



Times photo by Mike Knaak

Graduate student Dan Ross used a computer to display a Holding Township map that shows distances from the city of Holdingford to help planners guide housing proposals. Students at St. Cloud

State University's Center for Geographic Information Systems are compiling high-powered computer maps that can display a variety of detailed geographic and land-use data.

# Putting Central Minnesota on the map: Other projects

Here are some of the projects being done at St. Cloud State University's Center for Geographic Information Systems:

■ **St. Cloud Pilot Project.** This involves a partnership between St. Cloud State, the city of St. Cloud, Stearns County and the Area Planning Organization. It will map the original borders of the town of St. Cloud, including the township, the Stearns County portion of the city and Waite Park. Scheduled for completion by the end of next year, it will provide a base map for the area along with city utilities and traffic usage. Stearns County commissioners have signed onto the agreement, but

the other agencies have not.

■ **Holding Township.** The township enacted a zoning ordinance in 1990 aimed at limiting the building of non-farm households in agricultural areas. St. Cloud State students now are inputting information into the GIS computer that will allow planners to grade housing proposals to see how well they maintain the goals of the ordinance.

■ **Abandoned wells.** Stearns County and the state Board of Water and Soil Resources are teaming up this summer to map out all of the wells in the county. They then will put in the road system, pipelines and railroads. The goal is to prioritize abandoned wells according to

potential for contamination. High-priority wells will receive funding for sealing.

■ **Minnesota Geological Survey.** The MGS and state Department of Natural Resources are conducting a joint program to do a hydrological atlas for the state. By checking at least eight well borings per township, they hope to create a three-dimensional map below the earth's surface to the granite level.

■ **South Two River Watershed District.** Through GIS, St. Cloud State is preparing a surface water run-off model for the watershed, which is in the north central part of Stearns County. The ultimate goal is to slow down

the pressure of the run-off after heavy rains. With a GIS model, the district may be able to target crucial wetlands for restoration that could slow run-off enough to prevent flooding problems.

■ **Mississippi River.** This is a joint project between St. Cloud State, the University of Minnesota's landscape architecture program and the Department of Natural Resources. The aim is to create a GIS model that will allow planners to change portions of the Wild and Scenic Rivers law while trying to balance the competing concerns for further development and further protection along the river corridor.

— John Welsh