

## Customized Mapping Solutions

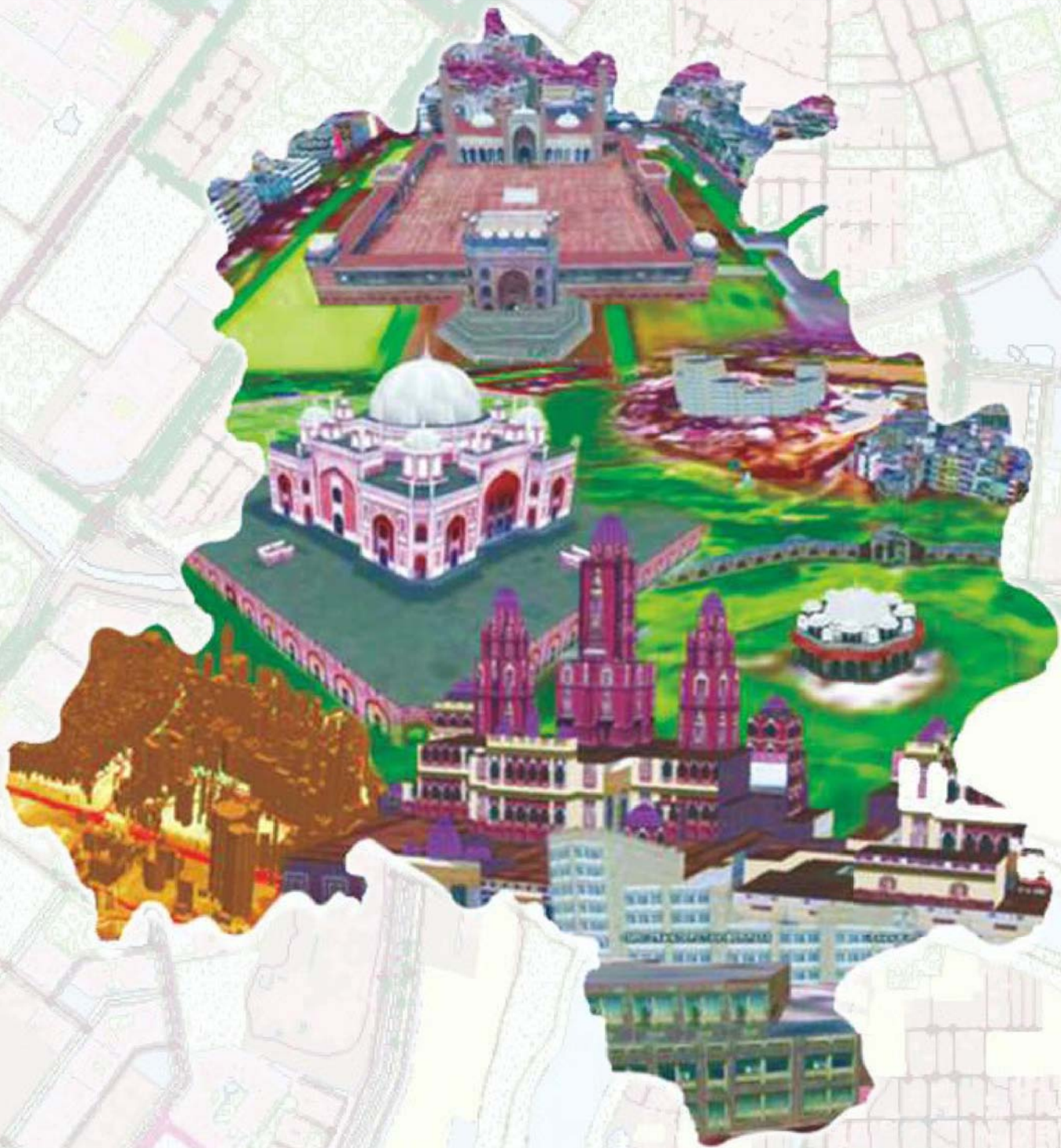
- Hydrography
- Transportation
- Building Property Database
- Utilities
- Cadastre
- Landuse/Landcover
- Elevation Layers
- Administrative Boundaries



*A Geo-Knowledge Enterprise*

**Geospatial**  
**DELHI LIMITED**  
(A Govt. of NCT of Delhi Company)

# *A Geo-Knowledge Enterprise*





## Commitment towards g-governance

# 01

Geospatial Delhi Limited as a geo-knowledge enterprise of the Government of Delhi with its expertise in the domain of GIS ensures the utilization of its proficiency to propose ideas/concepts & conversion of the same into effectively implemented solutions for the g-governance.

GSDL aims to gear up the capital to pioneer for the effective and successful implementation of the g-governance initiatives thus portraying the country as a lead example in the arena. This would not only ornament the country's facades geospatially but also highlight it on the Geospatial map of the world.

