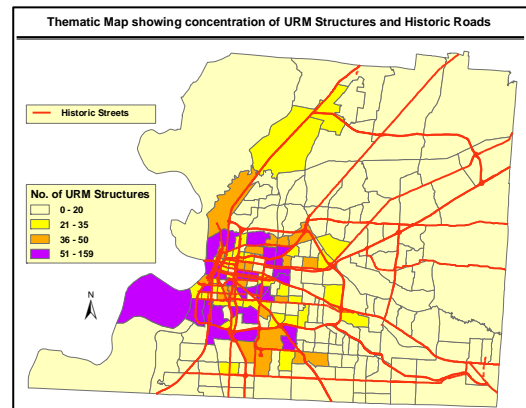


INTRODUCTION TO CP 6514 GEOGRAPHIC INFORMATION SYSTEMS

COURSE TITLE: Introduction to GIS
COURSE NUMBER: CP6514 C | College of Architecture
TERM: Spring 2008
INSTRUCTOR: S. Muthukumar
SEATS: 25

About GIS:

Urban planning, civil and environmental engineering, water resources management, geography, remote sensing and many other disciplines, require information about a number of factors where the location of a phenomenon is of critical importance. To handle large amounts of spatially distributed data, various types of automated information systems began to be introduced in firms and agencies over the past decade. Geographic information systems [GIS] are the most prominent of these technologies that store, retrieve and manipulate spatially referenced information. GIS is therefore useful for working with environmental, transportation, housing, demographic, marketing, infrastructure and land use data and have wide applicability in several disciplines.

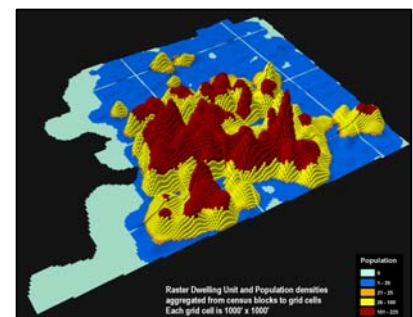
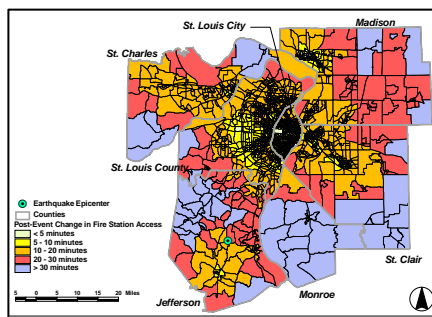
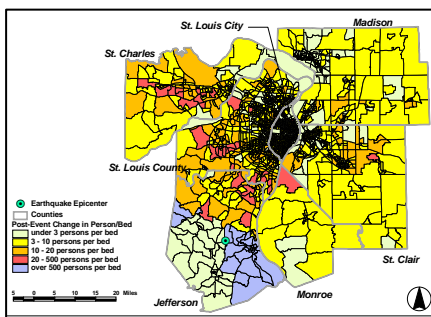


Course Objectives:

In general, the "CP 6514--Introduction to GIS" course will serve as a basic introduction for those who want to use GIS to support their interest in another area and as a foundation course for those who intend to concentrate their studies in the GIS specialization. Course objectives are implemented through readings, lectures and laboratory sessions that give students "hands-on" exposure to ArcGIS 9.3, an ideal desktop GIS software for the novice. The use of this particular software package is intended to provide students with a thorough grounding in the generic underpinnings of geographic information system concepts and design, and a working knowledge of ArcGIS 9.3 that can be used both academically and professionally. Every attempt would be made to alternate between lecture and lab sessions, where the lab sessions deal directly with the concepts covered in the lecture session.

The course has two broad educational missions:

- to educate students in "conceptual level spatial reasoning" techniques, and
- to generate "GIS skills" in students and impart "technical" training



By the end of the course, students are expected to understand the basic components of a geographic information system and to be familiar with the functions and limitations of different software implementations. Successful completion of the course will begin to prepare students to be effective in system design, hardware and software selection, problem solving and application development.