

Land administration is defined as the process of determining, recording and disseminating information about the tenure, value and use of land when implementing land management policies.

The land planning function as practiced by U.S. surveyors is largely limited to the planning of land subdivision. The broader field of social and urban planning is practiced by others.

The research function is described in the third activity of the Detailed Functions as the "development, testing and calibration of sensors, instruments and systems."

This function is carried out primarily by industry and academia both in the States and elsewhere, and is one in which the professional associations should be involved in at least an advisory capacity.

We often lament that the general public has so little understanding of surveying and of what it is that surveyors do. In fact, surveyors themselves lack complete agreement about their profession.

The international understanding of what surveying is, according to the FIG definition, goes well beyond our concept of the profession here in the United States. Surveying, internationally, is a very large tent.

There is room in the tent for cartographers, geodesists, land managers and land valuers. Engineering surveyors as well as cadastral surveyors are comfortable tent dwellers.

I fear that the U.S. surveying community has constrained itself by isolating "professional surveyors" from the other categories of our profession.

In so doing we weaken the profession politically and we lower whatever public esteem we may otherwise have earned through the breadth of our activities.

Readers of this column may recall my less-than-enthusiastic response to the recent reorganization of ACSM in which the member organizations, AAGS, CAGIS, GLIS and NSPS distanced themselves from each other by separating individual membership from ACSM.

One writer observed that this action would "drive an even deeper wedge between the very societies that should be working even more closely in this changing age to promote and preserve the professions we follow." (See "A rush to ... what?" by John E. Dailey, PS, in the November/December 2002 ACSM Bulletin.)

That wedge, I suggest, has made it impossible for the U.S. surveying community to claim the unity that might have provided the public recognition, political significance and career appeal we all long for.

Robert Foster is a past president of the International Federation of Surveyors (FIG).

Robert Foster



FIG Definition of the Functions of the Surveyor

As adopted by the General Assembly 23 May 2004

Summary

A surveyor is a professional person with the academic qualifications and technical expertise to conduct one, or more, of the following activities;

- to determine, measure and represent land, three-dimensional objects, point-fields and trajectories;
- to assemble and interpret land and geographically related information,
- to use that information for the planning and efficient administration of the land, the sea and any structures thereon; and,
- to conduct research into the above practices and to develop them.

Detailed Functions

The surveyor's professional tasks may involve one or more of the following activities which may occur either on, above or below the surface of the land or the sea and may be carried out in association with other professionals.

- 1 The determination of the size and shape of the earth and the measurement of all data needed to define the size, position, shape and contour of any part of the earth and monitoring any change therein.
- 2 The positioning of objects in space and time as well as the positioning and monitoring of physical features, structures and engineering works on, above or below the surface of the earth.
- 3 The development, testing and calibration of sensors, instruments and systems for the above-mentioned purposes and for other surveying purposes.
- 4 The acquisition and use of spatial information from close range, aerial and satellite imagery and the automation of these processes.
- 5 The determination of the position of the boundaries of public or private land, including national and international boundaries, and the registration of those lands with the appropriate authorities.
- 6 The design, establishment and administration of geographic information systems (GIS) and the collection, storage, analysis, management, display and dissemination of data.
- 7 The analysis, interpretation and integration of spatial objects and phenomena in GIS, including the visualisation and communication of such data in maps, models and mobile digital devices.
- 8 The study of the natural and social environment, the measurement of land and marine resources and the use of such data in the planning of development in urban, rural and regional areas.
- 9 The planning, development and redevelopment of property, whether urban or rural and whether land or buildings.
- 10 The assessment of value and the management of property, whether urban or rural and whether land or buildings.
- 11 The planning, measurement and management of construction works, including the estimation of costs.

In the application of the foregoing activities surveyors take into account the relevant legal, economic, environmental and social aspects affecting each project.

www.fig.net