## Our Experience with the DSSDI dataset

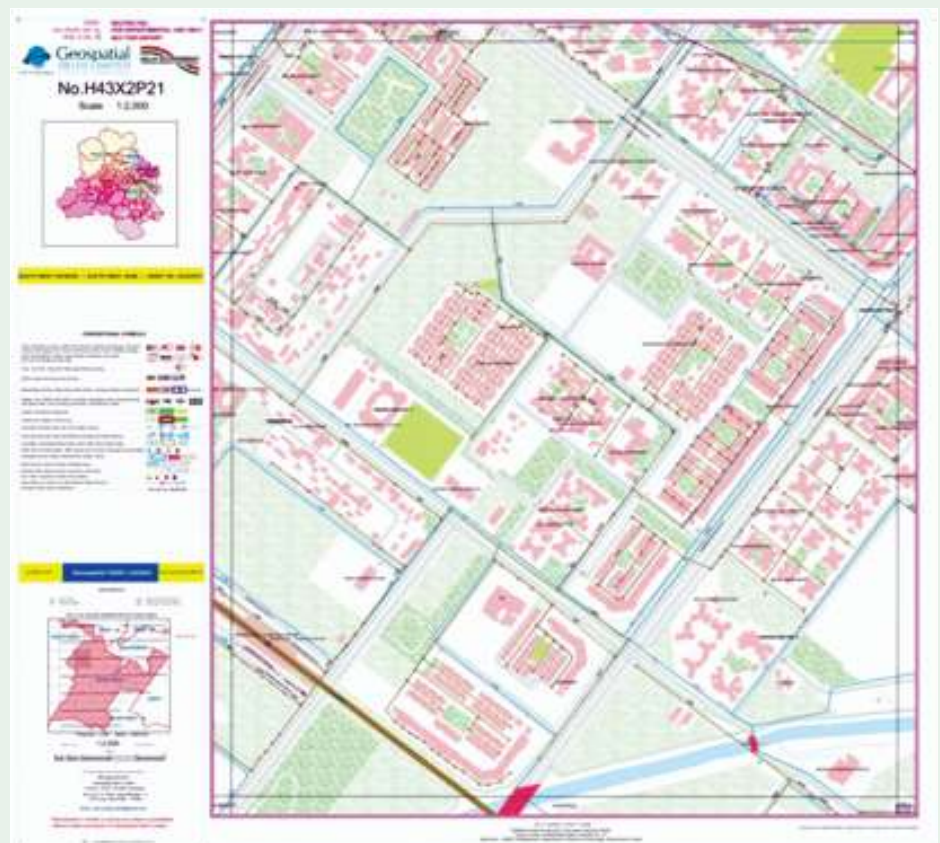
# 02

Utilization of DSSDI data set for applications in various g-governance initiatives has enriched the organizations experience in the domain. Listed below are a few ongoing projects/services being taken up by GSDL:

### System for Maintenance and Updation of Spatial Infrastructure of Delhi Jal Board (DJB) assisted by Field Sheets

There is a regular process of updation of GIS data in Delhi Jal Board and about 500 such cases of maintenance, asset creation & liable updations are reported annually in the department. This process requires mapping of assets on field and updation as GIS database. GSDL initiated the creation, printing & submission of DJB utility maps on three levels viz. division-wise, ward-wise and field sheets on 1:1,000 scale which will be used by DJB field staff for planning and maintenance purpose.

These field sheets will be the base for the utility data updation mechanism. The further updation of assets will be marked on these sheets by the DJB field staff. They can also show their planning alternatively on these sheets. The proposed mechanism will form the cyclic process of updation in the department.



Underground/Overground utilities of Delhi Jal Board: Division: Southwest-I, Zone: Southwest -I

## East Delhi Municipal Corporation

Collection of property tax is a major source of revenue for the local government. The gaps in the tax collection could be Geospatially assessed which could assist in a precise estimation of the same. With this objective in mind, a project- *“Joint validation of Geospatial property data and the MCD linked data with (East Delhi Municipal Corporation)EDMC tax inspector and legacy digitization of EDMC property ledger”* is being carried out for EDMC.

Steps for joint validation of DSSDI and MCD data includes correlation of DSSDI building & building unit data with MCD ledger data & data of online tax payer;



Map of Geeta Colony, Block-14 showing the status of property tax paid or not paid.

digitization of tax paid history from MCD ledger and updation of online tax payer information to DSSDI data. Through this information status list of tax payers is prepared. To ease the visualization of tax payer location, block wise or colony wise map has been prepared.

