Conclusion Report: The Historical GIS Research Network

Award details:

ESRC Research Seminars Grant: RES-451-25-4307

Awarded to Ian Gregory (formerly Queen's University Belfast, now Lancaster University) and Paul Ell (QUB). Administrative support provided by Zoe Bliss (AHDS History).

Funds awarded: £14,877

Duration: 1st Sept 2006 to 31st August 2008.

Aims and objectives:

The main aim of the application was to establish a seminar program that developed our understanding of how Geographical Information Systems (GIS) helps us to understand the geographies of the past. This field has being growing rapidly in recent years and is known as Historical GIS. The grant aimed to encourage and develop this field by achieving four specific objectives:

- a. To provide a focus for historical GIS research in Europe.
- b. To advance our understanding of historical GIS at the technical, methodological, and applied levels.
- c. To encourage the adoption of GIS amongst a broad audience with an interest in the past.
- d. To investigate setting up an international association to act as a focus for historical GIS research.

Approaches to publicising the events:

Events were publicised electronically through email lists and a website.

Details of the events:

The application specified that we would run two "outreach seminars," one in York (Spring 2007) and one in London (Autumn 2007), one "expert meeting" in Belfast (September 2006), and a two-day conference in Colchester (Spring 2008).

This was broadly followed with some minor changes. The outreach seminars took place as planned on the 28th Feb and 24th October 2007. The expert meeting was moved from Belfast to Lancaster and held on the 11-12th December 2007. This was because of Gregory's move to Lancaster, and because an opportunity had emerged for a small group of experts to prepare a document for the European Science Foundation (ESF) to help advance Historical GIS across Europe. The conference was moved back from the Spring to August 2008 because it was felt

that holding the conference at Easter would have lost a significant number of American participants.

Participants and level of demand.

The York seminar had 44 applications for 30 places. Of these we accepted 23 participants from UK HEIs, 2 from museums, 3 from historical or archaeological organisations, 1 from a National Park Authority, and one independent researcher. Of the academics, 6 were PhD students, 6 were research officers on a variety of funded projects, 1 was a training officer, and 1 a data manager with the remainder being lecturers.

The London seminar had 31 applicants so we accommodated all of them even though this meant we were slightly over-subscribed. 24 of the participants were from HEIs (of which 6 were from overseas), 3 from museums or archives, 1 was a private consultant, and 1 an independent researcher. There were 7 were PhD students and 1 researcher among the participants from HEIs.

The expert meeting was originally envisaged as having around 15 participants from across the world however it was felt that it was a mistake to invite international participants to this meeting and to a conference in quick succession. Money earmarked for bringing participants to this meeting was used to bring them to the conference instead allowing us to hold a roundtable at the conference while making this meeting much more specialised. 4 people attended: Gregory, Dr. A. Kunz (Mainz), Dr. S. Marburg (Dresden), and Prof. D. Bodenhamer (Indianapolis). Ell was also invited but was unable to come due to ill health. The agenda was tightly focussed on developing a White Paper for the ESF on the need for investment in infrastructure and collaboration in Historical GIS in Europe. This was submitted in May 2008. The ESF have subsequently requested a Position Paper on this topic which will be submitted shortly.

The conference was potentially threatened by the sudden decision to close down AHDS History who were to host the event. I am extremely grateful to the UK Data Archive for honouring this commitment, particularly Veerle Van Den Eynden, Matthew Woollard, and Kevin Schurer. Zoe Bliss, who came back unpaid to assist, deserves a special thanks. The conference was enormously successful. It is the first time an open Historical GIS conference has been held anywhere in Europe and only the second in the world. We had anticipated 50 to 100 delegates, in the event 123 attendees gave a total of 79 presentations. Participants came from 18 different countries, including the UK (40% of participants), 12 other European countries (30%), North America (20%), Japan (8%), Malaysia and New Zealand. People came from a range of backgrounds including GIS specialists (18%), other geographers (22%), historians (32%), IT (9%), and libraries/archives (4%). They also had a range of experience: 9% had never used GIS, 28% described themselves as novices, 32% as competent users, 26% as experts, and 6% managers.

