

# **GIS Professional Certification and GISCI**



# Presenter

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- Scott A. Grams
- GISCI Certification Director & URISA Education Manager
- Staff Support for the URISA Certification Committee for 4 years.
- Association Professional NOT a GIS Professional.
- Worked Closely with URISA Leadership in Developing GISCI.



# Why Certify?

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- 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?

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- 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?

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- 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!

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



# A Point-based System

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- 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



# Benchmark

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- **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

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- 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

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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)



# The Educational Achievement Section

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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

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## 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**



# Educational Attainment

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## 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

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## 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:

$$3 \text{ credits} \times 15 \text{ weeks} \times 3 \text{ (set value)} = 135 \text{ hours}$$

$$135 \text{ hours} / 40 \text{ (set value)} = 3.38 \text{ EDU points}$$



# Educational Attainment

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## 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

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- 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





# Professional Experience

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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

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- **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

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- 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

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- Designed to assist professionals who have working with spatial data for many years
- Successful candidates will only have their professional experience reviewed.



# The Grandfathering Provision

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- 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.



# The Grandfathering Provision

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.



# Contributions to the Profession

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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

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





<b>Publication Type:</b>	<b>Points Earned per Publication</b>
A. Book Author/Editor	15
B. Published Atlas (as author)	15
C. Refereed Paper	5
D. Book Chapter Author	5
E. Published Map (as author)	3
<i>Note: For an atlas or map to be considered as published, for purposes of earning contribution points, it must not have been produced as a result of a work or academic assignment.</i>	
F. Editorial Board	3
G. Magazine/Journal Article	3
H. Magazine/Journal Column	3
I. Paper in Conference Proceedings	2
J. Magazine/Journal/Newsletter Column Editor	1
K. Newsletter Article	1
<i>Note: Professional writing is credited as Experience. Publication of theses and dissertations is credited as Education.</i>	



## GIS-Related Professional Association Involvement

Level of Involvement	Points Earned per Year of Office or Affiliation
L. President or Board Chair	5
M. Board Membership	4
N. Committee Chairperson	3
O. Committee Member	2
P. Association/Organization Membership	1



### GIS Conference Participation

Level of Involvement	Points Earned per Conference
Q. Conference Chairperson	4
R. Conference Committee Member	2

### Workshop Instruction

	Points Earned per Workshop
S. Workshop Instruction	3

### GIS Conference Presentations

Presentation Type	Points Earned per Event
T. Conference Presentation	1
U. Conference Poster Display	1

*Note: Credit is accrued for both a conference presentation and publication of same in the conference proceedings (see item 1. GIS Publication).*

## GIS Awards Received

Recognition Type	Points Earned per Award
V. National Award	3
W. Local/Regional/State Award	2

*Note: Awards issued by the applicant's employer do not count as a contribution to the profession. These awards will not be considered.*

## Other GIS Contributions

Participation Type:	Points Earned per Activity
X. Event Organizer	2
Y. Event Participation/Moderation	1
Z. Related Community Contributions	1-3



# Additional Requirements

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



# Signing the Code of Ethics

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



# Renewal of Certification

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

Educational Achievement	4 points
Professional Experience	50 points
Contributions to the Profession	10 points
Additional Points	11 points
Total:	75 points



# Renewal of Certification

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





# The GISCI Organization

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# Establishing GISCI

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- 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?

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- 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

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



# The Application Review Process

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# The Application Review Process

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



# GISCI Staff Review

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- 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

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- 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

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- 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

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- 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

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- Currently there are 401 certified GIS Professionals (GISPs)  
(as of August 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

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- 56% are from the Public Sector  
38% are from the Private Sector  
6% are from Academia
- They have backgrounds in the following disciplines:

Planning  
Public Works  
MIS/IS  
Emergency Services  
Utility Planning Operations  
Transportation

GIS  
Engineering  
Assessment  
Natural Resources  
Community Development  
Finance and Administration



# Flow of Applications

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- 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

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- 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.







# www.gisci.org



## GIS Certification Institute

[Home](#)[Feedback](#)[Contents](#)[Search](#)[Home](#)[GISCI News](#)[About the Program](#)[Getting Certified](#)[Certification FAQ's](#)[Code of Ethics](#)[Links to GIS Organizations](#)[About GISCI](#)

### Important Note:

**Applications for the GISCI Certification Program are now available.** GISCI is now ready to accept complete applications accompanied by full payment and a signed of ethics.

[View or download the application materials for GISCI professional certification.](#)

Attitude



# Thank You...Any Questions?

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# **Applying for GISCI Certification:**

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**A Step by Step Guide to  
Completing an Application for  
GIS Professional Certification**



# Steps

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- The Grandfathering Provision (form GF-1)
- The Educational Achievement Component (forms EDU 1, 2, 3, S & X)
- The Professional Experience Component (forms EXP 1 & 2)
- The Contributions to the Profession Component (form CON-1)
- Total Certification Points (form TOT-1)



# Getting Started

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- Download all necessary documents from the GISCI website at [www.gisci.org](http://www.gisci.org)
- An application packet includes:
  1. The Application
  2. A Procedures Manual
  3. The GIS Code of Ethics
  4. An Application Packet containing a welcome letter, payment form, checklist, and questionnaire



