

# GIS Professional Certification and GISCI

## Why Certify?

- Although GIS has many uses, GISCI believes there is a GIS profession.
- GIS *professionals* understand and apply the *full range* of GIS capabilities, most commonly as their primary professional role.

## Who Qualifies?

- Other professionals (surveyors, cartographers, landscape ecologists, etc.) are typically not GIS professionals
- These professionals assess both the range of their GIS applications and the significance of their GIS skill set to their professional role.

## What can Certification Provide?

- 1) Classify bad and good practice
- 2) Implement a professional code of ethics that identifies bad practice and upholds good practice
- 3) Outline the education and work experiences necessary to establish good GIS practice

## No Test!

- **Point-based** and **self-documented**
- Based on **achievement in three categories**:
  - **Educational** attainment
  - Professional **experience**
  - **Contributions** to the profession

## A Point-based System

- GISCI Professional Certification created a system that adds objectivity (points) to the subjective (one's career)
- The Certification Committee spent 4 years attributing points to various activities
- The result of their effort is the GISCI Certification Program

# Three Categories of Achievement

- **EDUCATION** – Bachelor's degree with some GIS courses (or equivalent)
- **EXPERIENCE** – Four years in GIS application or data development (or equivalent)
- **CONTRIBUTIONS** – Annual membership and modest participation in a GIS professional association (or equivalent)

## Minimum Category Points

- Educational Attainment: 30 points
- Professional Experience: 60 points
- Professional Contributions: 8 points
- Additional Points in any of the 3 Categories: 52 points

## Minimum Total Points

To allow flexibility in the distribution of points, a minimum total points was established at:

**150 points**

This allows one to make up for a lack in one category with an excess in another (eg., long on GIS experience, short on education)

# I. The Educational Achievement Section

There are 3 components to the Educational Achievement Section:

1. Credential Points (degrees in any field)
2. Course Points (geospatial technology courses)
3. Conference Attendance Points (days spent at relevant meetings and conferences)

## Educational Attainment

### Credential Points:

Master's Degree or Higher	25 pts
Bachelor's	20 pts
Associate's	10 pts
GIS Certificate*	5 pts

\*400 or more student activity hrs

### Select the highest earned

### Student Activity Hours:

Hours spent in a classroom, seminar, or conference, plus hours spent completing assignments, reading, studying, or other preparations for the course.

Geospatial technology courses and related courses taken are worth:

**1 point for every 40 student activity hours**

### Course Point Examples

#### Examples:

1. The applicant completed an 8 hour workshop:  
 $8 \text{ hours} / 40 \text{ (set value)} = 0.2 \text{ EDU points}$
2. The applicant completed a 15 week, 3 credit course:  
 $3 \text{ credits} \times 15 \text{ weeks} \times 3 \text{ (set value)} = 135 \text{ hours}$   
 $135 \text{ hours} / 40 \text{ (set value)} = 3.38 \text{ EDU points}$

### Conference Attendance Points

- Conference attendance points are a result of the number of total days that the applicant has spent at meetings and conferences sponsored by professional societies and regional and local user groups.

## **Conference Attendance Point Examples**

- Conference Attendance Points are determined by the number of days and not hours spent at each event. The number of days attended should always result in a whole number multiplied by 0.1.

The applicant attended the 2004 ESRI International User Conference:

August 9-13 = 5 days x 0.1 (set value) = .5 EDU points

## II. Professional Experience

Job experience is the most important factor in GIS qualifications because:

- Performing in a job provides learning experiences that allow **growth and expansion of skill sets**
- Work environment with other professionals allows **transfer of knowledge**

### 3 Tiers of Professional Experience

- **Analyst, System Design, Programming: (Tier 1)**  
Typical tasks include database design or management, documentation or analysis of functional requirements, application design and evaluation, implementation management, and system administration. = **25 Points Per Year**
- **Data Compilation, Data Maintenance, Teaching: (Tier 2)**  
Typical tasks include editing data, map composition, report generation, database maintenance, data validation, instructional training, and teaching. = **15 Points Per Year**
- **GIS User: (Tier 3)**  
Typical tasks include utilization of applications involving geospatial technologies. Candidates may be involved in managing or coordinating GIS, but not involved in the technical implementation of GIS. = **10 Points Per Year**

### 4-year Minimum

- Applicants must have a combination of at least 4 years (48 months) of professional GIS experience to apply for GIS Certification.
- If the applicant has met the minimum requirement with less than 4 years of experience then the applicant must wait until 4 years of professional GIS experience is accrued.

