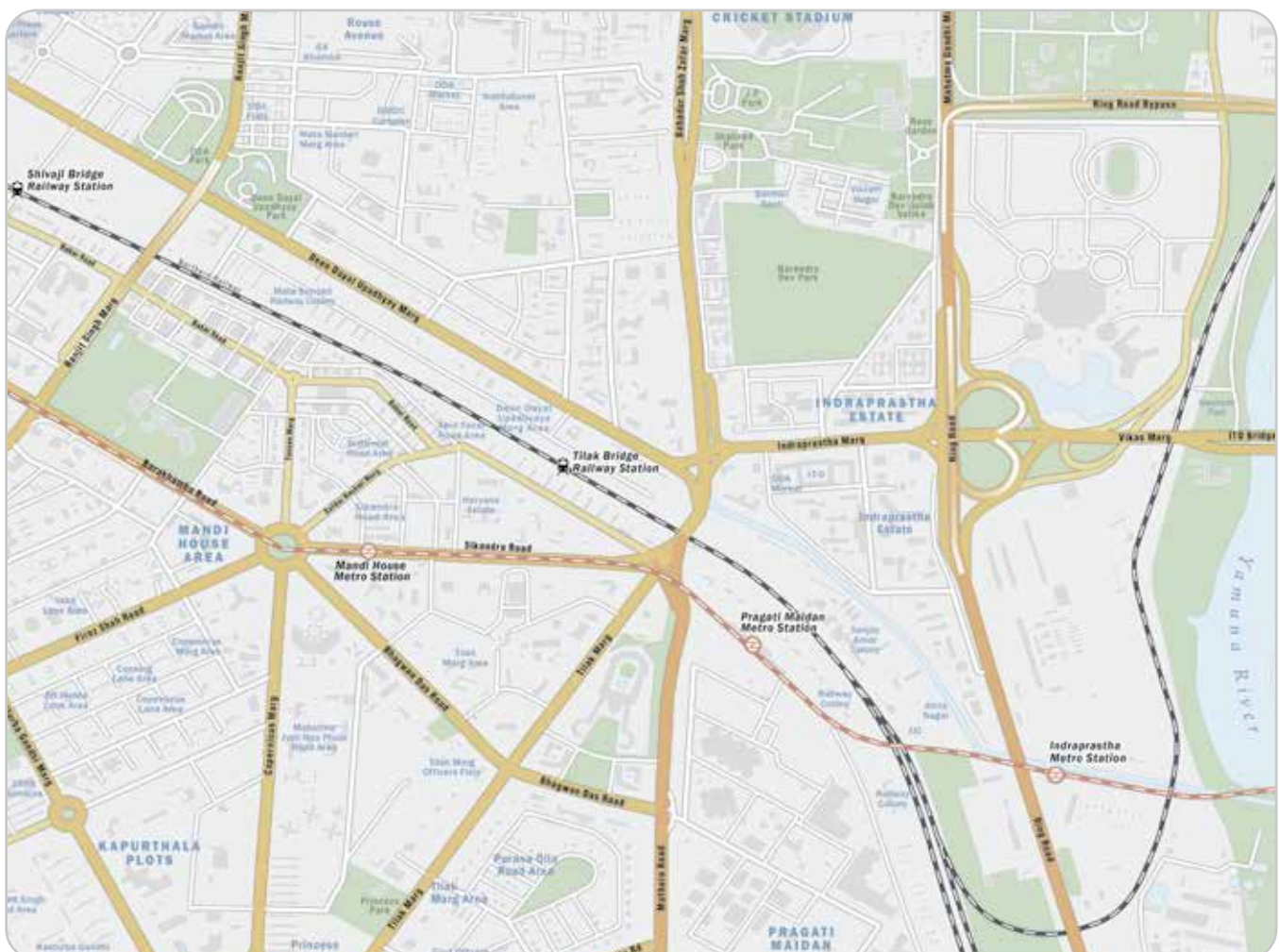
Highly detailed and classified road and rail network covering the entire length and breadth of the country.

