

## **D) Geographic Information Systems (GIS)**

The Colombian GIS market is segmenting, as small businesses start to realize the valuable analytical tool GIS software can provide. In the past, only large multinationals, government organizations and geomatics companies could afford GIS software. Now, due to the development of less expensive GIS software, small companies can afford this technology. The growth has shifted to smaller less professional users of this software with large organizations still being important customers.

In the past 4 years, leading GIS distributors have seen their sales grow by five fold, and many of these distributors have rushed to provide different types of GIS software for their clients. Specialized GIS software for different sectors of the economy, such as the electricity generating sector, is being demanded by some of the larger companies, while low-priced and easy-to-use software is being demanded by small companies.

Currently, there are no Colombian developed GIS software products, but there has been talk of developing such a product. The majority of the GIS software in Colombia comes from the U.S., with Europe and Canada providing some GIS products.

The most popular GIS software currently sold in Colombia are the following: ARC/INFO (U.S), ILWIS (Holland), Intergraph MGE PC-1(U.S.), MapInfo (U.S.), InfoCAD (U.S.), Atlas (U.S.) and SPANS (Canada). In the interviews with government organizations and Colombian companies, ARC/INFO was by far the most commonly mentioned GIS software. Its success can partly be attributed to its vast distribution network in Colombia and the service (installation and training) provided to clients. Most companies and government organizations use this software, followed by one or two of the above mentioned GIS software products.

GIS software products that have recently entered the Colombian market include: GenaMap and AutoDESK. GenaMap is produced by the U.S. company GENASYS and is said to offer the latest technology, such as the ability to link directly to popular relational databases. In early 1997, British Petroleum (BP) brought this software package and was in the process of installing it and receiving training. Already 50 businesses have been licensed with this software. AutoDESK is a GIS software product that is a spin-off of AutoCAD. The benefit this program provides is the ability to work well in conjunction with AutoCAD.

## **E) Image Processing and Photogrammetric Mapping**

There has been no image processing or photogrammetric mapping software developed in Colombia. All software is imported. The main software product used in Colombia for image processing is ER Mapper (Australia). Photogrammetric mapping software includes CADMAP, AutoCAD, ERDAS and KORK. The various geomatics firms usually carry more than one of these software programs.