# Filling out the Application

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- The application may be completed in two ways:
  1. Manual Entry (print out forms and complete in ink)
  2. Electronic Entry (complete the forms electronically, print, and combine with documentation)
- All applications need to be sent as paper copies. No electronic documents will be accepted



# Helpful Tip Before you Begin

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- There is no benefit to documenting a high point total. The point total is used only during application assessment and is not noted or reflected in your final certificate. It is unnecessary to expend extensive effort documenting minor achievements *unless the point values are needed to meet the minimum.*



# Request External Official Documentation

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- Primary materials include:
  - current résumé or curriculum vitae (CV)
  - college transcript(s)
- Secondary materials may include:
  - certificates of completion / participation
  - awards
  - publications
  - course catalogs, class syllabi, class reports/projects



# Removal of Personal Information

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- All sensitive or personal information (i.e. social security number, drivers license number, maiden name, etc.) may be removed or obscured from any document. If this information is included only the GISCI staff and Review Committee Members will view it.





# Notes on the Grandfathering Provision

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- Grandfathering Provision applicants are encouraged but not required to complete the Education and Contribution components
- There is no Grandfathering Provision for recertification. Applicants must earn the minimum points in all three achievement categories
- Grandfathering Provision Applicants must complete the forms EXP 1 & 2
- The Grandfathering Provision is indistinguishable from the certification approved in the regular fashion



# Completing the Form GF-1

Review the Grandfathering Provision requirements and determine if you may be eligible

Grandfathering Provision Information Sheet: GF-1 (sheet 1 of 2)

## GRANDFATHERING PROVISION INFORMATION SHEET

### ARE YOU ELIGIBLE FOR GRANDFATHERING?

*(Please read before proceeding with the application)*

Please complete before proceeding

Check either box A or B.

A. Yes, I would like to be considered under the Grandfathering Provision.

X

B. No, I am not eligible for the Grandfathering Provision and choose to apply under the regular application process.



# Satisfying the Grandfathering Provision

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- Grandfathering Provision Candidates must complete forms EXP 1 & 2
- With Grandfathering, the Educational Achievement and Contributions to the Profession Components are optional



# Completing the Grandfathering Provision

EXP-2: EXPERIENCE SUMMARY TABLE		
Worksheet	Title	Points
1	GIS Manager	135.45
2	GIS Analyst	64.24
3	GIS Technician	38.05
8		
	*Total Experience Points:	237.74

If the total from EXP-2 exceeds 200 points proceed to Total Certification Points Sheet (TOT-1)

*\* = This total must be at least 60.0 in order to qualify for certification. (200 points for Grandfathering prior to December 31, 2008).*

# Completing the Grandfathering Provision

The applicant has successfully earned GISCI Certification through the Grandfathering Provision

TOTAL CERTIFICATION POINTS SHEET (TOT-1)	
Achievement Categories	Total Points
Educational Achievement (Total from EDU-S)	22.3
Professional Experience (see Note 1) (Total from EXP-2)	237.74
Contributions to the Profession (Total from CON-1)	18
<b>TOTAL POINTS</b> (see Note 2) (Add EDU-S, EXP-2, and CON-1) =	278.04



# The Regular Certification Process

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- Candidates who do not qualify under the Grandfathering Provision are invited to apply under the regular certification process.
- Requires completion of all three components (EDU, EXP, & CON)



# The Educational Achievement Component

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# The Educational Achievement Component

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- The Applicant will need a minimum of 30 Educational Achievement Points to satisfy this section.





# Completing the Credential Points Section (EDU-1)

Example: The candidate has earned a Bachelor's Degree in Computer Science

Credentials		Points
Master's Degree or Higher		25 points
Bachelor's Degree		20 points
Associate's Degree		10 points
GIS Certificate		5 points

Highest Credential Earned	Year Conferred	Institution	Points Claimed
BS	1989	Purdue University	20

**Enter the degree or certificate's corresponding point total on the form and enter that in the box marked total credential points**



# Completing the Credential Points Section (EDU-1)

This value should be added to the Educational Achievement Summary Sheet (EDU-S)

Education	Points Claimed
	20



# Documenting Credential Points

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- The credential claimed must be found on an original transcript.
- If the degree is not listed on the original transcript, a copy of the diploma may be included.



# Notes on the Course Points Section (EDU-2)

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- Subject matter must relate directly to geospatial information science or related technology, and applications.
- The course subject matter must be subsumed by one or more of the eleven “knowledge areas” identified in the University Consortium on Geographic Information Sciences’ (UCGIS) Model Curricula plus computer programming courses.



# Notes on the Course Points Section (EDU-2)

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- All university courses claimed must be found on an original transcript
- Courses offered by non-accredited educational institutions such as workshops and vendor training are also acceptable.
- Proper documentation of workshops should be supplied (certificates, invoices, rosters, etc.)



# Calculating Course Points

- Calculating Student Activity Hours (SAH) for credit courses

The formula is  $SAH = C \times 3 \times W$

1991	GEOG 6534	Introduction to Geographic Information Systems	3 credits	15 wks	135
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- where  $C$  is the number of credits per course,  $3$  is the standard number of activity hours per credit, and  $W$  is the duration of the course in weeks.