Feedback

Feedback was collected from the two outreach seminars and the conference. It was overwhelmingly positive. Full summaries are attached in the appendices. There were 26 completed forms from York, 28 from London, and 45 from the conference. The basic quantitative responses from the two seminars were:

Did the event meet your expectations?

York: YES: 23 YES and NO: 2, NO: 1. London: YES: 27 NO: 0.

Was the workshop pitched at the appropriate level?

York: YES: 24 YES and NO: 1 NO: 1 London: YES: 27 NO: 0

Please indicate your degree of satisfaction with the event (1: Very poor, 3: Satisfactory, 5: Excellent):

	Yo	rk	London		
	Mode Mean		Mode	Mean	
Quality of speakers	4	4.1	5	4.5	
Contents of presentations	5	4.2	4	4.4	
Booking and admin	5	4.7	5	4.5	

From the conference there were the following:

Did the conference meet your expectations? YES or NO

YES: 43 NO: 0. 2 people ticked both YES and NO

Please indicate your degree of satisfaction with the event:

	Mode	Mean
Overall satisfaction	4.5	4.4
Quality of the sessions	4	4.3
Quality of lecture rooms	4	4.2
Booking and admin.	5	4.6
Accommodation ¹	3	3.7
Catering ¹	4	3.8

Would you be interested in attending further HGIS conferences?

100% of respondents said YES

¹ We deliberately kept expenditure on accommodation and catering down to allow us to include a larger conference than anticipated. This explains the relatively low scores for these.

Would you be interested in short courses in any of the following?

	n	%
Using GIS in Historical Research	23	51.1
GIS on the internet	19	42.2
Spatial statistics in HGIS	19	42.2
Other:	7	15.6

How nearly were the objectives met and have further activities arisen

We believe that we met or exceeded all of our aims and this is illustrated by the further activities that it has generated. Our outreach seminars were over-subscribed and attracted a wide range of people. This has encouraged the adoption of GIS among abroad audience, objective c. Acting on a suggestion in the feedback from the York seminar we set up a website www.hgis.org.uk which, although not part of the original grant, helped to publicise the conference and has attracted around 400 visits a month ever since. This has helped to advance the understanding of historical GIS (objective b) as well as encouraging its adoption (c). The success of the outreach seminars helped us to gain further funding from the ESRC's Research Methods Programme for a two-day training course in Historical GIS held at Lancaster in September 2007. This had 39 applications for 20 places and again helped in achieving objectives b and c. We know of at least one person who had not used GIS until she attended an outreach seminar, she then came to the Lancaster course, and finally presented her research at the conference in Essex.

The expert meeting resulted in a White Paper on Historical GIS in Europe which will shortly be followed by a Position Paper. We hope that eventually this will lead to significant funding that will provide a well-resourced focus for Historical GIS research in Europe, objective a. The conference was extremely successful, again being highly over-subscribed. A special edition of the *International Journal of Humanities and Arts Computing* is in press with the best papers from the conference. We also have a proposal with Indiana University Press for an edited volume of some of the other papers (to be edited by Gregory and Geddes). This helps achieve objectives a, b and c.

At the conference we discussed setting up an international association for Historical GIS (objective d). At present we are not going to do this as the administrative overheads do not currently justify it. America is well served by the *Social Science History Association* and the *Association of American Geographers*. Europe lacked this focus so we have persuaded the *European Social Science History Conference* to set up a *Historical GIS and History & Computing* network (of which Gregory will be one of the co-chairs) that will help provide an international umbrella group as well as assisting with objective a. We have also arranged for further international conferences. The first of these will be held in Taipei in September 2009, the next is likely to be in Indianapolis in 2010, with the plan being to return to Europe the following year. In this way we believe that we have an international focus for Historical GIS without setting up a formal association although this is still an option should significant EU funding be attracted.

