## <u>GIS</u>

A geographic information system (GIS) integrates hardware, software, and data for capturing, managing, analyzing, and displaying all forms of geographically referenced information. GIS merges cartography, numerical data, and computer

science technology. It uses computers to create representations of places and allows the user to layer information about those places. GIS allows us to view, understand, question, interpret, and visualize data in many ways that reveal relationships, patterns, and trends in the form of maps, globes, reports, and charts.

Let's return to our example of a building a shopping center. Once a location is proposed, GIS technology can incorporate information such as underground water and soil types, as well as sewer and power lines. GIS allows us to add surface information that may include roads, buildings, and natural features on the earth's surface for that location. Other statistical information such as people's income, family size, and ethnic information can also be layered to provide a detailed picture of the location.

## Applying Geographic Tools to Places

Every area on Earth can be categorized one of three ways: rural, urban, or suburban. In *rural* areas, people do not live close to each other. There are few buildings, and homes are far apart from each other. There is a lot of open space or farmland. People who live in rural areas are often referred to as living in the country.





Source: http://wikimapia.org/8061069/Golestan-Province