# Calculating Course Points

- A typical 3-credit college course conducted during a 15-week semester earns 135 student activity hours ( 3 credits  $\times$  3 hours/credit  $\times$  15 weeks = 135 activity hours).

1991	GEOG 6534	Introduction to Geographic Information Systems	3 credits	15 wks	135
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# Calculating Course Points

- Calculating Student Activity Hours (SAH) for non-credit courses that award Continuing Education Units (CEUs)

The formula is **SAH** = CEUs × 10

1996	n/a	AAG GIS Workshop	1 CEU	n/a	10
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- where **CEUs** is the number of continuing education units per course, and **10** is the standard number of activity hours per CEU.





# Calculating Course Points

- A typical 1-day workshop earns 10 student activity hours (  $1 \text{ CEU} \times 10$  [fixed value] = 10 activity hours).

1996	n/a	AAG GIS Workshop	1 CEU	n/a	10
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# Calculating Course Points

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- Sum all of the Student Activity Hours for courses from accredited and non-accredited educational institutions
- Divide the total by 40. This is the fixed number set by GISCI to help determine total course points.
- The resulting value is the total course points for EDU-2



Sum the Student Activity Hours in the far right hand column and divide by 40.

The resulting value is your Total Course Points for EDU-2 and should be added to EDU-S

Example: (form is truncated)

EDU-2: Courses Offered by Accredited Educational Institutions					
Year	Course Abbreviation and Number	Course Title	Credits or CEUs	Course Duration (weeks)	Student Activity Hours
1991	GEOG 6534	Introduction to Geographic Information Systems	3 credits	15 wks	135
1991	GESC 4752	Computer Mapping and GIS	3 credits	15 wks	135
1996	n/a	AAG GIS Workshop	1 CEU	n/a	10
1997	GEOG 345	Computer Aided Drafting and GIS	3 credits	15 wks	135
EDU-2 Part C. TOTAL Student Activity Hours				415	
				+ 40 hrs per point	
EDU-2 Part D. TOTAL COURSE POINTS				10.38	

# What if my Course Title is Vague?

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- Use form marked EDU-X (eXplanation) to justify point claims for student activity hours whose relevance may not be apparent from the course or workshop title.
- This form is optional and should only be used if the content of course is difficult to discern from the course title.
- If a course is obviously related to one of the knowledge areas you do not need to provide a description.



# Completing Form EDU-X

## Course Descriptions Using EDU-X

Example:

<i>ENG 4108 Civil Engineering Measurements</i>	<i>Fundamental surveying measurements, traverse computations, coordinate geometry, mapping, GPS and GIS, circular and parabolic curves, earthwork, boundary surveys, CAD applications.</i>
------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Course Number  
and Title

Brief  
Description



# Notes about EDU-X

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- EDU-X will only be available during the “Transition Period” that concludes on January 1, 2009.

After that all vague courses will need official descriptions taken from course books or other educational institution materials (conference programs, websites, etc).



# Notes on the Conference Attendance Points Section (EDU-3)

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- 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 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.



# Calculating Conference Attendance Points

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- Within the form the applicant should place the name of the conference, the year, the host organization, the location and the number of days attended.

Year	Name of Conference/Host Organization/Location	Days Attended
1995	ASPRS Annual Conference – San Antonio, TX	4





**After all relevant conferences are entered onto EDU-3 the number of days should be added together.**

Example: (form is truncated)

EDU-3: Conference Attendance Points		
Year	Name of Conference/Host Organization/Location	Days Attended
1995	ASPRS Annual Conference – San Antonio, TX	4
1998	NCURISA Annual Conference – Charlotte, NC	2
EDU-3 Part A. TOTAL Conference Days Attended		6
		× 0.1 points per day
EDU-3 Part B. TOTAL CONFERENCE POINTS		0.6

■ **Multiply the number of total days by the GISCI standing value of 0.1.**



# Calculating Conference Attendance Points

- The resulting value will be the total number of conference attendance points and should be added to EDU-S.

	6
	× 0.1 points per day
	0.6

Add this  
number to  
EDU-S



# Determining the Total Amount of Educational Achievement Points (EDU-S)

- Your Educational Achievement point total will be determined by adding the credential points, course points, and conference attendance points.

EDUCATIONAL ACHIEVEMENT POINTS SUMMARY SHEET	
	Education Points
Credential Points (EDU-1)	20
Course and Workshop Points (EDU-2)	10.38
Conference Points (EDU-3)	0.6
TOTAL EDUCATION POINTS (EDU-1 + EDU-2 + EDU-3) =	30.98

# Final Step for the Educational Achievement Points Section

- The EDU-S total should then be added to the GIS Certification Institute Point Tabulation Sheet (TOT-1).

Example:

TOTAL CERTIFICATION POINTS SHEET (TOT-1)

Achievement Categories	Total Points
Educational Achievement (Total from EDU)	30.98
Professional Experience (Total from EXP)	165
Contributions to the Profession (Total from CON)	9
<b>TOTAL POINTS*</b> (Add EDU, EXP, and CON Totals) =	205.33



# Documenting The Educational Achievement Component

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# Credential Points and the University Transcript

The degree used to claim credential points should be listed on the transcript. If the degree is not listed, please provide a COPY of the diploma.