The one disappointment with the project was that an application for further funding from the ESRC's Research Development Initiative to develop skills in Historical GIS was declined. A major reason given was a perceived lack of a market for these skills. We hope that the results given here illustrate that there is a large and growing demand in the field domestically and internationally.

(1,499 words)

Appendix 1: Evaluation from the Seminar on GIS in Historical Research

York. 28th Feb. 2007

The meeting had 30 participants of whom 26 left completed evaluation forms. Of the 30 participants

23 were from HEIs, 2 from museums, 3 from historical or archaeological societies and organisations,

1 from a National Park Authority, and 1 independent researcher.

The vast majority of the feedback was strongly positive, the exceptions were one that wanted hands-

on training, one that thought it was too technical, and one that had strong opinions (both positive and critical) about the speakers. A significant number of participants appear interested in attending

the Research Methods Programme funded two-day workshop that we will be hosting in Lancaster in

September.

There were requests for more web links so we have set up a website www.hgis.org.uk. For next time

we will consider asking the participants to introduce themselves at the start, and giving a live demo

of ArcGIS.

1. What were your main reasons for attending the event?

Most comments were concerned with learning more about GIS

2. Did it meet your expectations? YES or NO

YES: 23 YES and NO: 2, NO: 1.

The one person who said NO commented that he/she wanted more technical information and that a

workshop would have been more relevant. The course publicity stated that this was a seminar with no hands-on software training but perhaps we need to be clearer about this in future. Of the two

that said both YES and NO one thought it was two technical while the other had issues with one or

two papers (as described below).

Comments by people who said YES include: "I have discovered the potentials are far greater than I

had imagined and I have come away with some wonderful ideas" "The information provided was

exactly that [sic] I had hoped for" "The case studies were both directly relevant to my project" "Good speakers and interesting leads to follow up" "All the presentations were useful, pertinent and

comprehensible, and covered the basics fully"

3. Was the workshop pitched at the appropriate level?

YES: 24 YES and NO: 1 NO: 1

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The NO commented that he/she wanted a workshop that was more technical, the YES and NO argued that the seminar was too technical.

Comments by people who said YES include: "Perfect" "Very enthusiastic presentations" "Expansive yet easy to understand coverage" "Well structured day – from general to specific – case studies were very interesting" "Gained understanding of technical terms"

4. Please indicate your degree of satisfaction with the event: (1: Very poor, 3: Satisfactory, 5: Excellent)

	Mode	Mean	1	2	3	4	5
Quality of speakers	4	4.1	1	1	2	16	9
Contents of presentations	5	4.2	1	1	2	11	14
Booking and admin	5	4.7	1			3	23

One person ticked 1 (very poor) for all three classes. As he/she ticked YES to questions 2 and 3 and stated in answer to question 3 "Much clearer understanding of what GIS is (and isn't). More confidence to have a go" and made no negative comments it seems likely that these scores were meant to be 5s. For transparency however we have included them as 1s.

One person circled several responses to "quality of speakers" and "contents of presentations." This involved giving a 2 to one guest speaker for his contribution (see comments on question 6), a 5 to one speaker for his, and a 4 to "all others." We have included all three of these in the tabulations.

One person circled 3 and 4 for "quality of speakers."

5. Was there anything else you would have liked covered in the workshop?

Several suggestions that we should include a hands-on demonstration. Other comments include more on the "History Data Archive," that two-days with practical hands-on would have been useful, more practical examples. A number of people thought that there was enough for one day.

6. Do you have any other comments on the workshop?

Several suggestions that we should have asked the participants to introduce themselves at the start of the workshop (rather than the start of the roundtable). A number of comments saying that people were looking forward to the two-day hands-on course in September which suggest that the seminar had inspired them to go further thus achieving its main aim. Requests for more web links (so http://www.hgis.org.uk has been set up). Some praise for the food, comments about the room being cold, requests for copies of Powerpoint presentations (these were printed out and included in the delegate' packs), praise for the use of a roundtable at the end, and a comment that holding it in York was a bit far to travel from the south of England (although the next seminar will be in London).