Roads classified into multiple categories depending on classification criteria and usage, with associated attributes, our transportation data stands out for all routing applications. Some of the rich attributes associated to roads are Name, Aliases, Route numbers, Administrative Information at the most granular level, Average Speed, Number of Lanes, Dividers, Road Directions, Speed Limits, Restrictions, Private Roads, Form of Ways such as Flyovers, Roundabouts, Bridges etc. , and many more....

Railway Network is basically classified into broad category of Metro Rail Network, and Rail Network along with classification on gauge types.

Data Layers

- National road network- NH, SH, DH
- City road network with road classification
- Railway Network
- Metro Rail Network



Application:

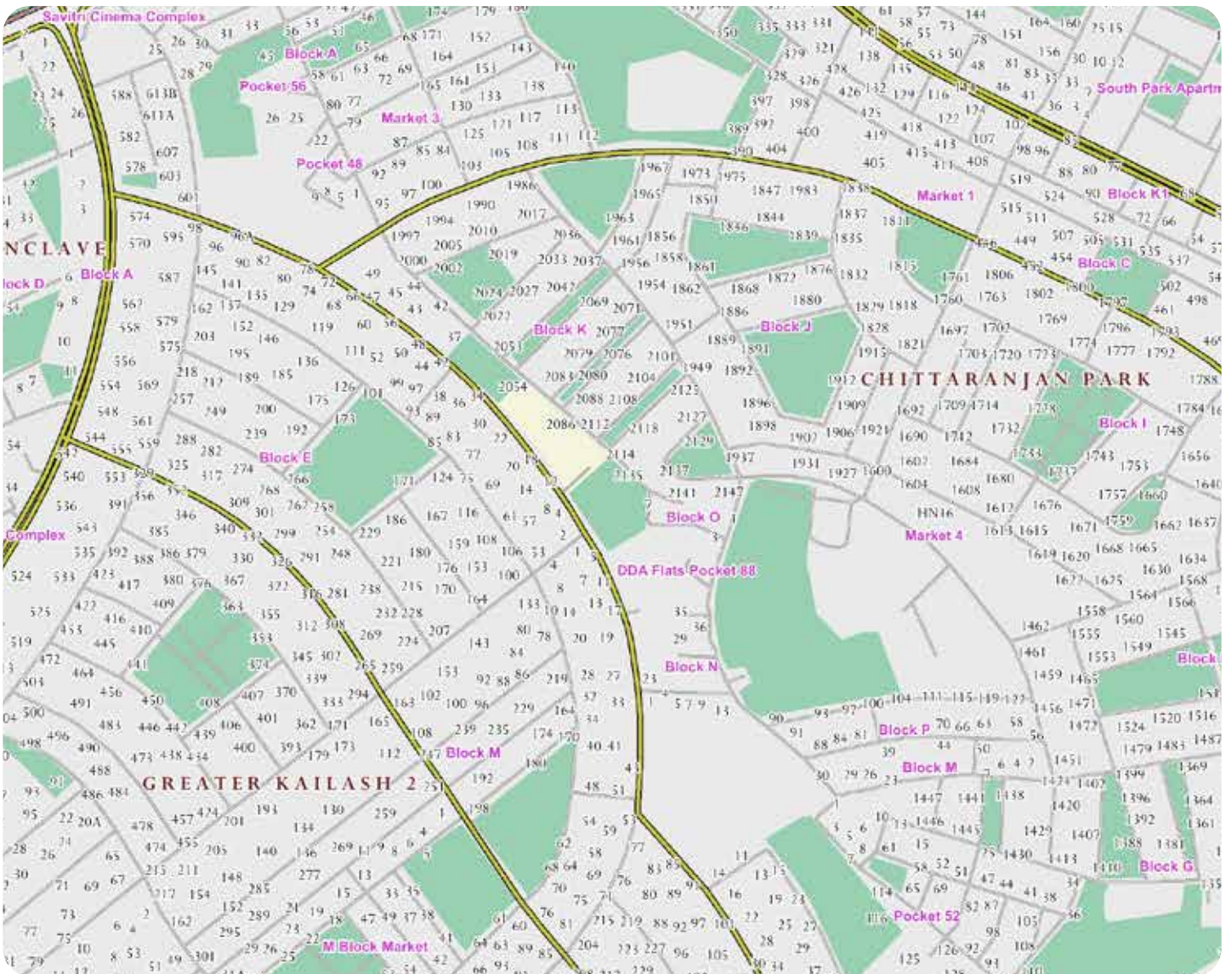
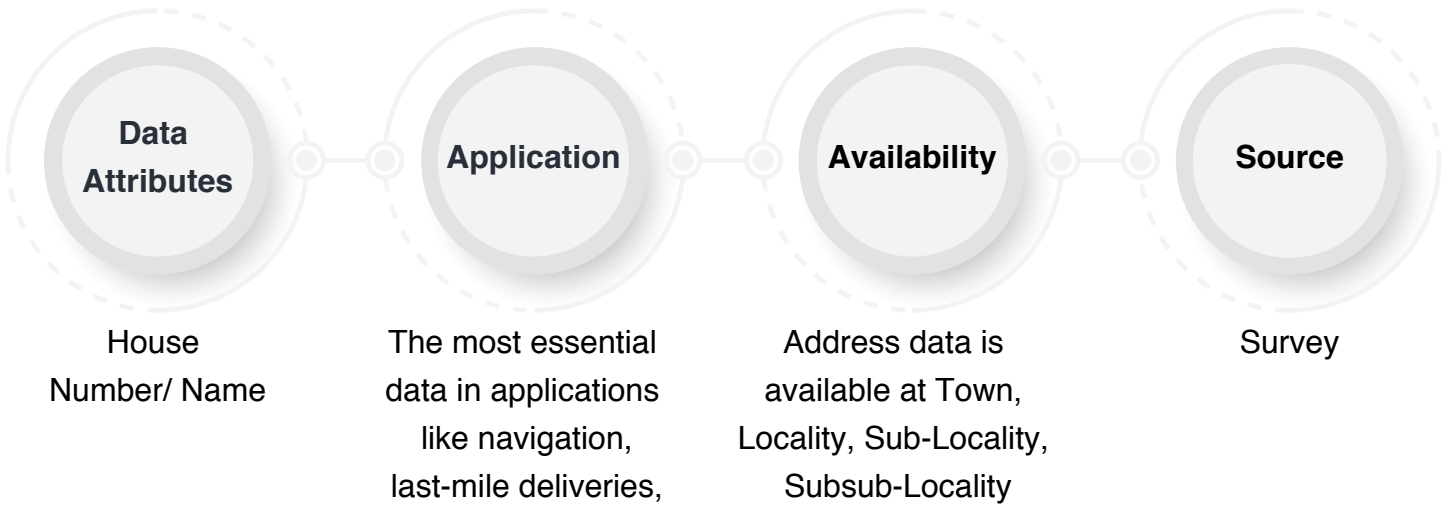
Transport Network can be used for Routing, Navigation, Last mile delivery, Transit application etc.

