UTILITY, OIL AND GAS SOLUTIONS

PERSPECTIVE OF UTILITY, OIL AND GAS

Electricity, water and gas networks need to be mapped so that their assets can be efficiently operated and maintained providing cost effective service to its customers. The geospatial database exchanges data with almost all IT applications including billing, customer care, field work force management, asset maintenance, HR applications, sales & marketing etc. It helps in efficient replacement of aged assets and estimating what amounts need to be set aside for replacement.

SPECIFIC GOVERNEMENT PROGRAMS

Ministry of Power, Government of India, launched the Restructured Accelerated Power Development and Reforms Programme (R-APDRP) with focus on establishment of base line data, fixation of accountability, reduction of AT&C losses upto 15% level through strengthening & up-gradation of Sub Transmission and Distribution network and adoption of Information Technology. The task on hand is collecting baseline data for total energy audit and accounting, through an integrated IT strategy across the distribution value chain. This also required automating and integrating various utility processes like Connections Management, Asset Management, Maintenance Management, Metering, Billing and Collection, Energy Audit, GIS-based Consumer Indexing, Network mapping, Customercare,and MIS

MAPMYINDIA OFFERINGS

MapmyIndia provides a comprehensive utility GIS services for our valued customers. MapmyIndia has a large number of trained and expert field staff dedicated to correctly locate your utility assets and collect and assign their attributes. Our project team members have located thousands of field assets using our GIS/GPS technology and integrated all this data in an effective geo-database

Some of these Utility networks that MapmyIndia has worked for:
- Electric Network
- Water supply network
- Sewerage System
- Drainage System
- Gas
- Telecommunications

The utility network field data is then integrated with other topographical layers and the most significant advantage of integrating GPS collected data into a well developed GIS system is the decision support capabilities generated within the GIS.
MapmyIndia offerings are as following:-

- **READY-TO-USE GIS DATA FOR ANY UTILITY, GAS and OIL**
  MapmyIndia owns and maintains precision, GIS data holdings for the whole country and hence can provide visual information that helps expedite adding the utility assets on the geospatial medium and manage utility assets, keeping their network information up-to-date.

- **MAPMYINDIA CAN UNDERTAKE WIDE VARIETY OF SURVEYS FOR UTILITIES**
  With its large team of experienced and expert GIS survey professionals, MapmyIndia can undertake customized ground and asset survey in any city of India and can get their GIS-Ready data organised and value-added by leveraging on MapmyIndia data repository.

> **GET YOUR MAPPING DONE EASILY FROM MMI**
> MapmyIndia's utility GIS services allows the organizations' assets and customers displayed in an enhanced way by overlaying it with our vast repository of India data such as roads, water bodies, buildings, and land use to understand rights-of-way, satellite imagery and field data.

> **MAPMYINDIA CAN BUILD AND MAINTAIN MIS REPORTS**
> MapmyIndia is an expert in creating and organizing and delivering superior quality of MIS reports which can provide very timely information for quick decision making. These reports consist of deviation report, movement report, over speeding report, stoppage report and attendance report and others.

> **SEAMLESS INTEGRATION OF POSITIONING, GEO-SPATIAL AND ICT SERVICES**
> MapmyIndia has unique knowledge, expertise and capability to integrate various software modules with various third party applications like ERP, GIS using standard plug-ins or business APIs as per customer requirement by integrating hardware, software and data.

> **MAPMYINDIA PROVIDES STATE-OF-THE-ART TRACKING SOLUTIONS**
> MapmyIndia has expertise in providing efficient GPS based tracking solutions for men and patrolling vehicles that help reduce theft of products in oil and gas industry. MapmyIndia's mapping of the pipeline's right of way and surrounding infrastructure help the pipeline operator manage disasters caused due to accidental / man-made tampering with the pipeline assets.