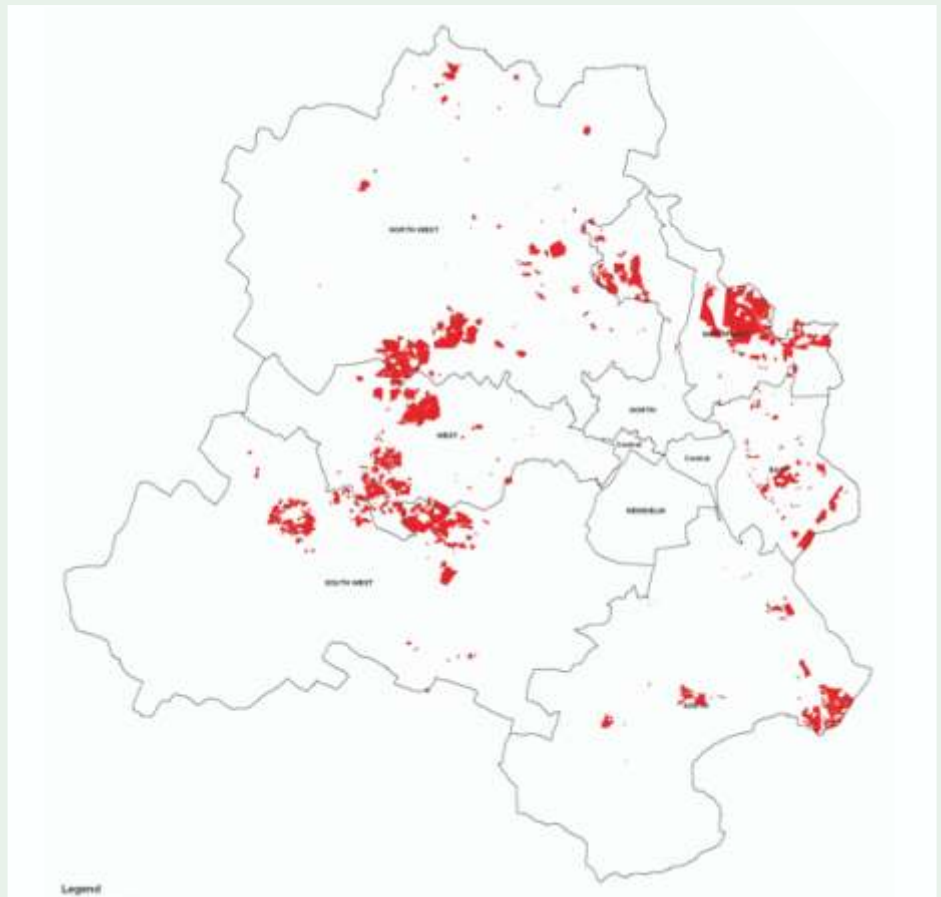
After spatial joining and sorting of data, analysis is being done on each and every individual record to identify the status category as “Tax Paid & Not Paid” based upon criteria as suggested by EDMC.

## Regularization of Unauthorized Colonies

The utilization of the Geospatial database for the delineation of the unauthorized colony boundaries and regularization of the same by the GNCTD is a commendable example of its type.

The unauthorized colony boundaries are delineated based on the defined guidelines and subsequently the maps are composed and submitted to the Urban Development Authority along with the built-up percentage of the colony. Temporal aerial photographs are being used for features / calculation of built-up percentage. This work is being carried out for approximately 1650 colonies of Delhi. The colonies are being considered for regularization, as per the guidelines which are based upon the built up percentage of the colony in the defined term.

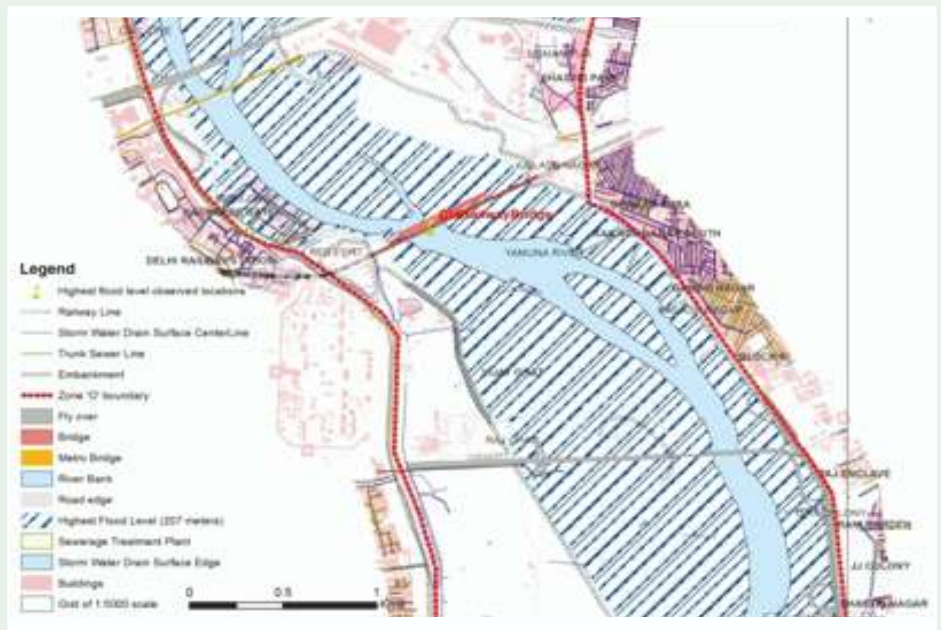
The application of the dataset in defining the re-development strategy for the colonies is also proposed and is under consideration.



