

**Q&A: *Directions Magazine's*
Special Session on GIS Certification with
David DiBiase, GISCI President, and Sheila Wilson, GISCI Executive
Director**

This is a summary of questions registrants asked when registering for the Tuesday, March 29 webcast. The questions have been arranged into general topics. Short answers are provided and more comprehensive answers are available upon request. Please contact Sheila Wilson at swilson@gisci.org for more information.

<http://www.directionsmag.com/webinars/view/directions-onpoint-special-session-gis-certification-with-david-dibias/169871>

Q: Why make changes to the existing certification requirements?

What is the ultimate goal of changing the process?

The ultimate goal is to increase the perceived and real value that is associated with voluntary certification as a GIS Professional. We also believe that it will strengthen the GISP within the GIS industry and across all other industries.

Are there enough career opportunities in the GIS field to warrant spending the money to become certified?

The Department of Labor has projected that 140,000 additional GIS jobs will be added to the US economy by 2018, approximately 20,000 jobs per year. This number is in addition to the job replacements that will be needed as retirements occur.

Q: How does the GISP certification compare/contrast to the Esri certifications

How do vendors such as Esri view GISP Certification in terms of their latest certifications initiative? How does it compare to the Esri certification? Will the testing requirements be aligned with the new Esri certifications?

GIS software vendors (like Esri) market their certification efforts as technical certification related to their specific software tools, and they have repeatedly identified the GISP as a complementary professional certification. Any exam that GISCI develops will be GIS-software independent. At this point, we do not expect to align the GISCI certification exam component with any other software-oriented certification program.

What is GISCI's position regarding the Esri certifications?

Technical certification related to specific software platforms or tool suites (such as Esri) are considered to be complementary to professional certification through GISCI. As such, GISCI has no position on the Esri technical certification exam content or categorizations.

Is this event sponsored by Esri?

No, the *Directions Magazine* OnPoint webinar was not sponsored by Esri.

Are the certificates issued by Esri and other companies to be translated to the new GIS certificates, or do they have to be retaken?

During the GISCI application process, all educational coursework can be documented in the EDU section; on the job training is documented in the EXP section. Just like a college/university transcript, a certification documents educational achievement.

At this time, we do not anticipate alignment (or translations) with technical certification programs.

Can GISCI leverage certification tests already provided by software providers like Microsoft and Esri?

The exam development process that will supplement the existing application portfolio has not yet been solidified. We are open to advice on how to do testing; however, a GISP exam will be based on the Department of Labor's Geospatial Technology Competency Model (GTCM) and the GI Science & Technology Body of Knowledge (GIS&T BoK) developed by UCGIS, not techniques that are associated with a given software toolset.

<http://www.careeronestop.org/competencymodel/pyramid.aspx?GEO=Y>
<http://www.ucgis.org/priorities/education/modelcurriculaproject.asp>

Q: What are the costs and benefits of testing?

What are the projected costs of testing? Will the annual fee go up?

We have approached other organizations that have a testing component for their certifications, and have heard that exam development firms might cost as much as \$50,000 for each exam. We do not have any firmer information than that at this time.

There is no annual fee for GISP certification, and we have not considered that option in any detail yet. We anticipate that the cost of taking an exam

will be borne by GISP applicants, when and if that component is added. We will endeavor to keep that cost to a minimum.

What is the financial implication?

If the recommended proposal is fully adopted:

- Total certification cost (due to the cost of administering the exam itself) will increase for new GISPs once the exam component of the application portfolio is enacted. We do not know what the per applicant exam cost might be at this time.
- We do not anticipate any changes to renewal fees for existing GISPs.
- GISCI expects the development cost for an exam component for GISCI certification to be a significant investment. We are examining those costs carefully before proceeding.

Can it be a free certification for GIS qualified people?

The GISCI Certification process is set up to identify those professionals who voluntarily provide their portfolio of education, experience and contributions to the profession (including the acknowledgement of their commitment to ethical conduct and practice). This certification qualifies them to use the GISP logo. Current certification fees cover the costs of GISCI administration, including the review/approval of certification applications, renewal review, outreach and education. We do not anticipate being able to offer free certification in the foreseeable future.

What about the testing procedure/cost/test prep materials? What will be the cost of certification to the applicant?