Availability : Pan India

Source : Survey/ Field visits

Address Database

MapmyIndia address data comprises of city, urban, semi urban and rural address directories with different levels of granularity. House and building numbers are covered at the most detailed level while street level maps for all the cities and towns in the country are being provided.

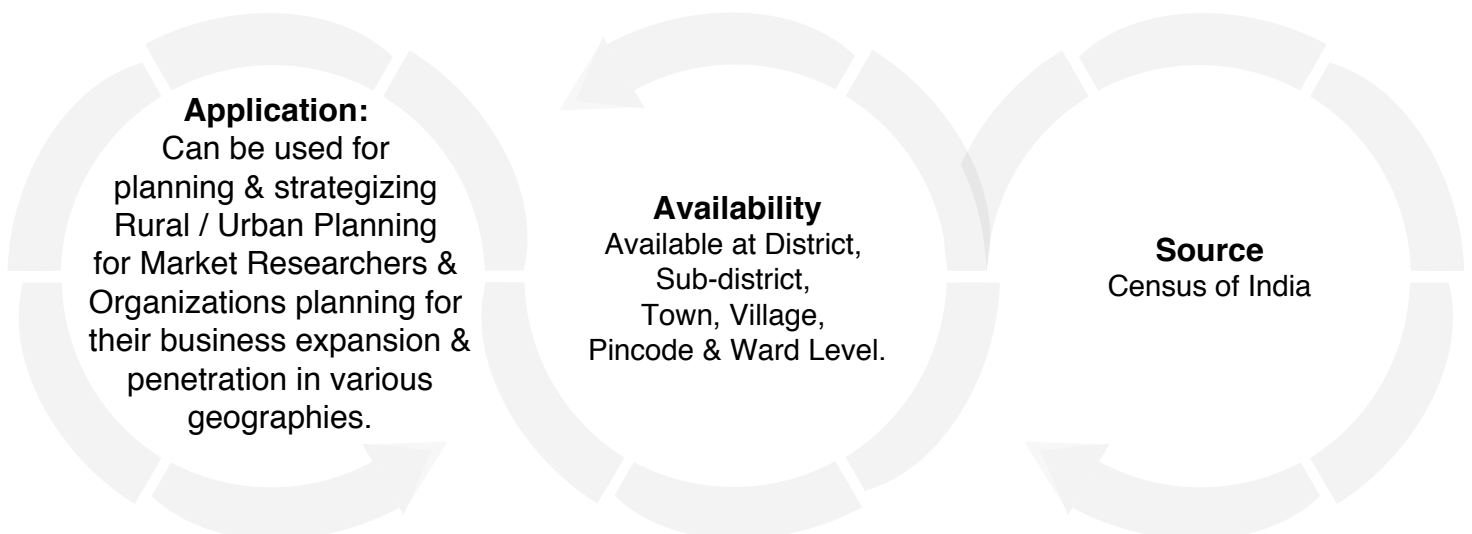


Amenities/ Facilities

Amenities help to understand infrastructure, profiling and development and growth potential of any geography.

