Abstract

LINK TO PAPER

A GIS-Based Model for Evaluating Agricultural Land-Based on Crop Equivalent Rate
Track: Cadastral and Land Records
Author(s): Jiyeong Lee

Cadastral GIS applications are the foundation for the development of GIS throughout a local government. To maintain the cadastral data known as the tax assessment role, the county assessor's office is interested in developing a system to evaluate agricultural land value. One of the important factors of providing the basics for property taxes for these rural affected parcels is the Crop Equivalent Ratings (CER) determined by soil characteristics. When determining the value, more factors relating to agricultural land are considered. Each factor layer is overlaid by Linear Combination Method through GIS analysis as the overlying map technique resulting in the calculation of the CER per parcel. This paper develops the CER Decision Supporting System (CER-DSS) to accommodate changes in the parcel layer and changes within the common land unit layer as they occur in Blue Earth County, MN. It examines important implementation issues of CER-DSS, especially the need for data accuracy analyses due to the used data’s scale effects.

Jiyeong Lee
Minnesota State University
Geography
7 Armstrong Hall
Mankato , MO 56001
USA
Phone: 507-389-2824
Fax: 507-389-2980
E-mail: leej@mnsu.edu