At this time, we do not know the cost of certification to future applicants. We expect that it will be greater than the current application cost due to the additional administrative overhead of the exam itself. GISCI is a non-profit organization. The goal is to create a stronger certification; therefore, all costs will be minimized whenever possible. It is possible that the sale of test preparation materials would offset some of the administration costs (thereby reducing the simple cost of the exam to the applicant), but that is a decision that will need to be considered in the future.

How will these changes in the certification process help the GIS profession to be more widely accepted by all?

We anticipate that a more rigorous certification process will allow GISPs to be more easily recognized by their HR departments and upper management. It will also help with recognition across industries. Even though we believe that the current portfolio approval process is rigorous,

many feel that an exam will further boost and enhance the value of the GISP certification.

What are the employment advantages? How much does a GISP certification affect being hired? Do employers really look for it? Possession of a vendor training certificate, like Cisco's, correlates strongly with market worth and salaries. Will this do that?

Many, including GISCI's Executive Director Sheila Wilson, received a better job with a private firm after becoming a GISP. Many employers are now requesting or requiring GISPs on staff. RFQs and RFPs are regularly issued requesting or requiring GISPs on staff. The value of the GISP is increasing at a non-linear rate. As the value increases, the market worth and salaries will also increase. It is also worth noting that job retention and lateral moves within an organization could be a direct result of GISP certification.

I often hear that a GISP only means something to other GISPs. How does GISCI plan to address the issue of the value of GISP?

GISCI has recognized the importance of sustained and energetic outreach, both within the GIS industry and its many associations and with the human resource departments that are recruiting and retaining GIS expertise. We are making those outreach and education investments now – regardless of any proposed or adopted changes to the certification process. The goal of GISCI is to better educate everyone as to the value of the GISP.

What Is the timeline for the proposed changes?

Is the model approved and how do we go about certifying "the new way"?

No, the GISCI Board of Directors is still considering the path forward. We anticipate significant discussion and incremental press releases throughout the next two months or so. Currently, we expect the development of an exam (if the Board chooses to undertake that effort) to proceed over the course of three years. During that time, the current application portfolio process will remain in place.

How long will portfolio-based certification remain an option? (I'm just about ready to submit everything!)

Congratulations on completing the application! Developing an exam component for the certification process is expected to take up to three years. There is no advantage (or disadvantage) to delaying submission of a GISP application.

How will the proposed exam be created and what will be on it?

What criteria must be met in order to apply for the proposed new certification?

The recommended proposal adds an examination component to the current portfolio-based application. Since the proposed examination will not be developed and in-place for several years, those criteria will be developed and deployed in parallel. The exam questions will be built on the GTCM model (probably Tier 4, for those of you familiar with the GTCM), and based on the GIS&T Body of Knowledge developed by UCGIS.

How do we determine what will be on the test when GIS is applied so many different ways to different industries and sciences? Should/could there be a core requirement for certification?

We recognize that this is a concern among all GIS professionals. GISCI expects to leverage either a professional test generation firm or the profound testing expertise that is embodied in the majority of its member organizations (AAG, UCGIS and URISA) to tackle this thorny problem. We believe that there will be core questions that all must answer, but do not know how those questions will be included or what the exam length must be at this time.

Regarding "an established curriculum is adopted by the GIS academic community," what role did universities play in the process?

- The University Consortium for Geographic Information Science (UCGIS) developed the GIS&T Body of Knowledge in 2006.
- UCGIS members are actively involved in the Core Competencies Working Group and the Certification Committee.
- UCGIS appoints two representatives (out of 10) to the GISCI Board of Directors. The Board will make the final decision on the proposed changes to certification.

How do you standardize a certification test when there are no standard education programs?

This is exactly the question that the UCGIS sought to answer when it developed the GIS&T BoK. We will use their insights and suggestions as the foundation for examination questions, and will be consulting with educators and GISPs as subject-matter experts.

Applications in GIS are widespread and a utility won't know about 9-1-1. How would you separate core competencies, which everyone must know, from field-specific issues like the property surveying?

