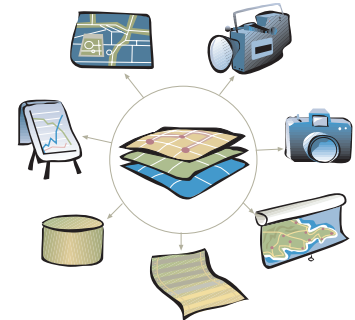


What Is GIS



GIS Is Geographic Information System.

A geographic information system (GIS) uses computers and software to leverage the fundamental principle of geography—that location is important in people’s lives. GIS helps locate new businesses and track environmental degradation. It helps route garbage trucks and manage road paving. It helps marketers find new prospects, and it helps farmers grow healthier, larger crops.



Integrate data in various formats and from many sources using GIS.

GIS takes the numbers and words from the rows and columns in databases and spreadsheets and puts them on a map. Placing your data on a map highlights where you have lots of customers if you own a store, or lots of leaks in your water system if you run a water company. It allows you to view, understand, question, interpret, and visualize your data in ways simply not possible in rows and columns.

And, with data on a map, you can ask more questions. You can ask “where?,” “why?,” and “how?,” all with the location information on hand. And you can make better decisions with the knowledge that geography and spatial analysis are included.

ESRI Is the World Leader in GIS Solutions

With the vast sources of information available today, GIS is a key tool in determining what it all means. With so much information tied to a location, GIS helps find patterns we might not see without a map.

GIS can make *thematic* maps (maps coded by value) to help illustrate patterns. To explore highway accidents we might first make a map of where each accident occurred. We could explore further by coding accidents by time of day. We might use one color to locate those that occur at night and a second color for those that occur during the day, and then we might see a more complex pattern.

Mapping the locations of school-age children can help reveal where day care is needed. Mapping crime incidents helps reveal where there may be a need for increased police patrols. Mapping customers’ home and work locations can help banks locate ATM machines to provide better service.

Mapping geologic features and ground temperatures can help exploration geologists look for minerals, oil, gas, and other materials underground. If they can identify patterns of likely locations, they save money and reduce the impact of drilling on the environment.

Mapping park land in a city may help the city council recognize the need for more green space. Mapping migration routes of birds may help protect endangered species.

GIS helps us look for patterns in both the man-made and natural realms and understand our world.





Make Your World Better

GIS Is About Solving Problems

Sometimes we need to create new patterns or reshape existing ones. Planners of all kinds—city planners, environmental planners, business strategists—do this every day. Their job is to lay out a framework so growth can occur in a managed way and benefit as many people as possible while respecting our natural resources.



Every day businesses need to deliver goods and services to clients all around a city. Each truck needs a pattern of how to visit each client. GIS provides tools to create those patterns, in this case *routes*, to solve the problem.

In the military, leaders need to understand terrain to make decisions about how and where to deploy their troops, equipment, and expertise. They need to know what areas to avoid and which are safe. GIS provides tools to help get personnel and materials where they need to be safely so they can do their job.

In forestry, existing and future trees need to be cared for to ensure a regular supply for the world's building needs. GIS provides tools to help determine where to cut today and where to seed tomorrow.

In many areas of business, such as manufacturing and banking, organizations must meet government regulations regarding pollution and interstate trade. GIS provides tools to help companies comply with local, state, and national regulations.

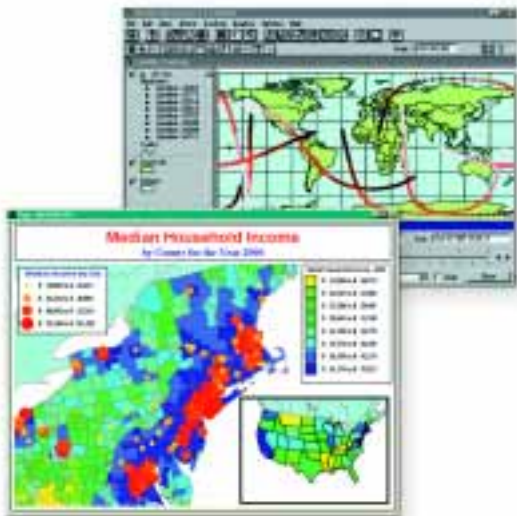
In floods and hurricanes, emergency response teams save lives and property. GIS provides tools to help locate shelters, distribute food and medicine, and evacuate those in need.

In telecommunications, when phone service is out, it means part of the network may be disconnected. GIS provides tools to help find out what part of the network is affected. With that information at hand, workers in the field can get everyone talking again.

GIS Is Part of Your World

If you flipped on a light switch today, chances are a GIS helped make sure the electricity was there to light up the room. If you drove down a highway today, chances are a GIS managed the signs and streets along the way. If you received a delivery today, chances are a GIS helped the driver find the way to your house. If you bought fresh vegetables today, chances are a GIS helped manage the land and calculate the fertilizer needed for the crop. If you looked at a map on the Internet, chances are a GIS had a hand in that, too.

Whether you use GIS technology yourself or see its impacts indirectly, it is a technology at work today to make your world better.



For more information, call your local reseller or ESRI at
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Send E-mail inquiries to info@esri.com
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