



OneMCGM A collaborative GIS initiative for municipal governance

Client

Municipal Corporation of Greater Mumbai (MCGM)

Industry

Urban

Organization Profile

The Municipal Corporation of Greater Mumbai (MCGM) is the primary civic body responsible for urban governance in Greater Mumbai. The Development Plan Department of the MCGM works with NGOs and citizen organizations in the fields of education, public health, creation of urban amenities, art and culture, heritage conservation etc.

Website

www.mcgm.gov.in

Project

OneMCGM

Highlights

- Significant savings in cost & time
- Faster action and decision making
- Improved citizen services
- Common application platform for citizens and staff



Project Summary

The Municipal corporation of Greater Mumbai also known as Brihan Mumbai Municipal Corporation is the governing civic body of Mumbai. Their vision is to integrate multiple information and communication technologies to manage city assets and operations. The goal is to improve the quality of life and to improve the efficiency of services that meet the citizen's requirement. City municipal administration is instrumental in conceptualizing, designing and finalizing the City plan along with citizen engagement. It is planning to develop the areas under its jurisdiction under the city initiative of the Govt. of India.

Challenges

The Municipal Corporation of Greater Mumbai covers a total area of 454 sq. km. and caters to a population of 12.5 million. There are 24 wards under the corporation and more than 75 departments to provide various services to citizens of Mumbai.

Being the largest City of India, with a high density of population, the major challenge is to meet the increasing demands of governance and service delivery for the citizens.

To maintain the sustainability of service delivery, MCGM embarked on an ambitious e-Government initiative, aimed at enhancing responsiveness to citizens' needs; increasing operating efficiency and effectiveness; improving financial health and ensuring greater transparency within various departments like Sewerage Operations, Storm Water Drains, Roads & Traffic, Hydraulic Engineering, Development Plan and Disaster Management Unit. The two main challenges addressed initially were:

1. Citizen Services through a GIS portal
2. Inter-Departmental / Intra-departmental collaboration

Solution

GIS provides a common communication language to the different stakeholders of a city and to its citizens to interact with the government. These two are major aspects of the sustainability of a city.

Landbase of Greater Mumbai was created from aerial photographs in 2004/05 duration by digitizing Tikka and Town Planning scheme images. Land parcels and roads were digitized, followed by scanning and digitizing of 6,000+ images

to capture different features of the city incorporating the development plan for 20 years duration. All major utilities, revenue elements and social infrastructure were planned to have an integrated database for better planning, management and sustainable development of the city.

MCGM GIS Integrater was launched in 2009 envisaging to bring all MCGM data into a centralized database and deploy GIS web applications. Ten departments were identified to be the potential torchbearers of GIS in MCGM. These departments were Roads, Sewage Operations, Hydraulic Engineering, Estate, Disaster Management Unit, Property tax, Storm water Drainage, Garden, Education and Licenses. The primary objective of this project was to design, migrate / implement & maintain department-wise GIS data and web applications for end-to-end asset management.

Desktop GIS applications were deployed in 2008 for generating Development Plan remarks for department users. In lines with EoDB and MCGM's latest business process, Esri India further helped the MCGM Development Plan Department to launch an OneMCGM Portal which is used by the MCGM internal users. The Portal host all the GIS data of different departments and web applications that are shared across the user base. 200+ layers of GIS information have been created in the OneMCGM portal for catering to the requirements of various MCGM departments. GIS applications have been already built and deployed for 20+ departments. As part of the OneMCGM initiative, a Mobile Application for citizens was developed for viewing the various DP reservations. Esri also supported in creating a SRDP1991 online DP remarks portal which was launched in 2015 by DP department which is using Esri GIS based online remarks to interested land developers/ citizens to know about reservations/demarcations etc. on required CTS number (Plot).

Citizens can obtain these remarks by online payment, which is generated instantly. This GIS portal has reduced the substantial time of citizens as well as MCGM DP officials. OneMCGM is integrated with different applications running in MCGM to create spatial reports:

- Integration with Capital Value System (CVS)
- Integration with Auto DCR system Building Construction Approval Management System (BCAMS) under EODB Initiative
- Integration with SAP (PS) System for real-time project monitoring
- Integration with SAP (RE) System for the real estate department

This e-Government initiative is helping citizens to request for services in an easier and faster manner, thus resulting in significant savings in cost and time. The municipality is consequently in a better position to service its citizens, better monitor and control its activities and introduce Customer Relationship Management (CRM) concepts; resulting in a tangible and visible increase in the quality of services for every citizen. The 'OneMCGM GIS' portal displays the latest information about various departments of the civic body, which could be mainly utilized by its officials and workers with an aim to speed up decision-making and coordination. Through this application and website, people can get better services.

OneMCGM brought all the applications to ArcGIS Esri platform. Esri ArcGIS platform also helped in the following:

1. Enterprise Geo-Database of MCGM
2. Institutionalization in spatial data management
3. Survey guidelines
4. Standard procedures for GIS data creation, usage, cleaning and auditing
5. Enterprise GIS web applications
6. GIS integrations with other applications

The earlier arrangement required citizens to visit local ward offices of MCGM in order to seek the information of DP reservations, city survey number. With the launch of mobile application, citizens now can download the app on their mobile phone and using GPS location, can view all details of the plot/DP reservations. It has also become a common application platform.

OneMCGM is an integrated online geospatial platform that provides reliable, timely, and accurate location-based information and services to the public. It is helping us to be in a better position to service citizens, better monitor and control our operations, and introduce Customer Relationship Management (CRM) concepts, resulting in a tangible and visible increase in the quality of services for every citizen. The GIS portal, powered by Esri's ArcGIS, displays the latest information about various departments of the civic body, which could be mainly utilized by the officials and workers to speed up decision-making and coordination.