Data Attributes

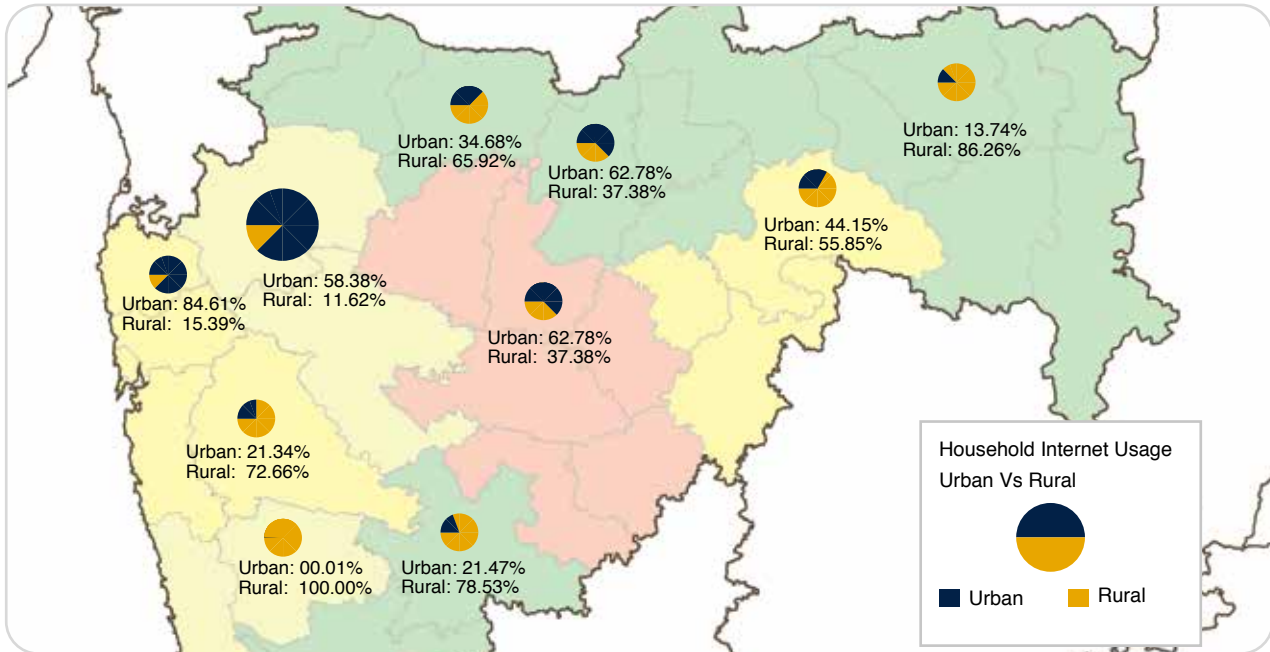
Attributes	Description
Agriculture related	Area (in hectares) of irrigated land, barren land etc.
Banking	Availability and no. of banks/ ATMs
Commodity	Major commodity grown/ manufactured
Communication	Availability of Post offices, TV, Radio, Telephone, Mobile etc.
Cooking Fuel	Type of fuel used or cooking
Education	Education facilities (School/ Colleges/ Universities)
Electricity	Availability and no. of HH availing electricity facility
Entertainment	Availability of cinema/ theatre etc.
Healthcare	Medical Facilities (Hospital/ Clinics/ Dispensaries/ Medical Store)
Market	Availability of markets/ mandi/ haats
NGO/ Community	Availability of NGO/ Asha workers/ SHGs
Power Supply	Availability of power for domestic/ commercial/ industrial use
Transport	Availability of Bus, Train, Van etc.



Awareness

In different geographies, literacy and digital awareness plays a major role for understanding and grasping knowledge of the surroundings and outer world whether the business or the society. Higher the literacy level especially female literacy and general awareness to digital media helps industry to focus on specific requirement of the population like: connectivity with businesses, brand awareness etc. This information becomes more useful when related to rural markets.

MapmyIndia collate and process various related attributes to help related business verticals to plan/ analyse the geographies for their better reach in various different geographies of the country.



Data Attributes

Attributes	Description
Literacy	Literacy percentage and ratio Female literacy
Media	No. of HH using Digital Media (Mobile/ Computer) No. of HH using Digital Media (Internet)

Application

This kind of data can be used for various vertical – FMCG, Retail, Banking, Insurance, etc.

Availability

Data is available for India across all levels

Source

Census of India

Penetration

In today's time organization are looking for deeper reach of their brand and products by studying the market through various means of information. Although many of market research agencies study the data to provide the information in tabular or graphical format but due to lack of 'location' factor i.e. digital maps, it remains a challenge for better to best approach. We, at MapmyIndia support such studies to visualize over the digital maps to help the organization to get the answer of various business challenges.



Data Attributes

Attributes	Description
Banking	Bank/ ATM
Digital Technology	No. of HH using Mobile, Laptop/ Computers, Internet
Media	No. of HH using TV, Radio Transistor, Newspaper
Vehicular	No. of HH using 2W, 4W