**FALL SEMESTER 2000**  
**GRADUATE**

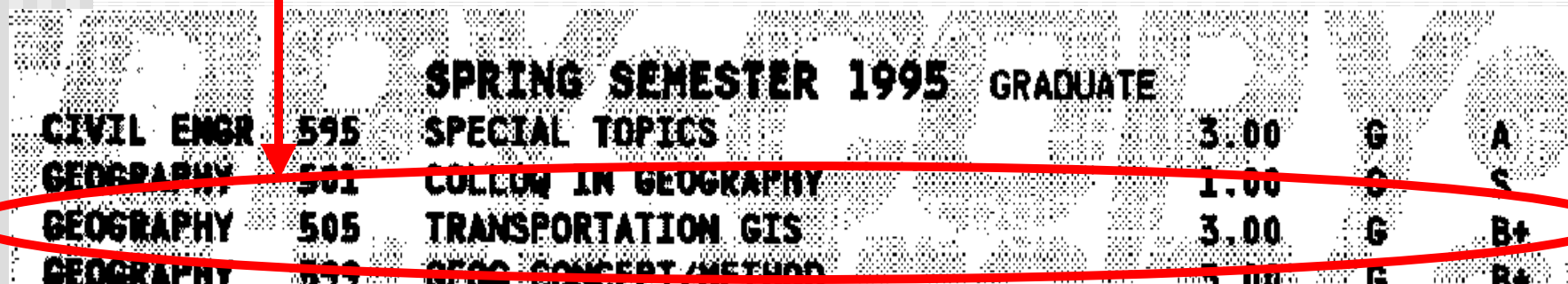
<b>GEOGRAPHY</b>	<b>600</b>	<b>DOCTORAL RSRCH/DISSER</b>	<b>9.00</b>	<b>G</b>	<b>P</b>
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**Degree:** DOCTOR OF PHILOSOPHY  
**Date:** 12/16/2000  
**Major:** GEOGRAPHY



# Course Points and the University Transcript

University courses need to be found on the included transcript(s).



SPRING SEMESTER 1995 GRADUATE					
CIVIL ENGR	595	SPECIAL TOPICS	3.00	G	A
GEOGRAPHY	501	COLLOQ IN GEOGRAPHY	1.00	G	S
GEOGRAPHY	505	TRANSPORTATION GIS	3.00	G	B+
GEOGRAPHY	599	GEOG CONCEPT/METHOD	3.00	G	B+

Transcripts must be official copies. Transcripts may only be marked to remove sensitive information or to highlight the courses that are being claimed.

# Course Points and Workshop Documentation

## GEORGIA INSTITUTE OF TECHNOLOGY

This is to certify that





has attended a class in

**Visual Basic for Building GIS Applications**

conducted by  
GEORGIA TECH  
CONTINUING EDUCATION  
Atlanta, Georgia

**September 07, 2001 - September 07, 2001**

  
Gerald Wayne Clough  
President

  
Diana L. Turner  
Director, Continuing Education

  
Joseph S. DiGregorio  
Vice Provost for Distance Learning, Continuing Education, and Outreach

Attendance verification needs to be provided for all claimed workshops. If a certificate is not available, submit an invoice, confirmation notice or a letter from the hosting organization.





# Conference Attendance Documentation

Conference Attendance documentation can include a confirmation letter, certificate, name badge, or any other materials that identify the event and verify attendance.

Dear Conference Attendee:

We are pleased to inform you that your registration has been processed for the 21st Annual ESRI User Conference to be held July 9 - 13, 2001, in San Diego, California.

You are registered for the following:

<i>Federal Rate</i>	<i>\$895.00</i>
	<i>\$0.00</i>
<i>Introduction to Geostatistical Analysis</i>	<i>\$295.00</i>



# The Professional Experience Component

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# The Professional Experience Component

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- The Applicant will need a minimum of 60 Professional Experience Points to satisfy this section.



# The Professional Experience Component (Forms EXP-1 & 2)

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- **NOTE:**

If you have less than 4 years (48 months) of professional experience you may not apply for GISCI Certification regardless of your point totals in this or any other category.

- This four-year minimum requirement can come at any of the three levels of technical complexity.



# 3 Levels of Technical Complexity

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- **Analyst, System Design, Programming:**  
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:**  
Typical tasks include editing data, map composition, report generation, database maintenance, data validation, instructional training, and teaching. = **15 Points Per Year**
- **GIS User:**  
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**



# Professional Experience Supervisory Bonus

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- **Bonus points** for years in a GIS supervisory or management position

(points are additive to the other three positions, i.e. a GIS Manager who also manages the department would receive 25 points + 10 points per year in that position).



# Necessary Professional Experience Documentation

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- A current copy of the applicant's résumé **edited to include only GIS related positions.**
- A signed letter from the applicant's immediate supervisor or employer stating that the information listed in the portfolio is correct.



# Notes on Completing the Professional Experience Section

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- The applicant will use forms EXP-1 and EXP-2 to document GIS professional experience.
- Each individual job will need to be placed within its own worksheet. EXP-2 will be used as a tally sheet for all the individual worksheets used.





