COMMUNITY MAPPING: GIS at Work

ASK

How are GIS maps used in the workplace?

INVESTIGATE

There are many uses for GIS.

Example 1: Communities may use GIS to map streets, stop signs, dangerous intersections, storm damage, flood areas, safe routes to schools, after-school program locations, crime zones, business development zones, public safety facilities, and much more.

Example 2: Foresters use GIS and GPS to map and monitor forest health. They can locate diseased trees and monitor insects. They may map hiking trails, bird watching sites, tree sizes and ages, plant life, and animal habitats, etc.

Example 3: Public safety systems use GIS and GPS to provide location and status information to emergency response teams such as police, fire, and rescue. This valuable information improves the time and accuracy of the team’s response.

Example 4: City or county planning commissions use GIS to map community assets, such as highways, parking lots, and traffic lights, to inform decisions about growth opportunities such as new businesses and expanded residential areas.

Example 5: Environmental Agencies use GIS to record both natural hazards and natural disasters such as flood plains and disease outbreaks. They look for clusters, patterns, or “hot spots.” For example, when hurricane Katrina hit the coastline, GIS was used to map the amount of damage. GIS mapping clearly showed the extent of the damage throughout several states.

Example 6: Companies use GIS to monitor their businesses. For instance, a nationwide coffee house company can map and monitor which stores are selling the most coffee and which stores have the highest or lowest number of customers.

CREATE

1. Do research in your community to find out who is using GIS. Some places to check include the village office, tax assessor’s office, local utility company, geography or city planning professionals, or local community college/university.

2. Conduct a web search by typing your town’s name along with GIS in the search box. For example, you may search “Champaign GIS.”

3. Ask an adult for ideas on where GIS may be used in your community.

4. Record what you discover.
DISCUSS

• Who uses GIS in your community?
• What are some of the uses of GIS in your community?

REFLECT

• What kinds of careers using GIS interest you?

RELATED WEB LINKS

edcommunity.esri.com/community/caseStudies/ -- This site provides case studies and lessons using GIS.