The examination component of the GISP application is expected to cover basic GIS concepts first and foremost. We cannot be too generic, but we also cannot be overly specific. A GIS professional in the utility industry will need to know about ethics, rules of conduct, and basic geographic and computational limitations in the same way that a 911 GIS professional. Please consider that not all GIS users should (or would be qualified to) apply for GIS Professional certification through GISCI. We expect fruitful discussion over the coming years as we develop an examination, and we are sure to confront this question carefully and completely.

Is it possible to develop tiered exams for various GISP levels? ie. technician, analyst, etc.

A tiered certification was one of four options considered by the GISCI Certification Committee's Core Competencies Working Group; however, they decided not to recommend that option at this time, due in part to the complexities of differentiating expertise using one exam or developing multiple exams simultaneously.

If the exam becomes a requirement, will the standards be set based on local or state criteria, or will they be the same globally?

GISCI is not aware of local or state-level criteria for the certification of GIS professionals. In fact, it is our understanding that GIS is not mentioned in any state statute at this time. To that end, we expect to develop the examination component for the GISP application packet to be based on national/international standards of GIS knowledge.

What is the potential format of the exam?

The format of the examination component for GISP certification is still in active discussion. We expect the exam development process to take up to three years, and the format of the exam will be considered and decided during that timeframe.

Will the exam be available in other languages?

The format of the examination component for GISP certification is still in active discussion. When the test is first released, we anticipate that it will only be available in English. If resources are available and if there is sufficient demand, we would consider examinations in other languages in the future.

Will programming be part of the test? Will there be concentrated functional area tests or a single comprehensive exam?

The format and content of the examination component for GISP certification is still in active discussion. The examination has not yet been developed, but the single comprehensive exam is considered the recommended option.

Will the process require in-class attendance and/or be available as an on-line study?

The format and content of the examination component for GISP certification is still in active discussion. We are also actively discussing the examination delivery format. We do not anticipate that applicants will be required to attend classes to prepare for the exam. We hope to produce exam study materials, but this will be dependent on many factors that we cannot determine right now.

Will the written exam be composed at a university level?

The format and content of the examination component for GISP certification is still in active discussion. Professional organizations that specialize in exam preparation will be consulted, with the objective of making the examination as accessible as possible. University-level concepts may be included, but they will not prevent applicants from qualifying for the exam nor will they prohibit successful completion of the exam. We expect to get appropriate help with the development and administration of the examination component of the GISP application process.

Guides and/or practice tests available?

As mentioned above, we hope to produce exam study and practice materials, but this will be dependent on many factors that we cannot determine right now.

Q: What are the potential changes to the portfolio section of the application?

Given it's a technical field, I'm in favor of exams for current/future certifications. Will less weight be placed on contributions to GIS?

The examination component of the GISP application process is supplemental to the education, experience and contributions to the profession section of the complete portfolio, and contributions

(professional activities) will always be a vital part of the GISP. This is how we expand our GIS body of knowledge, teach others, and promote GIS. If anyone has difficulty reaching the minimum points for the contributions section, please contact GISCI. We can help people find points they didn't realize they had, or develop a plan by which to meet the necessary Contributions to the Profession points.

Q, General Information

What is the distinction between certification and licensing?

- **Certification:** A voluntary process by which individuals who have demonstrated a level of expertise are identified to the public and other stakeholders by a third party. Recognizes expertise.
- **Certificate:** An award given to an individual recognizing completion of an academic or training program.
- **Licensure:** The granting of an official permit to practice within a profession. Often regulated by states and documented in legislation. Guards against incompetence.

What is the impact on state's licensing of GIS Professionals?

GISCI is not aware of local or state-level criteria for the certification or licensing of GIS professionals. In fact, it is our understanding that GIS is not mentioned in any state statute at this time. The impact on state licensing is up to the individual states. The GISP is a voluntary certification process through GISCI. We do not plan to become involved in licensing.

How will the GISP certification impact the use of uncertified student interns for GIS mapping/analysis projects?

GISP certification is unrelated to individual mapping/analysis projects and the potential use of interns. The GISP certification offers peer-recognition for seasoned GIS professionals. GISPs will continue to mentor non-certified GIS practitioners/professionals to become GISPs, as well as serving as positive role models within the broader GIS community.

Disagree with exam requirement; there's enough of that; existing process is already lengthy.