**Example:  
The Professional  
Experience  
Worksheet EXP-1**

<b>Worksheet:</b>	<i>Example #1</i>					
<b>Title (from résumé):</b>	GIS Analyst					
<b>Employer:</b>	State Office for Information Resources – D					
<b>Years / Months Employed:</b> # of yrs + (# of months / 12)	3.75 years					
<b>Description of GIS-Related Duties:</b>						
<ul style="list-style-type: none"> <li>• Maintain inventory control system, QA/QC, and technical auditing and reporting of GIS digital products.</li> <li>• Manage technical consulting effort for database development and implementation.</li> <li>• Guide implementation of enterprise GIT architecture; advise / review agency GIS implementation plans; develop and maintain policy documents supporting enterprise architecture.</li> </ul>						
<b>Experience Level</b>	<b>% Full Time Equiv.</b>		<b>Years (from above)</b>		<b>Pts/Yr</b>	<b>Subtotal</b>
GIS Programmer or Similar	.80	x	3.75	x	25	75.00
GIS Technician, Educator or Similar	.20	x	3.75	x	15	11.25
GIS User		x		x	10	
Supervisory Bonus				x	10	
<b>Total this worksheet:</b> <i>(This figure would then be added to EXP-2)</i>						86.25

# Completing the Professional Experience Worksheets (EXP-1)

Worksheet #

Worksheet: *Example #1*

Title (from résumé): GIS Analyst

Enter job title

Employer: State Office for Information Resources – Division of GIS Services

Years / Months Employed: 3.75 years  
# of yrs + (# of months / 12)

Enter name of employer

Enter years and months at that specific position.



# Completing the Professional Experience Worksheets (EXP-1)

## Description of GIS-Related Duties

**This description should be brief and should not expand outside of the provided box. This description should encapsulate the position so that the Review Committee may determine if points are being claimed in the correct category. This needs to be done for all worksheets used.**

# OF YRS + (# OF MONTHS / 12)

### Description of GIS-Related Duties:

- Maintain inventory control system, QA/QC, and technical auditing and reporting of GIS digital products.
- Manage technical consulting effort for database development and implementation.
- Guide implementation of enterprise GIT architecture; advise / review agency GIS implementation plans; develop and maintain policy documents supporting enterprise architecture.

Experience Level

% Full

Years

Pts/Yr

Subtotal



# Full Time Equivalent Percentages (% FTE)

- FTE% (see *example EXP worksheets*) stands for Full Time Equivalent. "%FTE" is the decimal portion of time credited towards a particular experience level, and supported by the description of GIS related duties section.

Experience Level	% Full Time Equiv.
GIS Programmer or Similar	
GIS Technician, Educator or Similar	
GIS User	



# Full Time Equivalent Percentages (% FTE)

- FTE% Example: in a small GIS office, an applicant might spend 80% of their time doing application development and system maintenance and 20% of their time doing data maintenance and update. It would be appropriate for the applicant to record .8 for "GIS Programmer or Similar" and .2 for "GIS Technician or Similar".

Experience Level	% Full Time Equiv.
GIS Programmer or Similar	.80
GIS Technician, Educator or Similar	.20
GIS User	



# Full Time Equivalent Percentages (% FTE)

- In most cases, values entered in "%FTE" will sum to 1. In cases where sales, an academic internship or part-time research is involved, the values in "%FTE" should sum to the appropriate proportion (e.g.: .4 for a half-time graduate research assistant, as appropriate).

Experience Level	% Full Time Equiv.
GIS Programmer or Similar	
GIS Technician, Educator or Similar	.20
GIS User	.20



# Completing the Professional Experience Worksheets (EXP-1)

Experience Level	% Full Time Equiv.		Years (from above)		Pts/Yr	Subtotal
GIS Programmer or Similar	.80	x	3.75	x	25	75.00
GIS Technician, Educator or Similar	.20	x	3.75	x	15	11.25
GIS User		x		x	10	
Supervisory Bonus				x	10	

Enter the FTE%(s) and multiply that value by the years/months worked and the points per year to determine the subtotal



# Completing the Professional Experience Worksheets (EXP-1)

Experience Level	% Full		Years		Pts/Vr	Subtotal
<p>Add the subtotals to determine the total for that worksheet. Place that total on EXP-2 and proceed to the next worksheet.</p>						75.00
						11.25
GIS User		X		X	10	
Supervisory Bonus				X	10	
<b>Total this worksheet:</b> <i>(This figure would then be added to EXP-2)</i>						86.25





# Completing the Professional Experience Summary Table (EXP-2)

Enter the point totals from all the Experience Calculation Worksheets on EXP-2

Worksheet	Title	Points
1	GIS Analyst	86.25
2	Technical Coordinator <i>(not shown in the above example)</i>	78.75
3		
4		
5		
6		
	Total Experience Points:	165

The resulting total should then be added to the Point Tabulation Sheet (TOT-1).

# Final Step for the Professional Experience Points Section

- The EXP-2 total should then be added to the GIS Certification Institute Point Tabulation Sheet (TOT-1).

