



## A Free GIS Program

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Finally, there is a free GIS program that can do more than simply view GIS layers. fGIS is a free GIS program that has layering, editing, querying and digitizing capabilities. fGIS can be used to customize layered views including aerial photos and other imagery, draw map objects, query and search spatial data, annotate maps for printing, and much more. This program produces shapefiles and geo-referenced images compatible with commercial GIS software.

Wisconsin foresters built fGIS and although fGIS is not meant to replace comprehensive programs needed by GIS specialists, many people will find fGIS entirely adequate for their needs. It is in use around the world, with a flexible menu system that can be translated to any language.

Users can make new polygon, line or point layers over other maps or images or without backgrounds. fGIS layers provide users with area and length dimensions and an attribute table for each layer. This GIS program supports both vector files like ESRI's shapefiles and MapInfo's MIF files, and the most common types of image files. Users can import and display x-y point data such as crop yield data.

fGIS and HyperCube can be used together to rectify and geo-reference imagery. HyperCube, freeware produced by the US Army Corps of Engineers Topographic Engineering Center, includes functions to analyze, filter, warp, mosaic, reformat, calibrate, and combine multi and hyper-spectral imagery and data. HyperCube comes as a single "exe" file, which does not require installation. It just needs to be unzipped and used. HyperCube can be used to clip and export images for use in other GIS programs, a function that cannot be accomplished in many costly GIS programs. HyperCube can also re-project image files.

fGIS can be downloaded free from <http://www.digitalgrove.net/fgis.htm> and HyperCube can be downloaded free from <http://www.tec.army.mil/Hypercube/>. Both programs come with detailed help files. Many people, including farmers, natural resource managers and local government personnel will find fGIS to be a useful and adequate GIS program that will meet all of their needs. I will develop step-by-step instructions for fGIS and post them on the NDSU Geospatial Technology Education web site at <http://134.129.78.3/geospatial>

More information about geospatial technology is available from the NDSU Agriculture and Biosystems Engineering Department Web site at <http://www.ageng.ndsu.nodak.edu>. Follow the links to Extension Programs and Geospatial Technology Education.