Map showing the distribution of 895 colonies regularised in phase-1

### Zone 'O' Mapping

GSDL is support party of Management Action Group (MAG) on Environment Planning & Coordination of MPD-2021 to prepare a plan of Yamuna river bed in Delhi (Zone 'O' of MPD-2021). The high resolution database of GSDL coupled with secondary data availed from other stake holders are extensively being used.



Highest flood level (207m) mapping around Old Delhi Railway Bridge

### Master Plan of Drainage in Delhi

GSDL is actively coordinating with IIT Delhi and Department of Irrigation & Flood Control for preparing the Drainage Master Plan of the city.

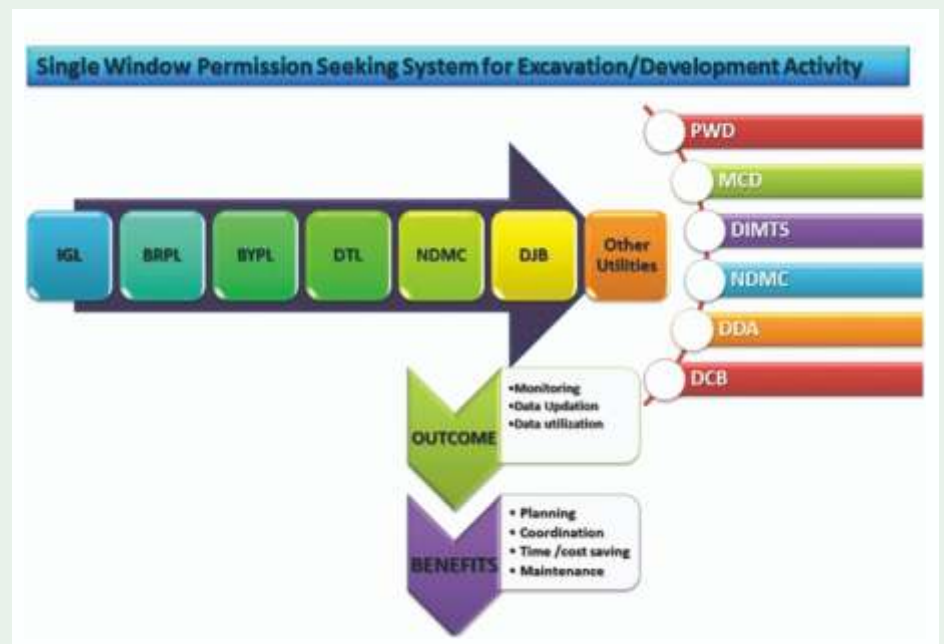


*Capacity  
building to  
ensure  
efficient and  
transparent  
g-governance*

## PDM Application

PDM is a unique combination of an industry standard server supporting an open source in-house code intended to facilitate different engineering departments of Delhi Govt. to plan the excavation; safely dig an area of any place and monitor the progress of the activity till the project is over and get historical excavation data or reports. This application is to ease the departments for planning and getting utility and spatial information of the area of interest. The application ultimately aims a smooth co-ordination among the stakeholders; to save time, money and effort and at the same time reduces the risk considerably.

The next phase of the application for online enrollment of contractors and granting permission on a single window interface is in progress.



## Outreach Activities



Hon'ble Lt. Governor addressing the Students

With the aim to enhance Geo-Literacy and promote geographical thinking ability among the masses GSDL conducts various training sessions and other outreach activities for a versatile level of users which could include domain experts from the departments to the school going students.

The workshop "Sensitizing schools with the versatility of GIS" conducted for the school students to honor the concurrence of GIS Day with the Children's day on November 14, 2012 is an example of the same.