One speaker was disappointed that all of the presentations were by men and was clearly annoyed that one speaker referred to student interns he had had helping with his project as "young ladies" and "girls." In fairness to this speaker, he was singled out for praise in a number of comments including the unsolicited letter (see below) which praised him as "particularly inspiring... full of good sense." It is difficult to see what could have been done to include more female speakers as all of the suitable candidates in the north of England and Scotland were male.

Other comments include: "Excellent! Thought provoking!" "Very interesting and helpful" "An excellent introduction to the subject" "Many thanks" "Brilliant. Well done" "Altogether an extremely useful day." "Well organised and very invigorating – useful materials and handouts."

Unsolicited comment:

In addition to the evaluation forms, one participant sent an unsolicited email after the course thanking us for the meeting. This included the comment "You did a superb job on the organisation front, timings were great, content was great, arrangements great and food likewise... I got an enormous amount out of the day with some very useful contacts and no shortage of ideas on how I might be able to proceed with my plans."

Appendix 2: Evaluation from the Seminar on GIS in Historical Research

London, 24th Oct. 2007

The meeting had 31 attendees of whom 28 left completed evaluation forms. Of the 31 participants

24 were from HEIs (of which 6 were from overseas), 3 from museums or archives, 2 from cultural

societies, 1 private consultant, and 1 independent researcher.

The vast majority of the feedback was strongly positive. There were some suggestions for

improvements and some minor quibbles.

1. What were your main reasons for attending the event?

Most comments were concerned with finding out more about GIS in historical research and how to apply it to their research, projects or organisations. Also some participants found the networking

helpful.

2. Did it meet your expectations? YES or NO

YES: 27 NO: 0.

Almost all comments were strongly positive. These include: "Covered advantages AND pitfalls – very

useful," "clear and thorough", "A good balance... of 'history of GIS,' theoretical, applied and practical issues", "Made things very clear re. GIS and software options", "Offered a useful introduction",

"extremely important and informative", "Very informative series of presentations", "useful

networking opportunity" "Excellent in every respect", "very informative series of presentations"

The only two slightly negative comments were "About 50% was relevant to me" and "Less on data

standards than I expected. Made up for by presentations on particular projects"

3. Was the workshop pitched at the appropriate level?

YES: 27 NO: 0

Fewer remarks in this section. Comments by people who said YES include: "really useful – everything

was quite appropriate", "very focused and interactive" "overall very relevant."

There were two calls for a more advanced follow-up meeting.

Several people noted that we were catering for a diverse audience and that this made pitching it a

difficult task. Among the suggestions for improvements were: More presentations on constructing

databases, we had too many case studies, and calls for more on software including hands-on or

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applied demos. One participant contradicted this by observing that as they were not using ArcGIS one of the sessions was not very relevant.

4. Please indicate your degree of satisfaction with the event: (1: Very poor, 3: Satisfactory, 5: Excellent)

	Mode	Mean	1	2	3	4	5
Quality of speakers	5	4.5	0	0	1	11	16
Contents of presentations	4	4.4	0	0	1	15	12
Booking and admin	5	4.5	0	0	3	7	18

These numbers are if anything slightly better than for the York workshop in February which had modes of 4-5-5 and means of 4.1-4.2-4.7 respectively.

5. Was there anything else you would have liked covered in the workshop?

Several suggestions that we should include a hands-on demonstration or hands-on work although there were acknowledgements on the difficulty in doing this in the time. Two calls for more on dissemination on the internet, one for CDs of the presentations, one for more case studies, and one for examples of building a GIS database

6. Do you have any other comments on the workshop?

On the positive side: "I really enjoyed the Q & A at the end", "A very useful well organised event", "Extremely useful", "Lively, varied and friendly" "Very interesting group of participants", "...very, very useful. My complements to the organisers...", "Would be good to see some more of this type beyond March 2008!"

Suggestions and criticisms included: Calls for better coffee (1), better directions to venue (1) the toilets to be closer (1), lunch not to be in the same room as the lectures (1), lecturers being made available on a website (1), and "Less of a workshop than a series of questions to a panel"

Appendix 3: Evaluation from Historical GIS 2008

University of Essex, 21-22nd August 2008

The conference had 123 attendees and there were 79 presentations. 45 participants left completed evaluation forms.