Application

Can be applied for
business expansion in
Urban & Rural Markets

Availability

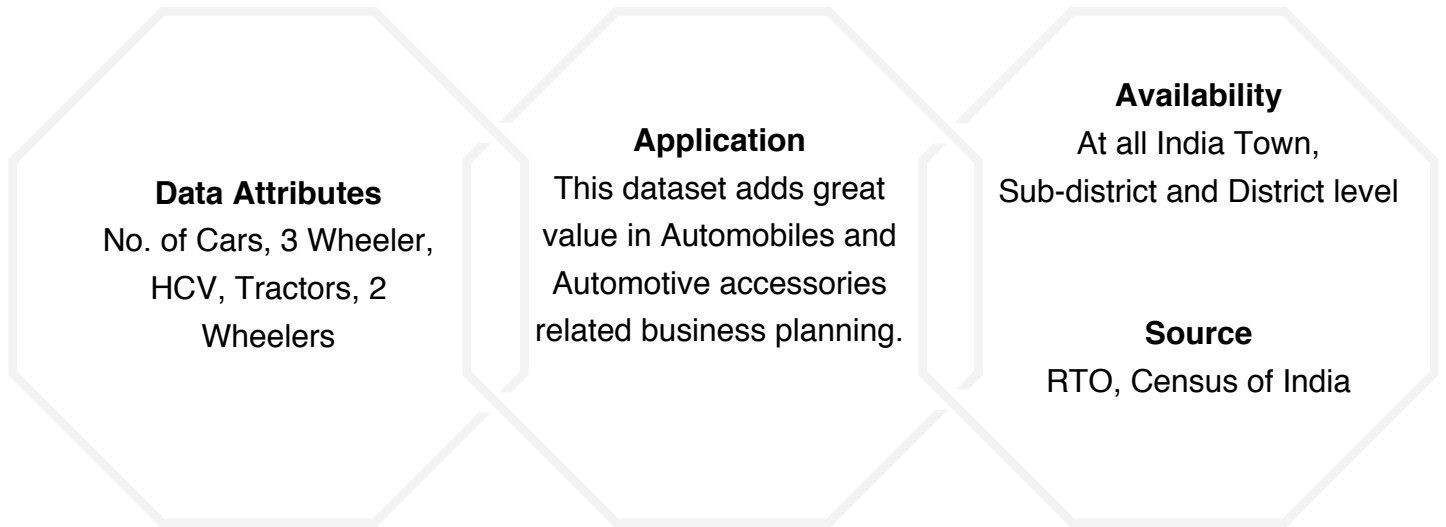
Pan India

Source

Census of India

Vehicle Population

Vehicle population database help to understand the estimated number of vehicles at Town, Sub-district and District level and can be used for studies and analyses related to automobiles and auxiliaries businesses

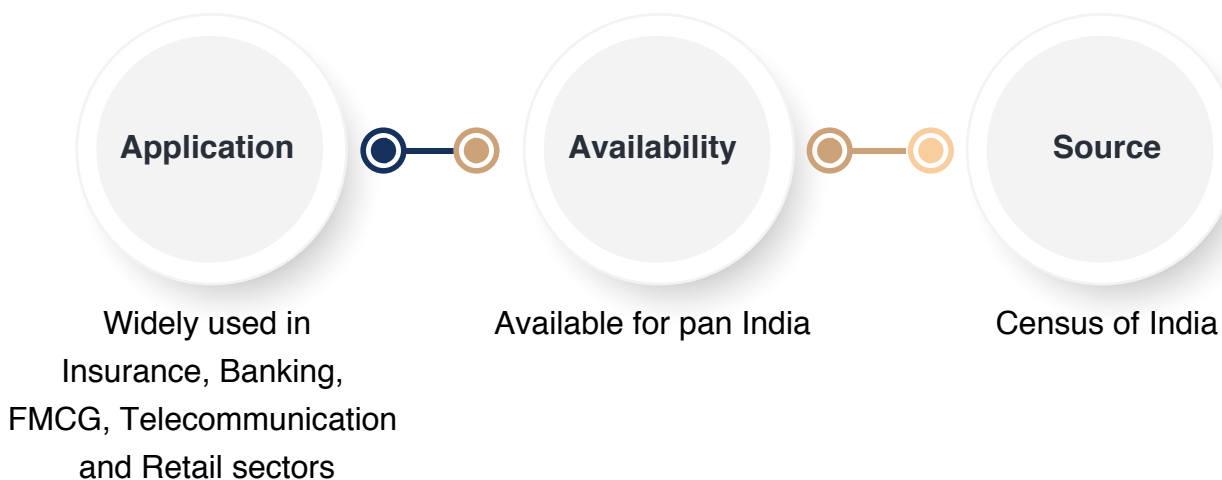


Consumption

It helps to understand the usage/ ownership of vehicles, durable goods, and telecommunication devices within specific administrative geographies.