Example:

TOTAL CERTIFICATION POINTS SHEET (TOT-1)

Achievement Categories	Total Points
Educational Achievement (Total from EDU)	30.98
Professional Experience (Total from EXP)	165
Contributions to the Profession (Total from CON)	9
<b>TOTAL POINTS*</b> (Add EDU, EXP, and CON Totals) =	205.33



# Documenting The Professional Experience Component

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# Letter from an Immediate Supervisor

GIS Certification Institute  
1460 Renaissance Drive, Suite 305  
Park Ridge, IL 60068

Dear GISCI Review Committee:

As the immediate supervisor of [REDACTED] I acknowledge that the professional experience stated in this portfolio is valid. With that said, I claim no responsibility for any misrepresentation, falsification, omission, or error that was done outside my knowledge. Whether these grievances were purposeful or unintentional I bear no legal or ethical responsibility. By signing and dating this letter I am providing adequate evidence in the minds of the review committee that the information made by this applicant is factual.

Sincerely  
[REDACTED]

The supervisor letter can follow the GISCI template or contain different text. It must state that to the best of the employer's knowledge the claims made within the professional experience component are correct.

The letter must be on company letterhead and be signed in ink. If the applicant does not have an immediate supervisor they should obtain a letter from a client, business partner, or past supervisor.

# Current Copy of the Applicant's Résumé

The résumé should be edited to include only the GIS-related positions claimed on EXP 1 & 2. Please indicate the months and years of employment.

**Present position - GIS Manager for the [REDACTED] Regional Commission (ARC) since 1993**

- Supervise a team of GIS and data development professionals.
- Implement new GIS hardware/software systems and develop resource level GIS data sets.
- Developed an Economic Development Information System (EDIS) that contains GIS data, attribute databases, digital ortho-photography, statistical data and multimedia resources to accomplish regional planning and economic development in the 10 county [REDACTED] Region.
- Developed and produced multimedia CD-ROM's tailored for use with the EDIS which can create reports and multimedia presentations
- Established and currently running an ESRI authorized ArcView Learning Center at ARC since August 1995. Trained, qualified and oversee three additional ArcView instructors.



# The Contributions to the Profession Component

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# The Contributions to the Profession Component

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- The Applicant will need a minimum of 8 Contributions to the Profession Points to satisfy this section.



# The Contributions to the Profession Component (Form CON-1)

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- The minimum qualification for initial certification is to accrue points in areas that not only benefit the applicant but also benefit the profession as a whole.
- It is expected that an active professional is capable of attaining a minimum of two Contributions points per year.





# The Seven Categories of Contribution Points

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



# Notes on the Contributions to the Profession Component

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- Points should be included for each instance that the applicant has satisfied the listed contribution.
- If the applicant has satisfied a contribution category more than once, the applicant may receive duplicate points.



# Notes on the Contributions to the Profession Component

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- There is no limit to how many times a category may be used or how many points may be accrued in that category.
- Not all categories need to be filled. If the candidate for example, has not published a book, they should move onto the next category.



# Notes on the Contributions to the Profession Component

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- The applicant is not entitled to document every single contribution point they earned during a 10 or 20-year career.
- Trying to provide documentation from a conference that occurred in the distant past is not necessary if the amount of contribution points earned since then puts the applicant above the minimum amount.



# Notes on the Contributions to the Profession Component

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- Candidates cannot be considered “more certified” by supplying a point total that greatly exceeds the minimum.
- If a discrepancy or misrepresentation of points is uncovered, the applicant runs the risk of being rejected.



# Notes on the Contributions to the Profession Component

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- Try to include points where adequate documentation is readily available.
- Often the applicant may want to start with the most recent points earned and then work backwards until the point total is satisfied.
- It is the idea that the applicant may have recent materials on hand to document the claimed points.



# Work Related Contributions to the Profession


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- It must be emphasized that **work-related publications and sales presentations are elements of work experience and NOT contributions to the profession.**
- Contributions are intended to recognize documents and activities that relay lessons learned and techniques developed at work beyond the client and employer.



# Completing the Contributions to the Profession Section

**Locate the applicable contribution type on the Contribution Point Schedule.**



F. Editorial Board	3
G. Magazine/Journal Article	3
H. Magazine/Journal Column	3
I. Paper in Conference Proceedings	2





# Completing the Contributions to the Profession Section

**Place the corresponding letter in the box and provide the necessary information.**

## CON-1: Contribution Points

*Note: If the Activity has had a duration Membership/Board of Directors Term/etc., place the adjusted point total in the Points box.*

CON Type (indicate letter)	Year(s)	Description	Documentation?	Points
G	1995	GITA 2003 Proceedings San Antonio, TX	Yes	2

# Completing the Contributions to the Profession Section

**If an Activity has had a duration of more than one year (i.e. Association Membership) place the adjusted point total counting each year in the Points box.**

CON Type (indicate letter)	Year(s)	Description	Documentation?	Points
G	1995	GITA 2003 Proceedings San Antonio, TX	Yes	2
P	1990-1994	ACSM Member	Yes	4



# Completing the Contributions to the Profession Section

**When all claims have been listed, sum all the Contribution Points earned for your Contribution Point Total.**

## CON-1: Contribution Points

*Note: If the Activity has had a duration of 1 year or more, list the year(s) in the Year(s) column.*

CON Type (indicate letter)	Year(s)	Description	Documentation?	Points
G	1995	GITA 2003 Proceedings San Antonio, TX	Yes	2
	1990-			4
				3
TOTAL CONTRIBUTIONS POINTS (Sum the above points) =				9

**The resulting total should then be added to the Point Tabulation Sheet (TOT-1).**



# Final Step for the Contributions to the Profession Points Section

- The CON-1 total should then be added to the GIS Certification Institute Point Tabulation Sheet (TOT-1).

