



# Ceinsys Municipal Solutions

## Description

Municipal Corporation is one of the major administrative offices of the city. They are responsible for the basic amenities of that city like, water, sanitation, infrastructure and health etc. In order to maintain all the amenities corporations require continuous flow of revenue, which the corporations generate from property tax, parking, water bills and electricity bills etc. In the cities due to exponential growth of population municipalities also need to do the development at the same pace, which is not possible without automation.

Geospatial technology helps the corporation to do current and the future planning in an effective and transparent manner. Various municipal corporations have recognized the benefits derived from Geographic Information System (GIS) / Geospatial technology and have planned to implement Geospatial services in order to enhance the tax collection system. Besides this, Municipal GIS can be used for city information system and for community development, administration, licenses and approvals, planning and monitoring of municipal infrastructure for the city

## Offerings

- Property Mapping & Survey
- Solid Waste Management
- Infrastructure Survey (LiDAR and UAV)
- 3D City Modeling
- E-Governance

## Technology Used

- Satellite Imagery (0.5 m Spatial Resolution)
- GPS
- IoT
- Open source or COTS based web & mobile application

## Property Mapping & Survey

Due to rapid urbanization and dynamic construction of property municipal corporation need to cope up with the information about properties which is much needed for urban planning as well as for revenue generation. GIS helps in increasing property tax realization and maintaining & updating of database.

## E-Governance

The strategic objective of e-Governance is to support and simplify governance for government, citizens and businesses. The use of ICT can connect all three parties and support processes and activities. Other objectives are to make government administration more transparent, speedy and accountable, while addressing the society's needs and expectations through efficient public services and effective interaction between the people, businesses and government. It facilitates better delivery of government services to citizens, improved interactions with business and industry, citizen empowerment through access to information, or more efficient government management. It simplifies internal operations and improves performance of government departments while helping all sections of society to avail government services at lower cost with maximum ease of use.

## 3D City Modeling

3D city models are increasingly used for the presentation, exploration, and evaluation of urban and architectural designs. Visualization capabilities and animation support of upcoming 3D geo-information technologies empower

architects, urban planners, and authorities to visualize and analyses urban and architectural designs in the context of the existing situation. Real-time 3D visualization and interactive exploration of such models can support planning processes by providing multiple stakeholders such as decision-maker, architects, urban planners, authorities, citizens or investors with a three-dimensional model.

## Infrastructure Survey (LiDAR and UAV)

Due to urban expansion and modernization, there is a huge demand for the infrastructure survey technology which can provide high accuracy and precision data in less time. LiDAR and UAV has proven itself for the capture of 3D data creation with very high spatial resolution. The accuracy of their data is in sub cm to sub mm. These data are the backbone for the various projects like smart cities, Utilities, Metro rail, building, etc.



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