### The Grandfathering Provision

- Designed to assist professionals who have working with spatial data for many years
- Successful candidates will only have their professional experience reviewed.
- Grandfathering applicants do not need to submit contribution or education points for initial certification.
- Grandfathering will only be available until December 31, 2008. There is no grandfathering provision for recertification. Recertification applicants will need to submit points in all three areas.

You are eligible for Grandfathering if you have earned a minimum of 200 professional experience points (see forms EXP-1 and EXP-2). Candidates who

qualify for grandfathering then, have worked for:

■ **8 years** in a GIS position of **data analysis, system design, programming, or similar position.**

*OR*

■ **13 1/3 years** in a GIS position of **data compilation, teaching, or similar position.**

*OR*

■ **20 years** in a GIS User Position

*OR*

■ **A combination** of the above positions that results in a total of **at least 200 points** as computed in forms EXP-1 and EXP-2.

## **III. Contributions to the Profession**

Documents and activities that add to the professional body of knowledge for the **benefit of the profession** as a whole – not just the employer and client.

### **The 7 Categories of Contribution Points**

- GIS Publications
- GIS Professional Association Involvement
- GIS Conference Participation
- GIS Workshop Instruction
- GIS Conference Presentation
- GIS Awards Received
- Other GIS Contributions

## **Additional Requirements**

- **Code of Ethics**
- **Renewal**
  - Every five years
  - Minimum points in each category and total since initial certification

### **Signing the Code of Ethics**

- All accepted candidates must sign the GISCI Code of Ethics.

### **Renewal of Certification**

- Applicants must earn the following points in the five years following initial certification:

### **Renewal of Certification**

- All points claimed for recertification will need to be documented.
- There is no “Grandfathering Provision” for recertification.

# The GISCI Organization

## Establishing GISCI

- Why not URISA and why GISCI?
  - Legal and financial protection for URISA and its members and officers.
  - Ability to expand the Institute to make it more multilateral when the time comes.
  - Wanted to enforce the principle that certification has no membership requirement.

## What is GISCI?

- GISCI is the GIS Certification Institute
- It is a 501(c)(6) organization – Similar to a trade association
- Will provide the GIS industry with a complete mechanism for certification
- At its inception, will not offer any other programs or champion other initiatives.
- In the eyes of the law and the IRS it is a completely separate organization from URISA.

## The Mission of GISCI

*To maintain the high standards and integrity of the GIS profession and promote ethical conduct within it.*

# The Application Review Process

- The GISCI Staff performs a QUANTITATIVE review.
- The GISCI Review Board performs a QUALITATIVE review.

## GISCI Staff Review

- Will determine if the points have been added and documented correctly.
- Will make a recommendation of the applicant's status to the Review Committee.
  - Accepted Outright
  - Rejected Outright
  - Pending Further Review

## GISCI Review Committee

- Volunteers with GIS backgrounds and credentials.
- Chosen by the GISCI Board of Directors
- Will make the final determination on ALL manners of points, documentation, and status.
- Their decisions are final and settled by simple majority.

## GISCI Review Committee

- The committee will see and approve the scores for every GISCI applicant.
- They will perform independent reviews and return their decisions to GISCI staff.
- They will make periodic recommendations on how to improve the program to the BOD and Oversight Committee.

## Notifying the Applicants

- All accepted/rejected candidates will be notified of their status hopefully within 2-3 months of submittal.
- Accepted candidates will receive a congratulatory letter and a certificate.
- Rejected candidates will be encouraged to resubmit.

## GISCI in Operation

- Currently there are 553 certified GIS Professionals (GISPs) (as of December 25<sup>th</sup>)
- 93.2% said that the application process was "Very Clear" to "Clear"
- 90.4% said it took 1-3 weeks to complete. (the majority of their time is spent waiting for transcripts).

## GISCI in Operation

- 56% are from the Public Sector
- 38% are from the Private Sector
- 6% are from Academia

## **Flow of Applications**

- GISCI is processing applications monthly.
- This means that 12 cohorts of professionals will be certified each year. GISCI estimates that each cohort will contain about 40 successful applicants
- GISCI hopes to have between 500 - 600 Certified GIS Professionals by the end of 2004.

## **Certification Fee**

- The cost of GISCI certification is \$250.
- Covers five years of certification with no annual fee assessed.
- There will be a yet to be determined recertification fee.
- Rejected applicants receive \$150 back, less a \$100 processing fee.

For more information and an application:

**[www.gisci.org](http://www.gisci.org)**