## Our Strength

# 03

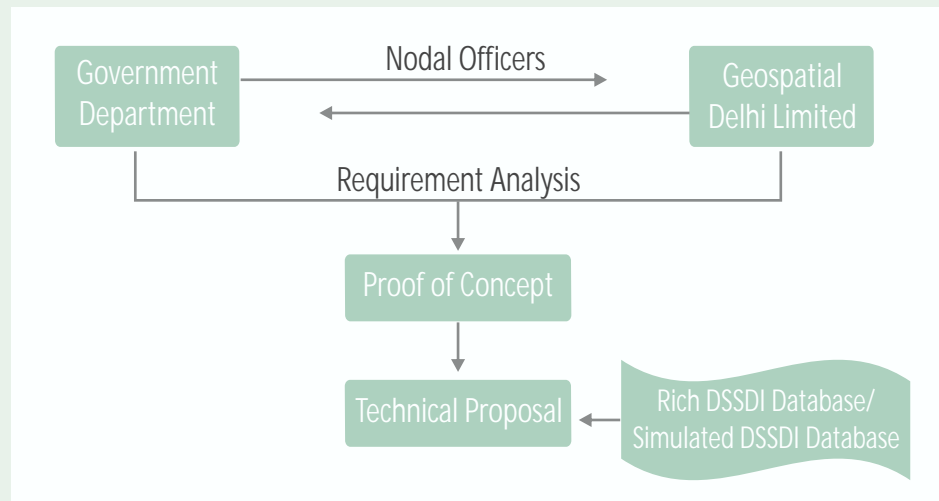
As per the Delhi Geospatial Data Infrastructure Act 2011, Geospatial Delhi Limited is the custodian of the affluent database prepared during the Delhi State Spatial Data Infrastructure project. The project has bestowed Delhi with an extremely rich database with all the infrastructure and facilities of the city mapped at a scale of 1:2000. Geospatial Delhi Limited formulated initially as a Special Purpose Vehicle to assist the project is now empowered as a company and is the custodian of DSSDI database.

The base strength of the organization lies in the combination of rich heritage of DSSDI data and a versatile pool of across the domain resources with their core specialization in GIS.

*Experience for prototyping and implementing Geo-Governance in Delhi enable us to be a prominent consultant in the field.*

## Our Approach

# 04



*GSDL proposes to expand its presence to every nook and corner of the country through strategic partnership with companies and the state government.*

## About GSDL

# 05

Geospatial Delhi Limited is a geo-knowledge enterprise of the Govt. of NCT of Delhi, empowered as per the Delhi Geospatial Data Infrastructure Act on 1st August 2012 through a notification by the order of Lt. Governor of the National Territory of Delhi (NCTD).

Geospatial Delhi Limited is a Government of Delhi Company with the authorized share capital of 150,00,00,000/- (Rupees One Hundred Fifty Crore) divided into 15,00,00,000 (Fifteen Crore) equity shares of Rs. 10/- (Rupees Ten) each. GSDL is registered under companies act, 1956.

## The Delhi Geospatial Act

06

The Delhi Geospatial Data Infrastructure (management control, administration, security and safety) Act, 2011 was passed by the Legislative Assembly of National Capital Territory of Delhi on 23rd March, 2011. It received the assent of Lt. Governor of Delhi on 6th April 2011 and came into force from 1st March, 2012.

### *Responsibilities of GSDL as per the Delhi Geospatial Data Infrastructure Act, 2011*

Maintenance and updation of geospatial data	Developing geo-portal and applications pertaining to the usage of geospatial data for the various departments and the citizens of Delhi	Providing value added and consultancy services to the Government	Management and sharing of geospatial data by GSDL	Utilization of geospatial data at the same time ensuring its safety and security	Support various line departments to update the attributes pertaining to them	Monitor and regulate any excavation/developmental activity by any contractor/department
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This act lays down the foundation to monitor and regulate online, any excavation work or developmental activity carried on by any contractor or department, be it private or government, in the entire capital.

## Board of Directors

07

Board of Directors is the governing body of the organization. The Directors of the company are the secretary level officials from various stakeholder departments, nominated from time to time by the Government of Delhi. Chairperson GNCTD is the Chairman of GSDL and Managing Director being the key functionary.

### Products & Services

Map Products	Data Products	Analysis/Modeling Results	G-governance solutions	Customized Software Applications	Tablet Customization	GIS Consultancy	Training & Capacity Building
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## Domains of Expertise