EXAMPLES OF MMI UTILITY, OIL AND GAS

IOCL Pipeline Division, Panipat

MapmyIndia worked with IOCL Pipeline Division, Panipat where they had problems with managing their Patrolling Workforce which was responsible for patrolling 8KM sections of the pipeline across India panning through multiple states. The patrolling was carried out both during the day on foot as well as in the night on vehicle and managing such large scale operations on a day to day basis was becoming challenging. MapmyIndia studied the problems and came up with solutions such as GPS/GIS based mapping of IOCL pipeline assets in the designated parameter which ensured monitoring the movement of both guards and vehicles who patrol the pipeline section looking for incidents that affect the safety of the pipeline. This further lead to minimization of pilferage loses of petroleum products. The project was done in two phases where the total kilometres were surveyed in different locations and various GPS/GIS devices that were deployed within the project.
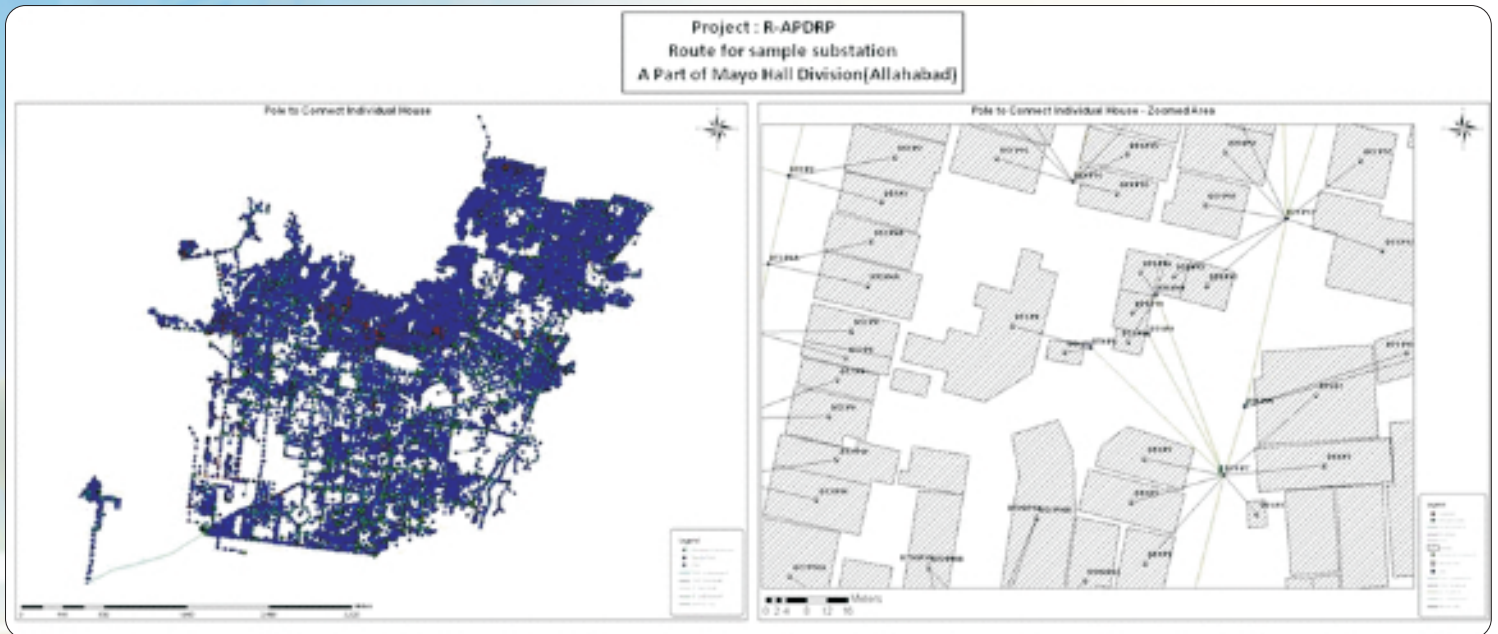
MapmyIndia also developed GIS solutions where in-depth pipeline surveys were carried out of the specific area clearly laying attributes like riverway, pump stations, high occupancy vehicle lane, medium occupancy vehicle lane, CP station, turning points with digitization of the survey data. MapmyIndia also developed the GIS map of the pipeline which consisted for the overlaying of the pipeline network on the top of the base map. The project also entailed creating web based GIS solution where a web based application was created which allowed interaction with GIS map of the pipeline. MapmyIndia application helped in extracting tracking application with MIS reports which provided relevant reporting such as deviation report, movement report, over-speeding report, stoppage report and others.

The diagram displays the total pipeline surveyed for IOCL project

Uttar Pradesh, R-APDRP project

MapmyIndia has made valuable contributions to mapping Uttar Pradesh's electrical networks under the R-APDRP scheme. This process involve mapping of electrical transmission and distribution networks to effectively understand the GIS-based consumer indexing and network mapping requirements with aid of survey for collection of geospatial data of distribution network and door-to-door survey of consumers for mapping their unique electrical identity.

The diagram shows the R-*APDRP* project layout for the city Allahabad

MAPMYINDIA PROPOSITION

MapmyIndia has distinct and unique GIS offerings to Indian Government (central, state and local governments) – GIS services that no other Indian GIS company offers today in a combined manner. MapmyIndia aims to serve the needs of the government through focused, innovative, efficient and quality GIS products and GIS services of relevance to all areas of governance in central government, state governments and even local governments. MapmyIndia brings horizontal and vertical integration of satellite/aerial Remote Sensing, Ground Survey, Positioning, GIS databases and GIS applications, GIS web-services and overall system integration services in GIS. MapmyIndia has the best professionals and experienced technology advisers/consultants in this GIS technology and boasts of a top technical team. The MapmyIndia team, with its vast experience and expertise, provides the back-bone of innovative, quality and effective solutions to all sectors of governments, private sectors, academia and non-governmental organisations.