The vast majority of the feedback was strongly positive. There were some suggestions for improvements and some minor quibbles.

1. What were your main reasons for attending the event?

Overwhelmingly the comments were on finding out what was going on in the field, meeting other people, and getting ideas to help their own work. Sample comments include: "To continue to develop my knowledge of HGIS technically and relating to its applications. To present a paper and to receive constructive input from knowledgeable colleagues", "To get an overview of the field", "Long-standing interest in HGIS. Desire to connect with other like-minded people", "networking with an international community. Learning of research outcomes", "To learn what I can do with GIS in my own projects – view to developing future proposals", and "Meeting other scholars – 1st GIS meeting"

2. Did it meet your expectations? YES or NO

YES: 43 NO: 0. 2 people ticked both YES and NO

Almost all comments were strongly positive. These include: "Excellent conference, only wish it was 4 days so [I] could attend all sessions", "Great idea! worked well as so many were here", "Just perfect!", "This has been a brilliant conference – so much varied & exciting scholarship on show and logistically it has run incredibly smoothly.", "Even better and more interesting than [I] had expected", "Superb. I learned a lot. Made contacts", "Very well organized. Nicely done"

The only negative comment in this section was "Only 40%, I expected better" From other comments on this form this was from an MSc student who was disappointed that the presenters did not use a more "scientific spatial analytic approach"

3. Please indicate your degree of satisfaction with the event: (1: Very poor, 3: Satisfactory, 5: Excellent)

	Mode	Mean	1	2	3	4	5
Overall satisfaction	4.5	4.4	0	0	2	21	21
Quality of the sessions	4	4.3	0	0	3	26	19
Quality of lecture rooms	4	4.2	0	1	8	20	17
Booking and administration	5	4.6	0	0	1	14	29
Accommodation	3	3.7	1	2	15	14	9
Catering	4	3.8	1	0	15	20	8

Note that on occasion people ticked more than one (eg 4 and 5) or left an answer blank so not all rows add up to 45.

These figures show a very high level of satisfaction with the conference overall and with the sessions.

As with all of the events in this series the Booking and Administration score is outstanding.

Accommodation and catering results are more mixed but this was largely expected as these were deliberately kept at a relatively basic level to keep costs down. For accommodation in particular it might have been a good idea to make it plain that we were only offering basic accommodation in student rooms but give a list of alternatives that delegates could make their own arrangements. American participants in particular would have welcomed this. Against this, the University of Essex is not ideally situated to allow people to do this.

4. Would you be interested in attending further HGIS conferences? YES or NO

100% of respondents said YES. Comments included: "Absolutely!", "I'd love to! Very important", "Yes. A need has been demonstrated" while a number where slightly more thoughtful saying that perhaps annually was too often. One respondent answering question 2 thought that the next conference should be "across the pond."

5. The next European Social Science History Conference (ESSHC) is in Ghent, Belgium in April 2010. Would you be interested in attending if they had a Historical GIS network? YES or NO

YES: 31 (69% of total responses, 84% of responses to this question)

NO: 6 (13% and 16%)

Some responses where very positive, others that they couldn't make it for a variety of reasons. Someone suggested Digital Humanities as an alternative.

6. Would you be interested in short courses in any of the following?

	n	%
Using GIS in Historical Research	23	51.1
GIS on the internet	19	42.2
Spatial statistics in HGIS	19	42.2
Other:	7	15.6

Other included: 3D visualisation, Animation & visualisation, Intermediate level ESRI software, GIS in the humanities/literary studies, Data archiving, GIS databases, and Presentational skills using GIS

7. Which of the following most closely describes the discipline that you work in? Tick more than one if appropriate.

Geography (GIS)	11 (17.4%)	History	18 (28.6%)
Historical Geography	10 (15.9%)	Sociology	3 (4.8%)
Physical/Environmental	1 (1.6%)	Literary studies/	2 (3.2%)
Geography		Linguistics	
Urban Geography	3 (4.8%)	Computer science	4 (6.4%)
Other Geography (please	0	Other (please specify	11 (17.5%)
specify below)		below)	

"Others" included: GIS with information systems¹, Historical cartography², Business history³, Economic history³, Social History³, History of science³, Humanities Computing⁴, Digital Humanities⁴, Librarianship⁵ (2), Archives⁵, Genealogy, Archaeology, Anthropology, Educational charity. The superscripts indicate which class these have been allocated into below (eg 3 is History).

