



Guest Editorial

>> Rj Zimmer, LS

2007 ESRI Survey & Engineering GIS Summit

This year marked the fifth year of ESRI's survey summit where surveyors come together to discuss, share, and learn about the applications of GIS to land surveying. The conference expanded this year to include engineering, and attendees came from twenty-two countries.

In his welcoming and introductory remarks, ESRI's Survey Industry Solutions Manager, Brent Jones, expressed his thoughts that the state of the industry emphasizes new services, relationships, markets, and new ways to do business brought about by changes in GIS technology. Drivers for these changes are the desire for accuracy, efficiency, currency, and interconnectivity of data, and information systems.

The keynote speaker for the survey-engineering summit was Professor Stig Enemark, president of FIG (International Federation of Surveyors) and the Danish Association of Chartered Surveyors. Professor Enemark offered the opinion that surveyors are moving from measurement to management of information and information systems. He feels that with advanced technology, everybody can make



Plenary Presentation: *GIS - Optimizing Operations at an Engineering Firm*
Herb McKim, P.E., Executive Vice President, McKim & Creed

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Keynote speaker Professor Stig Enemark, President of FIG and the Danish Association of Chartered Surveyors.

accurate maps and everybody can do precise measuring. Thus, the surveyor's key role is changing and surveyors are becoming land information professionals.

Professor Enemark also discussed the surveyor's role as a proactive agent of social change in the world. He discussed social and economic imbalances, at one point showing a map of the world where the size of each nation was distorted by its gross domestic product per capita. In this perspective the USA, Western Europe, Japan and South Korea dominate the landscape. Professor Enemark offered that surveyors can play a role in helping to bring about social and economic improvements, and asked "... you, as surveyors, to work on getting this map back to scale." He suggested that surveyors are central and vital to providing geographic information, mapping, and databases of the built environment and the natural world and land tenure systems. In his view, land-tenure systems are an important construct for protecting individual's rights, and that land surveyors are the ones responsible for delineating the land

ownership and interest systems. He suggested that the surveyor's education system should change to focus on spatial information management.

The survey summit then presented a case study of using GIS in engineering and surveying operations. Herb McKim, PE, of McKim and Creed discussed how their firm integrates GIS. McKim & Creed offers GIS services directly to clients and uses GIS internally to manage projects and information (such as utility systems) and to control data. The company uses ArcGIS Server on a virtual private network (VPN) to share GIS data and maps among its various offices in the southeastern U.S. The company has a core GIS group that provides direct GIS services for internal and external clients, and maintains the company GIS databases. Company engineers and surveyors can access the GIS data and maps via the VPN to produce their own maps, such as showing zoning and parcel data on a utility system.

ESRI staff then presented information on its upcoming new release of the

Survey Analyst software, which will include improved parcel editing and coordinate geometry tools that will assist the surveyor in better managing survey information within a GIS environment. The new technology looks promising in its ability to provide simple to use tools for managing parcel information.

There were more than forty sessions and papers presented that covered GPS, geodesy, parcel editing, integrating multimedia in survey projects, hydrology, facilities management, spatial reference systems, cadastral information systems, coastal and marine mapping, engineering, surveying-GIS education, and spatial accuracy. Surveyors had the opportunity to learn more about using GIS for managing operations as well as for providing products and services to clients. There was also time for summit attendees to visit with a variety of vendors in the exhibitors' room where equipment and software vendors displayed their products and services.

In all, the ESRI Engineering - Survey Summit provided good opportunities for engineers and surveyors to see new developments in GIS and to learn how others are using GIS in their work. *A*