The creation of an examination component for the GISP certification process is not intended to lengthen the process, though it is possible that it will. As mentioned earlier, the inclusion of an examination is meant to demonstrate higher value to other professional organizations as well as to hiring authorities within the public and private sectors. The idea is to show that an applicant is well-qualified for the GISP.

How can we as GISPs improve and ensure a specified level of professionalism at a state, national and international level?

We need to promote the GISP at all levels, making it more recognizable by HR departments. One of our first steps in that direction has been to develop a brochure that one can give to HR to better explain who we are and what we do. We will have the brochures available at conferences. You can also request HR brochures be mailed to you.

We are always looking for ways to promote the GISP. You will find GISPs at professional conferences, promoting the GISP. We discuss what the GISP is through presentations and how to apply for the GISP in workshops. We have a newsletter to which one can subscribe on our website at www.gisci.org. You can find us on Facebook and Twitter. We also have a GISP store, where all items are sold at or near cost.

How can we do away with GISP? Top leaders of GIS at my workplace do not know what they are doing. They are mostly afraid ...

The GISP is here to stay. We could use your help in educating people about the importance of the GISP and GIS. GISPs are strengthening the GIS industry, thereby making everyone's job better and salaries higher.

How does the new GISP accommodate students in other countries? Is the GISP for American Citizens only?

The GISP was developed as a US-centric certification; however, the international community is embracing it as well. The GISP is open to anyone in any country. We are considering plans that will accommodate exams for people outside of North America, but this will only happen once the examination has been developed and administered, and we have sufficient resources and demand.

Will current GISPs be given the opportunity to complete a test for certification if a test is adopted?

If the recommended proposal is adopted as worded by the GISCI Certification Committee's Core Competency Work Group, current GISPs may take the test if they so desire. We anticipate that they would have to pay whatever examination cost is assigned to the exam component. If grandfathering is adopted (as was also recommended by the CCWG), then current GISPs will not be required to take the test, either as a requirement for their continued certification or as a requirement for renewal.

Q: How does this affect certification renewals?

How do the proposed changes affect re-certification? How is an exam justified for those who have already received their GISP? Also how is it justified for them to renew their certification? How would a GISP, who has moved on to Senior Management of an SDI be expected to pass an exam? Would the exam be technical?

Currently, certified GISPs do not have to re-certify after their initial five-year certification period. By demonstrating continued contributions to the profession and education, GISP certifications are renewed for another five years. The CCWG proposal recommends that we leave the renewal requirement the same as it is now. That is, current GISPs remain certified at the same level as those who take the exam, once it is developed and in place. The exam will have technical (technique-oriented) questions, but they will not be software specific.

However, the GISCI Board of Directors has not yet decided to pursue the proposed examination development, so some of the above statements may be premature or incomplete. At this time, we do not anticipate forcing existing (or renewing) certified GISPs to take the examination.

Q: What is the current application process

For us serving in the military who haven't been able to gain the required points, are we now going to lose our GISP certification?

Thank you for your service to our country! We value our American heroes and will make every effort to accommodate you. If you are referring to the difficulty that you may have in the renewal process, please be assured that we want to help ensure that that difficulty is minimized. You may contact GISCI by email (info@gisci.org) or phone (847-824-7768). We will help you develop a reasonable plan by which you can meet the requirements. We have several options available.

I am interested specifically in the recertification criteria; many GISPs will have trouble getting required 'contribution' points.

Please note that we renew certification, we do not recertify. Please contact GISCI, as we have developed ideas to help current GISPs meet the education and contribution sections that do not require travel or significant expenses.

I would like general Information about the certification process: how do I get started?

You can find the GISCI application and procedures manual online. Different conferences around the country provide application training workshops. And you can always directly contact GISCI for help (email: info@gisci.org or phone: 847-824-7768). We look forward to helping you and to receiving your application.
http://www.gisci.org/application_materials.aspx

How many points do I get for publications or other professional activities?

The GISP points for professional activities are described in detail in the GISCI procedures manual, which is available online at the GISCI website.

http://www.gisci.org/application_materials.aspx

How can educated people be certified? Now in the recession only old professionals can be certified. It takes forever to find a job.