Re-allocating these to broad classes gives:

1. Geography (GIS)	12 (17.6%)	("Geography (GIS)" plus 1 "other")
2. Geography (not GIS)	15 (22.1%) (Non-Gl	IS "Geography" plus 1 "other")
Total Geography	27 (39.7%)	
3. History	22 (32.4%)	("History" plus 4 "others" as shown above)
4. IT	6 (8.8%)	("Computer Science" plus 2 "others")
5. Library/Archive	3 (4.4%)	
Other	10 (14.7%)	

A real range of disciplines but the majority from history and geography. Of the geographers less than half class themselves as primarily concerned with GIS with most of the rest being Historical Geographers.

8. How would you rate your skills with GIS software? Please tick only one.

	n	%
Never used	4	8.5
Novice	13	27.7
Competent user	15	31.9
Expert user	12	25.5
Manager of GIS projects but not direct user	3	6.4

Obviously this is a broad range roughly evenly split between those with little experience (never used or novice), those who are competent, and those who are experts or managers.

9. What GIS software products do you regularly use/would like to learn? Please tick all that apply.

	Us	Use		d like		
				to learn		
	n	%	n	%		
ESRI products (ArcGIS, ArcView, etc)	31	68.8	6	13.6		
MapInfo	8	17.8	5	11.4		
Oracle spatial	4	8.9	7	15.9		
Open source software (please specify	5	10.2	8	18.2		
below)						
Other (please specify below)	2	4.1	2	4.5		

n=45

Of the others people mentioned: GeoDa (3), Google Earth (2), Open Layers (2), MapViewer (2), MapServer, "cheaper GIS", Jump, GDV, Java, GeoServer, Geomedia, Erdas, XLisp, and Stata. From the way these were listed it was not always clear whether people were using them or wanted to learn.

10. Do you have any other comments on the conference?

Overwhelmingly positive. The word "excellent" occurred six times and "thank you" five times. Positive comments include:

- "lan & Zoe are due very warm thanks for their organization of this event. Very helpful communications over the past several months relating to the event."
- "I've thoroughly enjoyed it, as have many of those I've had conversations with. I have a whole lot of new ideas for my own work. Really its an ideal illustration of what an academic conference should be!"
- "Well worth the money!"
- "Good organised [sic], very interesting conference. I have learned a lot"
- "Really good!"

Other comments included two that wanted better internet access, one calling for discussants in sessions, and "I've learned a lot, but please also invite other people outside universities, because they have to know what is going on (cultural heritage institutes)" suggesting that perhaps we could make more effort to attract those outside academia,

Other comments/unsolicited comments emailed to the organisers include:

- "Attended Essex/Lancaster course. Was really well taught and very useful"
- "Extremely well organised, great group of attendees"

- "Congratulations on a splendid conference! It certainly has helped (and will help in the future) the cause..."
- "thank you again for this very interesting meeting"
- "...things went very well indeed--and a good time was had by all. It was really quite enjoyable and fruitful, a success all around. Congratulations.
- "...thanks for organizing such a good conference. It's clear how much the field is thriving, and the balance of old and new faces was just right."
- "I just wanted to congratulate you on the Historical GIS conference: I, for one, had a great time down there in Colchester and managed to get a lot out of the event. So, thank you for all your hard work in pulling it together. It's given me plenty to think about..."
- "Congratulations to you and to the other organizers for putting together such a wonderful event. I would definitely say that you have demonstrated a need for such an event."