URISA Begins GIS Certification Program

William E. Huxhold

The following article will appear in the Nov/Dec issue of the URISA News. It reports on the action taken by the URISA Board of Directors in October at the annual URISA Conference in Long Beach, California, to schedule the implementation of a certification program for GIS professionals within the next two years. The Board seeks input from all URISA members, members of allied organizations, and the geospatial technology industry as a whole. All UCGIS delegates should review the GIS Certification proposal and participate in the public discussion that URISA will facilitate at the Association's web site (www.urisa.org).

The article reads:

Last month (Oct 25), the URISA Board unanimously approved the URISA Certification Committee's proposed schedule for public discussion, testing, evaluating, and implementation of a proposed certification program for GIS professionals. The URISA Certification Committee members spent over three hours debating the details of this proposal at the Long Beach conference. This followed three years of honest and professional debate about the pros and cons of GIS Certification. Background information is available in other locations at the URISA web site.

The schedule covers two years: a six-month period for public debate, a one-year pilot period for testing, and time for evaluating and revising the system prior to a final approval scheduled for the URISA Annual Conference in October, 2003.

The URISA Board of Directors strongly encourages all GIS professionals to study the proposal and enter into the discussion that will follow over the next six months.

The Certification Proposal

The proposed GIS Certification Program is voluntary and is intended to acknowledge the GIS professional achievements of those whose primary responsibility involves the use of geospatial data technology. It is not envisioned as a program for general users of GIS technology.

The proposed GIS Certification Program consists of a point-based system that is selfdocumented and calculated by the individual seeking certification. *The proposal does not include an examination.* One year of prior experience is required before an individual can submit a portfolio, and a confirmation signature of the individual's employer (or certified colleague if there is no employer) is also required. All certification applications are reviewed and either accepted or rejected by a GIS Certification Board whose composition and membership are yet to be determined.

Minimum levels of achievement points are set for each of three categories of achievement:

- Educational Achievement
- Experience on the Job
- Contributions to the profession

In addition, a certification renewal program sets minimum point requirements for continued certification every three years to encourage GIS professionals to maintain currency in geospatial technologies.

Models for Certifying GIS Professionals

Two options (models, if you will) have been proposed – both based upon the above achievement point system:

The first option (Model 1) provides for certification of professionals in three different <u>Professional Roles</u>: *GIS Technician*, *GIS Analyst*, and *GIS Manager*, AND three different <u>Competency Levels</u> within each professional role: *Novice*, *Master*, and *Expert*.

The second option (Model 2) provides for certification of GIS professionals in one common role: *GIS Professional*, but allows for five different levels of competency: *Beginner*, *Novice*, *Experienced*, *Master*, and *Expert*.

Achievement Point Schedule

Educational achievement points are assigned within three groups: **highest formal degree**, **professional development courses**, and **self-directed study**. Additional points are assigned for formal degrees that include a GIS specialization as well as professional development GIS certificate programs. Certification requires a minimum of 40 to 140 Educational Achievement points, depending upon the competency level being certified.

Points for Experience on the Job are assigned based upon the number of years in any of five categories of employment: a **GIS position**, a **position in a related field**, an **IT position**, a **non-IT or non-GIS position in a related field**, and **supervisory or management position in any field**. Certification requires a minimum of 20 to 260 Experience points, again depending upon the competency level being certified.

Points for Contributions to the Profession are assigned to activities that assist in the further development of the GIS profession: **publications**, **instructing in workshops**, **participation in professional associations**, **participation in GIS-related conferences**, and **volunteer events and organizations related to the technology**. Certification requires a minimum of 0 to 80 Contribution points, depending upon the competency level being certified. (No contribution points are required of beginners in the profession because it is felt that some experience is required before a professional can make a contribution to the profession.)

The certification renewal program requires the certified professional to earn a minimum of six achievement points in the three-year period since last certified. The six points must include three Education points and three Contribution points.

A detailed schedule of minimum required points within the three achievement categories for the different roles and competency levels of each option (Model 1 and Model 2) are provided in the URISA Web Site, <u>www.urisa.org</u>. The site also lists all of the achievement opportunities and their individual point values.

Code of Ethics

In order to become certified, the individual must also certify that he or she has read and agrees to conduct professional activities in conformance with the professional Code of Ethics. While at this time, no Code of Ethics has yet been adopted, URISA's Code of Ethics Committee plans to submit a proposal for Board approval prior to final implementation of the Certification program. Thus, conducting professional activities in an ethical manner is part and parcel of the GIS Certification Program.

Certification Board

The GIS Certification Program will be administered by a Certification Board that, hopefully, will consist of GIS professionals from all interested organizations and professional societies. The program is not intended solely for URISA members, and therefore does not require membership in URISA for aspiring GIS certified professionals.

That is why public review by all GIS professionals – not just URISA members – is essential at this time.

The Process

URISA's "Certification Guestbook" at its web site is one avenue being developed for public discussion of this proposal. Other avenues such as articles in periodicals and ejournals will also be developed. We will attempt to gain as wide an audience for review and comment as possible.

After three months of public comment, revisions will be incorporated into this proposal and the Revised Certification Program will again go out for public comment sometime in February 2002. By May 2002 we should have a Final Draft of the Certification Program. This Final Draft will then be submitted to the Board at its June 2002 meeting for final approval.

If it meets Board approval in June 2002, an Interim Review Board will be established to implement a pilot program to begin in August, 2002. During the Certification Pilot Program, volunteers (possibly through our chapters) will be solicited to participate in a test of the

certification process.

By the time of next year's annual URISA conference in Chicago, we will have had three month's experience with the Pilot Program and be in an early position to evaluate, review, and revise it at the Conference.

The Pilot Project will end in August 2003, and a complete evaluation of the one-year pilot project and revision of the program as needed will be completed just in time for the 2003 annual conference. Final Board decisions on Certification and possible approval for final implementation is expected at the URISA conference in October 2003.