Data Attributes

Attributes	Description
Communication	No. of HH using basic telephone (landline) No. of HH using Mobile
Media	No. of HH having media (TV/ Radio)
Vehicles	No. of HH using 2-Wheeler/ 4-Wheeler/ Bicycle



Annexure1: Information Categories and Availability

CATEGORY	STATE	DISTRICT	SUB-DISTRICT	TOWN	VILLAGE	PIN CODE	WARD	LOCALITY	SUB-LOCALITY	SUB-SUBLOC	GRID
AFFLUENCE	✓	...	✓#	✓#	✓#	✓#	✗	✓#
AGE GROUP	✓	✓	...	✓#
AMENITIES/ FACILITIES	...	✓	✓	✓	✓	✓	✓#
AWARENESS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
COMMUNICATION	✓	✓	✓	✓	✓	✓	✓	✓#	✓#	✓#	✓#
CONSUMPTION	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
DEMOGRAPHICS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
EDUCATION LEVEL	✓	✓
MEANS	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MODE OF TRAVEL FOR WORK	✓	✓
PENETRATION	✓	✓	✓	✓	✓	✓	✓	✓#	✓#	✓#	✓#
PROFILE DATA	✓	✓	✓	✓	...	✓	✓	✓	✓	✓	✓
RELIGION	✓	✓	✓	✓#
RURAL POTENTIAL INDEX (RPI)	✓
SOCIO-ECONOMIC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
VEHICLE POPULATION	✓	✓	✓	✓	...	✓#
TRAFFIC DATA	✓#
POSTAL DATABASE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
TRANSPORT NETWORK	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
LANDUSE	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
ADDRESS	✓#	✓#	✓#	✓#	...

#: Available for limited geography

Annexure 2: Information Categories v/s Business Verticals

Augmenting the map with significant information adds colossal value to the study of any geography for various GIS and non-GIS analysis. Below are some of the proposed datasets that can add value to different verticals using different combination of information datasets.

FMCG

- Demographic
- Administrative
- City Map
- Affluence
- Penetration
- Profile Data
- Postal Database
- Address Database

Retail

- Demographic
- Ward
- Penetration
- Affluence
- Postal Database
- City Map
- Profile Database
- Address Database

Insurance

- Demographic
- Penetration
- Urban Database
- Administrative
- Amenities / Facilities
- Postal Database
- Profile Database

**Banking
(Incl. Micro Finance)**

- Demographic
- Administrative
- Profile Database
- Affluence

Telecom

- Demographic
- Administrative
- Profile Database
- Amenities/ Facilities

Healthcare

- Demography
- Profile Database
- Amenities/ Facilities
- Transport Network

**Market
Consultants**

- Demography
- Amenities/ Facilities
- Penetration
- Ward
- Profile Database
- Affluence
- Urban Database

Government

- Administrative
- Demography
- Penetration
- Ward

**Travel &
Tourism**

- City
- Urban Database
- Transport Network
- Profile Database
- Demography
- Postal Database

Education

- Administrative
- City
- Demography
- Penetration
- Ward
- Urban Database
- Postal Database
- Transport Network
- Affluence

Media

- City
- Ward
- Urban Database
- Transport Network
- Profile Database

Automotive

- Demography
- Amenities/ Facilities
- Penetration
- Affluence
- Profile Database



Digital Address: eloc.me/mmi000

Postal Address:

CE INFO SYSTEMS (P) LTD.
237, Okhla Industrial Estate, Phase-3,
New Delhi -110020

+91-9999333223  contact@mapmyindia.com  www.mapmyindia.com