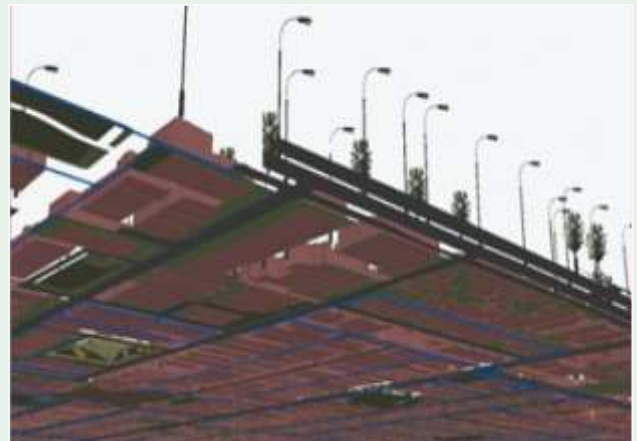
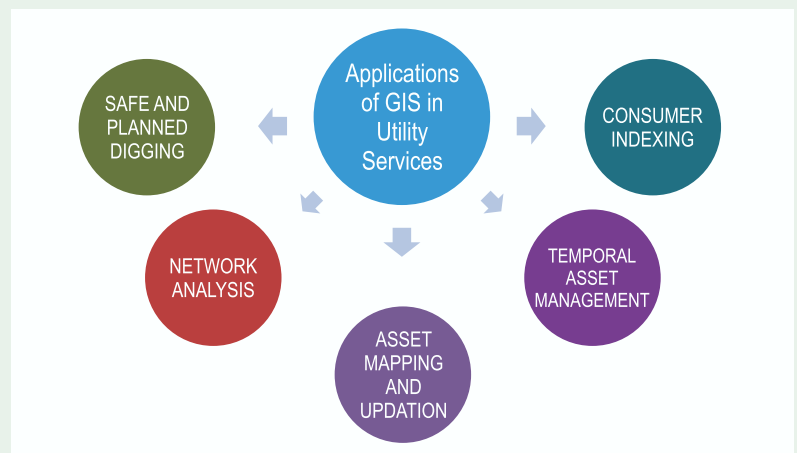
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### Core Competencies

e/g-governance Solutions
Application Development
Mapping and Surveying
Capacity Building
Aerial/GPS/TS Survey
System Integration
Position and Navigation
GIS Solution and Services
Strategic Consulting
Project Management
Web GIS Applications
Database Services
Photogrammetric Solutions
Remote Sensing Solutions

GSDL offers specialized GIS Solutions in the following domains. These domains have been derived through clubbing a set of stakeholder departments and are led as the verticals of the organization:

- Utility Management Cluster specializes in the domain and supports various utility companies covering the areas of gas distribution/ transmission, electric distribution/ transmission, telecommunications, cable and water/ sewer. Our team is a blend of technological know-how for digital mapping from variety of sources including satellite images, aerial photographs, GPS field data and existing maps leading to the GIS database creation and analysis and modeling of the same for various utility projects.

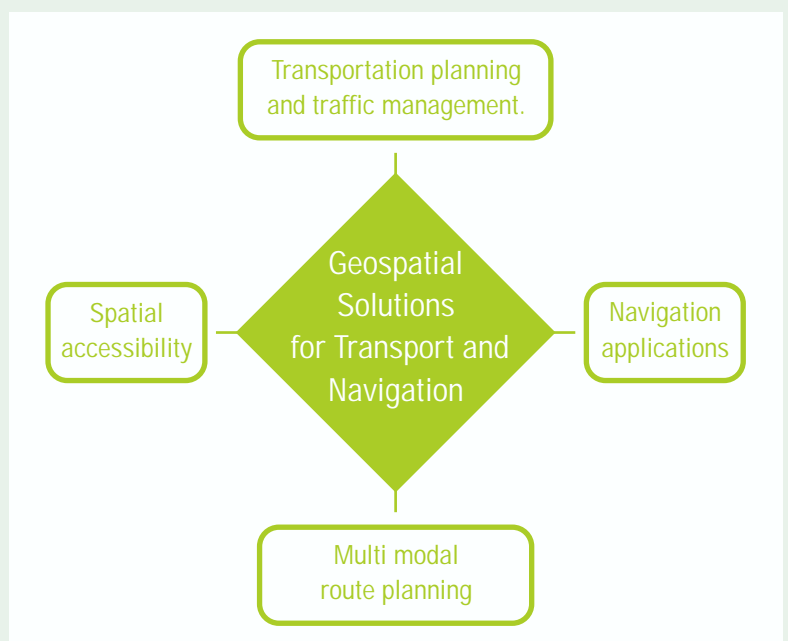


3D projected view a) Over ground b) Under ground

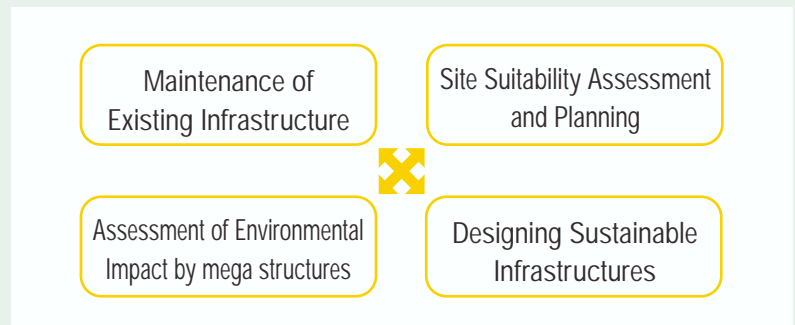
- Land and Property Cluster specializes in the Geospatial Solutions for Land & Property related departments like Delhi Development Authority, Revenue Department, Municipal Corporation of Delhi & Forest and Wild life. The cluster constitutes a team of technical domain experts and offers cutting edge geospatial solutions for land development, planning, property tax and forest & ecology.