Example:

TOTAL CERTIFICATION POINTS SHEET (TOT-1)

Achievement Categories	Total Points
Educational Achievement (Total from EDU)	30.98
Professional Experience (Total from EXP)	165
Contributions to the Profession (Total from CON)	9
<b>TOTAL POINTS*</b> (Add EDU, EXP, and CON Totals) =	205.33



# Documenting the Contributions to the Profession Component

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# Documenting Publications

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- ***Books/Published Atlas***  
The ISBN #, year, and title,
- ***Refereed Papers***  
The journal's title, ISSN#, Volume and Number
- ***Published Map***  
Location of where the map published and/or a copy of the credit.
- ***Editorial Board***  
List the journal, publication, or serial, the ISSN#, years and capacity served
- ***Article***  
Name of the publication in which it appeared, date, year, ISSN#, and a copy of the article
- ***Paper in Conference Proceedings***  
Date and location of the conference, name of the conference, copy of the paper's title page
- ***Newsletter Article***  
Date and year of the article, Issue # or date, month, year, name of the newsletter, copy of the article or title



# Documenting Publications Example

Provide sufficient documentation for all publication claims. Copies of articles are required.

# Business

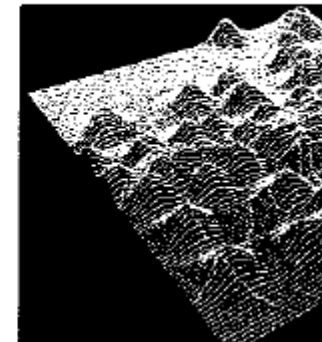
## G E O G R A P H I C S

*The Geographic Technology Magazine for the Business Community*

### 42 POTENTIAL SURFACE MAPPING REVEALS UNMET RETAIL DEMAND

Discover how to find out if there is enough population of the right mix to support your proposed new outlet.

By [REDACTED]  
Wei [REDACTED]



# GIS Professional Association Involvement

## ***Level of Involvement***

Presidency  
Board Membership  
Committee  
Chairmanship  
Committee Participation  
Association Membership

Documentation may include a copy of a membership card, listing in a Membership Directory or other association publication, dues receipt, certificate or a verification letter from the association.

This message is to confirm your service on the [REDACTED] URISA Board of Directors for four years:

1998 (Secretary)  
1999 (Treasurer)  
2000 (Treasurer)  
2001 (Vice President).

Please let me know if you require additional information.

Regards,

[REDACTED]  
[REDACTED] URISA President

Institute



# GIS Conference Participation

<b><i>Level of Involvement</i></b>	Documentation may include a listing in a Conference Program or other publication or a verification letter from the association/organization.
Conference Chair	
Conference Committee	

*Welcome to URISA's 40<sup>th</sup> Anniversary Celebration!*

## **URISA 2002 Annual Conference Committee**

### **Conference Chair**

Martha Lombard, Spatial Focus, Inc.

The Conference Committee and URISA Board welcome you to an exciting week of learning, networking and fun as URISA celebrates its 40th year of being the leader in education and innovation in urban and regional information systems. Our theme this year is "Looking Back,



# GIS Workshop Instruction

Documentation may include a copy of the certificate, listing in a conference program, or a letter from the sponsoring organization.



# Conference Presentation/Poster

## GIS in Business '94 Conference Proceedings

### **Target Marketing**

Visualizing Carrier-Route Targeting for Direct-Mail  
Donald Cooke, Geographic Data Technology, Inc.,  
Phyllis Pescosolido, ADVQ, Inc.

### **Target Marketing of Agribusiness Products**

Arthur A. Kalinski, Atlanta Regional Commission

67

### **Continuing and Distance Education: The GIS Connection**

James T. Meyer and Anthony V. Williams, The Pennsylvania State University

71

A copy of the relevant pages from the program or an acceptance letter from the organization sponsoring the event is acceptable documentation.

**June 5-8, 1994**

**San Francisco**

**Hilton and Towers**

**San Francisco, California, USA**



# GIS Awards Received

## **Award Type**

Local/Regional/State Award  
National/International Award

A signed letter from the award granting institution or proof of when/where/why the award was bestowed. This can consist of a listing in a conference program, newsletter, magazine, memo, etc.

## **Leadership Award**

Presented to members who have demonstrated exemplary leadership to URISA, creativity, innovation, and dedicated support of URISA programs.