Experience is a core component of a well-rounded GIS professional, as well as education and contributions to the profession. If you are having difficulty with fulfilling any portion of the application, please contact GISCI (email: info@gisci.org or phone: 847-824-7768). We may be of assistance.

How flexible are the requirements? i.e. substituting education for publication.

You can find the GISCI application and procedures manual online. Each component of the GISP application must be met. If you are having difficulty with fulfilling any portion of the application, please contact GISCI (email: info@gisci.org or phone: 847-824-7768). We may be of assistance.
http://www.gisci.org/application_materials.aspx

How is certification criteria determined? How much work experience counts toward any part of certification?

You can find the GISCI application and procedures manual online. The current criteria is a point-based system in which one must document at least 1,200 hours of either formal or supplemental education in the geospatial field, a minimum of four years work experience, professional activities, and agree to the Code of Ethics and Rules of Conduct. If adopted by the GISCI Board of Directors, the CCWG's recommended proposal will add an exam to these requirements.
http://www.gisci.org/application_materials.aspx

I would like to know if I can obtain my GISP even though I am currently unemployed.

If you can meet the requirements of the GISP application, you can become a GISP. You can find the GISCI application and procedures manual online.. Please review the application materials and contact GISCI (email: info@gisci.org or phone: 847-824-7768) with any additional questions you may have.

Why don't you have an electronic application/renewal process?

We are in the process of improving our Web presence, and expect to have a secure online application and renewal process in place by the end of 2011.

Could the GIS Certificate earned at American River College, Sacramento, CA be equivalent to a GISP? How does this correlate with online learning/GIS certificate through universities?

A GIS certificate earned in school is different than professional certification. A GIS certificate from an educational institution documents classroom learning; whereas the GISP shows that a person has reached a benchmark in education, professional experience and professional activities. The GISP certification process also requires that applicants sign a Code of Ethics and Rules of Conduct.

http://www.gisci.org/code_of_ethics.aspx

http://www.gisci.org/Ethics_and_Conduct/rules_of_conduct.aspx

How come getting an MS doesn't include getting your GISP? How would you transfer from a Master's degree in Geography to a GISP certification? If someone possessed an advanced degree in GIS, why can't they just take a test and get the certification?

An MS or other GIS degree reflects achievement in education only. The GISP is professional certification, which includes education, professional experience and ongoing professional activities related to GIS, as well as the Code of Ethics and Rules of Conduct. Education is a necessary, but not solely sufficient, component of the GISP certification.

How much time would it take for a working professional to get a degree?

Each person and situation is unique. It will depend on the kind of work that is undertaken. Is it related to GIS? What part of a given day is devoted to GIS-related activities? What educational background does the applicant have? How are they contributing to the GIS profession, outside of their work commitments?

Why can't you save the .PDF document with your information filled in?

You can if you have the full version of Adobe Acrobat. You can always print the form and hand write the application. We expect to have a secure online application available by the end of the year.

Why doesn't the GISCI qualify boots on the ground work as college course work equivalent?

"Boots on the ground work" is professional experience, which is different than the education component. If you are having difficulty meeting the education portion of the GISCI application, please contact GISCI (email: info@gisci.org or phone: 847-824-7768). We may be able to help you.

Why was the "grandfather" clause removed? Time and budget do not allow me to meet the requirements, after 25 years doing GIS.

The "grandfathering" phase of the GISCI certification process was put in place to allow folks without easy access to college/university transcripts an opportunity to qualify as a GISCI. This phase was intentionally limited to five years, in order to accommodate the initial interest and transcript difficulties. We do not anticipate another round of grandfathering like that. Please contact the GISCI offices (email: info@gisci.org or phone: 847-824-7768). We may be able to help.

Will advanced education have greater weight in the certification process?

Advanced education has greater weight in the existing certification process. One receives more points in the education section for a Master's degree or higher.

What is the difference between GISCI renewal and new applications?

In the current application process, the new application requires significant time and documentation in all three sections of the application materials. We are trying to assure that application review is meaningful and fair to all applicants. The renewal process generally takes less than two hours. The idea is that since you have completed the more rigorous initial application, you have shown yourself to be qualified to hold the GISCI. The renewal requires that you document minimum levels of continuing education and professional activities, which can be supplemented by experience points if needed.