- Transport/Navigation Applications team constitutes Geospatial experts with experience in road network analysis and data preparation associated with traffic management. The team also provides specialist services in respect of the highway, traffic and parking aspects of development planning. The versatile database of the DSSDI project and the experiments on the same for the conceptualization of projects and services also ornaments the organizations expertise in various multi modal navigation applications.



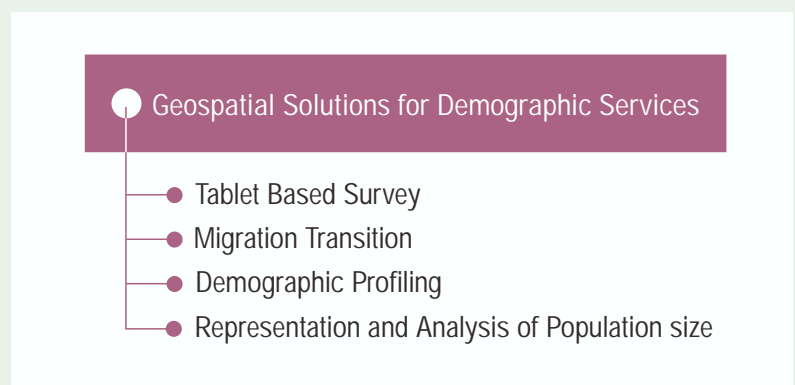
- Infrastructure & Taxation team is an amalgam of GIS experts to support the community redevelopment initiatives in a way that revitalizes the economic and environmental health of neighborhoods.



- Social Sector Services team facilitates geographically enabled decision making and location allocation factor in the social space. An efficient system of governance requires geographically referenced information of various cultural aspects of the society like health facilities, public distribution system, educational system etc. which assist the economic development and facility management. The cluster is aligned to define and suggest an operative approach for the dissemination of the cultural resources in the society.

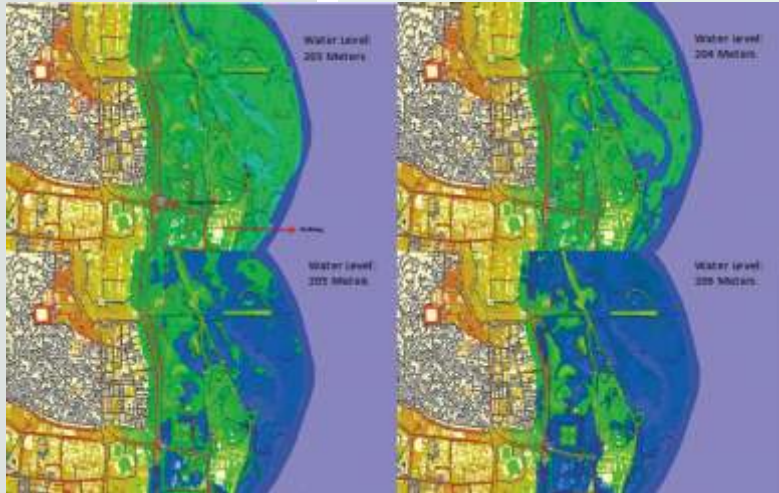


- Demographic Services: The stakeholders of the cluster include departments dealing with statistics of human population like the electoral and the census departments. The cluster offers expert solutions for demographic analysis and offers end to end geospatial solutions that might include tablet applications for survey to desktop applications for analysis which might assist in various administrative and planning purposes like new boundary delineations, modifications of the existing boundaries based on demographics and interdepartmental boundary reconciliation.





- Emergency Services: Emergency Services cluster deals with Geospatial services in the domain of disaster management which include information generation, data updation and designing decision support system etc. The skilled team specializing in the domain of use of Geospatial technology in Disaster Management offers solutions for disaster planning based upon the real world situation.



Land inundation with the rise of water level



- Environment Clearance Services: Environment Clearance Services cluster capitalizes the capabilities of the Geospatial Technologies to solve a wide range of environmental problems, which are mostly related to urban areas and of anthropogenic origin. The cluster is entitled to carry out mapping, analysis and modeling of spatio-temporal data for the concerned Govt. departments to assist in planning, assessment and protection of the environment.