### **Joseph Ferreira, Jr.**

Joseph Ferreira, Jr. is Professor of Urban Planning and Operations Research at the Massachusetts Institute of Technology (MIT). He is currently head of the Planning Support Systems Group and Founding Director of the Planning Department's Computer Resource Lab. Prof. Ferreira's



# Other GIS Contributions

Event Organization Event Participation Relevant Community Contributions	Include any materials that would signify your participation in these events. This would include letters, articles, fliers, etc.
-------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------

## Forsyth County Proclaims GIS Day 2002

**Forsyth County Government GIS announces America's Backyard: Exploring Your Public Lands on GIS Day, November 20, 2002. Representatives from the county, schools, and public sector will be present to discuss how Forsyth County utilizes Geographic Information Systems (GIS). Events begin at 9 a.m. with a map gallery display located inside the main entrance.**

Examples include GIS Day, Career Day, K-12, legislative initiative, etc. These must fall outside of the applicants professional responsibilities.

# The Total Certification Points Component

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# The Total Certification Points Component

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- The Applicant will need a minimum of 150 Points to become certified.





# The Total Certification Points Component

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- The applicant will need the following minimums in the three achievement categories:

Educational Achievement	30.0
Professional Experience	60.0
Contributions to the Profession	8.0

- The candidates will also need an additional 52 points in any of the three categories.





# Completing the Total Certification Point Sheet (Form TOT-1)

After all three components have been completed, the totals from each form (EDU, EXP, and CON) should be added to the Total Certification Points sheet (TOT-1)

Example:

TOTAL CERTIFICATION POINTS SHEET (TOT-1)

Achievement Categories	Total Points
Educational Achievement (Total from EDU)	30.98
Professional Experience (Total from EXP)	165
Contributions to the Profession (Total from CON)	9
<b>TOTAL POINTS*</b> (Add EDU, EXP, and CON Totals) =	205.33



# Completing the Total Certification Point Sheet (Form TOT-1)

This number must meet or exceed 150 points in order to be considered eligible for GISCI certification.

Example:

TOTAL CERTIFICATION POINTS SHEET (TOT-1)

Achievement Categories	Total Points
Educational Achievement (Total from EDU)	30.98
Professional Experience (Total from EXP)	165
Contributions to the Profession (Total from CON)	9
<b>TOTAL POINTS*</b> (Add EDU, EXP, and CON Totals) =	205.33



# The Grandfathering Provision

This number must meet or exceed 200 points in order to qualify under the **GISCI Grandfathering Provision**.

TOT-1: TOTAL CERTIFICATION POINTS SHEET	
Achievement Categories	Total Points
Educational Achievement (Total from EDU-S)	22.3
Professional Experience (see Note 1) (Total from EXP-2)	215.35
Contributions to the Profession (Total from CON-1)	24
<b>TOTAL POINTS</b> (see Note 2) (Add EDU-S, EXP-2, and CON-1) =	261.65

# You Are Now Completed with the Application...

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...But you  
aren't  
done yet!



# Application Checklist

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Completed application with proper documentation



Full payment and payment form



Signed and dated Code of Ethics Acknowledgment Form



Optional demographic questionnaire



All items are arranged correctly and have been placed loosely in a folder



# Full Payment and Payment Form

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- A GISCI application will not be processed unless full payment accompanies the portfolio.
- GISCI accepts checks and credit cards



# The Code of Ethics Acknowledgment Form

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- Included with the application packet is a copy of the GISCI Code of Ethics.
- The first page of the Code contains an acknowledgement form that must be signed and dated and returned with the application.
- **No candidate, regardless of points will be considered certified without signing the GISCI Code of Ethics.**



# GISCI Code of Ethics Acknowledgment Form

Name (Print): \_\_\_\_\_

Signature: \_\_\_\_\_ Date: \_\_\_\_\_

I acknowledge that I have fully read, understand, and am in full compliance of the GISCI *GIS Code of Ethics*. I understand and agree that upon receipt of proof of violation of this Code of Ethics, the GISCI Board of Directors will proceed in investigating and my professional certification may be revoked.

Please complete the above and mail **only this page** back to GISCI Headquarters with your completed application. No application will be processed without being accompanied by a completed Code of Ethics Acknowledgment form.





# Optional Demographics Questionnaire

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- The application packet contains a questionnaire that will provide GISCI some background information on their certified members.
- Not completing the questionnaire will in no way jeopardize the consideration of your application.



# Arranging the Completed Application

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- NO STAPLES, PAPER CLIPS, or OTHER FASTENERS should be included in the portfolio.
- All items should be grouped together loose and sent in a pocket folder.
- Portfolios should not be bound, laminated, or enhanced aesthetically.
- All portfolios are scanned electronically and inclusion of these items may substantially delay the processing of an application.



# Arranging the Completed Application

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- **NOTE:** No completed applications or individual application materials, under any circumstances, will be returned to the submitter.



# The Completed Application

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- **Mailing Instructions**

The completed application should be placed in a file or pocket folder and sealed in an envelope.

- Proper postage should be applied and the portfolio should be sent to GISCI headquarters at the following address:

GIS Certification Institute  
1460 Renaissance Drive, Suite 305  
Park Ridge, IL 60068

- Upon receipt, a confirmation notice will be sent to the applicant.



# Application Checklist

---



Completed application with proper documentation



Full payment and payment form



Signed and dated Code of Ethics Acknowledgment Form



Optional demographic questionnaire



All items are arranged correctly and have been placed loosely in a folder



# You are now completed with the GISCI Certification Process

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Thank you  
very much  
for your  
interest and  
support.

