Editorial

GIS map of Fairfax County, Virginia

This issue includes some of the peer-reviewed papers that were presented at the **FIG Commission 3 (Spatial Information Management) Workshop, "Spatial Information Management toward Environmental Management of Megacities."** The Workshop took place in Valencia, Spain, February 18-21, 2008. An optional double-blind peer review—by authors' request—is offered for papers that are submitted for specific Commission 3 annual workshops. This year, eight papers have successfully passed the double-blind peer review: four of them are published in the current issue, and the remaining four will be published sporadically in the following issues *of Surveying and Land Information Science.*

The year 2007 was a turning point in human history because 50 percent of the world's population became urban. Rapid urbanization is a phenomenon of our times. Most of the rapidly developing cities are located in Latin America, Central Africa, and Asia but also in Eastern Europe. Urbanization can be viewed as an indicator of development because concentration of the most dynamic economic activities in urban areas often produces economies of scale and leads to social and economic benefits. However, major problems appear in the rapidly developing urban areas which are related, among others, to unplanned development and the lack of basic services such as fresh water and energy supply, transportation, waste treatment and management, environmental pollution, and crime.

It is a matter of human rights that people are free to choose where to live and work. Nobody likes to live in a city which is congested; suffers constant blackouts, garbage crises and frequent floods; has few parks, awful schools, insufficient clinics, and increased criminality; and is governed by incompetent public administration. It is the challenge of our time to achieve good governance, efficient administration, and sustainable urban growth. Restrictions on private rights in the use of land in terms of air, soil, and water pollution have to be applied and accepted by all market participants. All must share the costs of the natural resources they consume.

The speed and scale of current urban population growth generate important challenges for surveyors, planners, and governments. This FIG Commission 3 Workshop focused on how surveyors can, through Spatial Data Infrastructures (SDIs) and good land administration, provide reliable spatial data and land tools for recording, monitoring, planning, controlling, and managing the rapidly increasing urban areas.

This issue begins with a paper by Christodolos Psaltis and Charalabos Ioannidis about the need for an automated, robust, cost-effective, and quick method for informal building monitoring. The state-of-the-art of the change-detection methods is presented, and a strategy is proposed and developed for the particular characteristics of informal settlement in Greece. The efficiency of the proposed software, developed by the authors, is tested in the greater metropolitan area of Athens and is compared with the efficiency of other commercially available software.

The second paper in the issue is by Sagi Filin, Aviram Borka, and Yerach Doytsher, and its focus

is on combining LiDAR data with cadastral maps to achieve 3D land visualizations.

A paper by Hartmut Mueller and Mirko Siebold emphasizes the importance of the availability of integrated spatial information services for policy makers, planners, and managers, as well as citizens and their organizations. Their "Good Practice Example of a German Regional SDI . . . " paper clarifies what kind of information has to be provided to support understanding of the complex interactions between human activities and their environmental impacts, and how these impacts manifest themselves in urban agglomeration areas. The authors describe the approach of the German state Rhineland–Palatinate and how achievements in web-based regional SDI implementation fit into the requirements of the INSPIRE (Infrastructure for Spatial Information in the European Community) Directive. They also address work that will need to be done to meet all INSPIRE requirements completely.

The last paper in the issue, "Tools for Legal Integration and Regeneration of Informal Development in Greece: A Research Study in the Municipality of Keratea," is by Chryssy A. Potsiou and Katerina Dimitriadi. The authors describe the land tools and procedures applied in Greece in order to regenerate and confer a formal status on informally developed suburban areas. Original research on the causes of informal development and how these affect land tenure and zoning regulations is presented. The problems encountered in the application of currently used procedures demonstrate the complexity of the situation and the impacts of informal development on land development process.

In this issue, we also include a "Call for Papers" for the 2009 Workshop of FIG Commission 3, "**Spatial Information for Sustainable Management of Urban Areas,**" to be held February 2-4, 2009, in Mainz, Germany.

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