Solid Waste Dumping Site in Ghazipur

- Capacity Building and Outreach: The team comprises of a pool of experts from different domains and is engaged in various capacity building and outreach activities primarily focusing upon the usage and applications of geospatial database and its various analytical applications to serve different work groups. The intent is basically to generate interest among people towards the usage and prospective applications of Geospatial technologies in their routine work and create a pool of expert professionals in the domain.



Various Seminars and Workshops Organized by Geospatial Delhi Limited

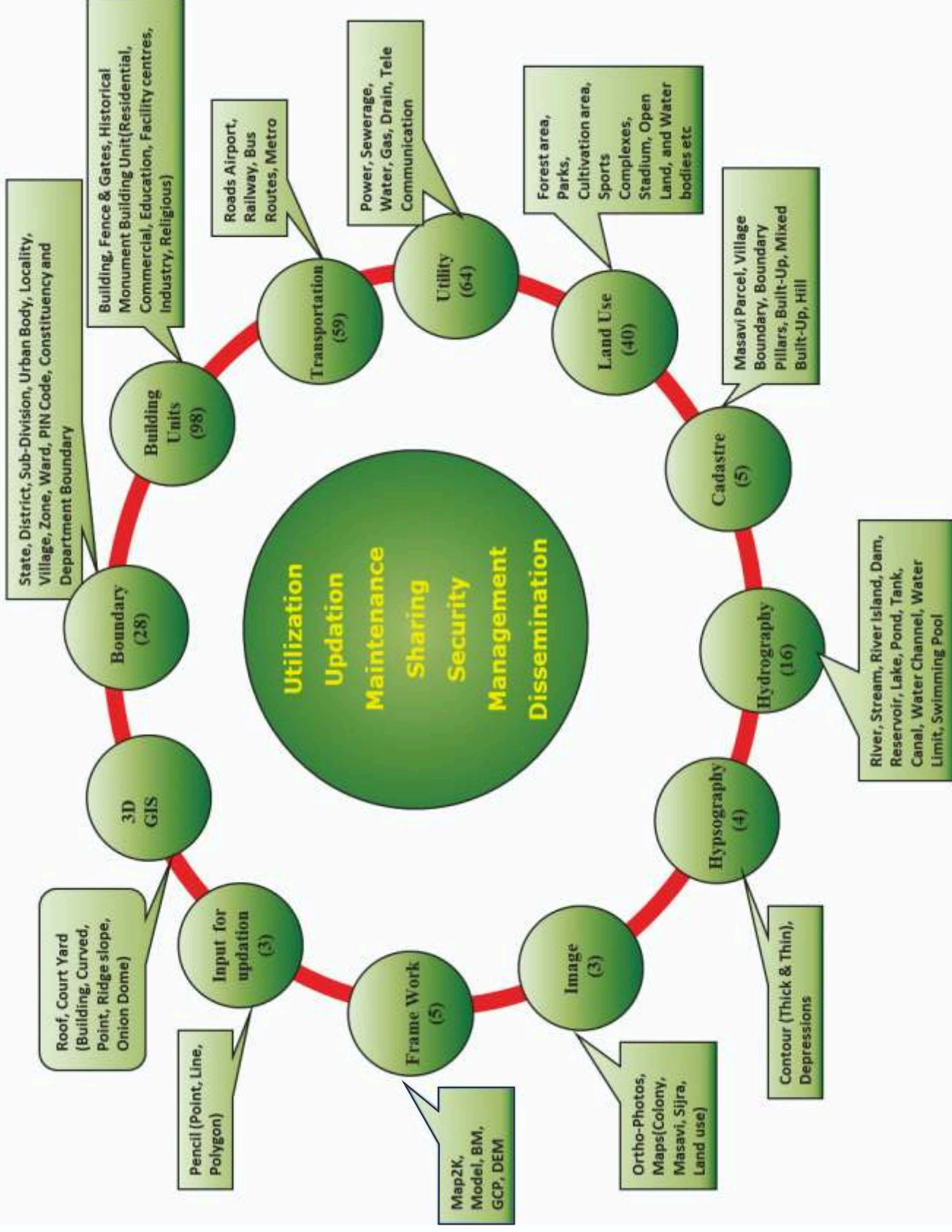
- Operations and Data Management Services: The team constitutes of experts with experience in core GIS data handling and is responsible for maintaining and updating the versatile database inherited from the DSSDI project.
- Systems and Software Development: The company maintains state-of-the-art System and Software development centre equipped with enterprise leading-edge hardware, software and networking infrastructures and is involved in developing and maintaining high end applications to support the governance related decisions made by the Government of Delhi. It is also developing high end applications for utilization of DSSDI data for a number of citizen centric services.



*GSDL is committed to  
take all necessary steps for  
furthering the cause of g-Governance.*



# Current Repository of Geospatial Dataset





# Our Stakeholders





## Geospatial Delhi Limited (GSDL)

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