

## GIS DEVELOPMENT FOR REAL ESTATE APPRAISALS IN CHIANG MAI MUNICIPALITY

*Awika PANITKITKUN<sup>a,\*</sup> and Puttipol DUMRONGCHAI<sup>b</sup>*

*<sup>a</sup>Graduate Student, Department of Civil Engineering, Faculty of Engineering,  
Chiang Mai University 50200, Thailand; E-mail: [awika.pa@gmail.com](mailto:awika.pa@gmail.com)*

*<sup>b</sup>Assistant Professor, Department of Civil Engineering, Faculty of Engineering,  
Chiang Mai University 50200, Thailand; Tel: +6653-944146-9, Fax: +6653-892376;  
E-mail: [puttipol.d@cmu.ac.th](mailto:puttipol.d@cmu.ac.th)*

**KEY WORDS:** GIS, Appraised value, Chiang Mai

**ABSTRACT:** This study presents the development of Geographic Information System (GIS) for real estate appraisals. The descriptive data of real estate information and their associated spatial features were collected and transferred into the GIS-based environment. Such spatial and attribute data sets are called GIS database, which can then be manipulated and analyzed for appraised values of real estates. Chiang Mai municipality, the largest and most economically and culturally significant city in northern Thailand, were chosen for assessing the GIS capabilities. The approach of using GIS-based real estate appraisals shows appraised values as close as those obtained by market comparison approach. Such a computer-assisted approach may be of practical worth to aid valuers for asset assessments without ground truth.