

## **GIS**

A geographic information system (GIS) is a computer system design to capture, store, manipulate, analyze, manage and present all types of geographical data. (Managing data, manipulating data and analyzing data)

### **SCOPE & IMPORTANCE**

The many important benefits in using GIS in urban planning include;

- Improved mapping – better access to maps, improved map currency, more effective thematic mapping, and reduced storage cost;
- Greater efficiency in retrieval of information;
- Faster and more extensive access to the types of geographical information important to planning and the ability to explore a wider range of ‘what if’ scenarios;
- Improved analysis;
- Better communication to the public and staff;
- Improved quality of services, for example speedier access to information for planning application processing.

GIS finds a vital role in the field of Urban Planning. The features of GIS which makes it important in the Urban Planning are,

- a) Multi-source data can be entered and integrated;
- b) Data consistency can be maintained;
- c) Data updating can be easily undertaken; and
- d) Flexible data storage and retrieval can be achieved.

Management and planning of urban space requires spatially accurate and timely information on land use and changing pattern. Monitoring provides the planners and decision-makers with required information about the current state of development and the nature of changes that have occurred. Geographical Information system (GIS) provides vital tools which can be applied in the analysis at the district and as well as at the city level.