

GIScience 2008

**Joint Discussion Session Between SOA & Cyberinfrastructure Workshops
2:00-4:00 p.m., Tuesday, September 23, 2008**

Sustainability – deployment, development
(after we build it, what then?)
refers to ontologies as well
libraries to absorb cost? Sysadmin?

Permanent entity/community
ESIP Federation, need more groups like this (AAG?)
GUIs get left out, updating over time
Tools to make use of ontologies, to build, visualize – more tools to support more ontologies

SUSTAINABILITY

Long-term objective of a center
NSF program managers?
Sustainability remains a challenge, how to fund? Cost a huge issue
Many universities share a sysadmin with an entire school/college

- 1) Archival side (after project is done)
- 2) Evolution side (more complex)

myUSGS.gov is a start

- 1) Operational model for system, with transition plans
- 2) Amazon web services, other vendor services

Examples at Indiana University?

Katy Börner model of getting CI money from NSF and used that to hire professional programmers (implement CI ideas only to create sustainability; get framework, architecture down)

Open Source, Development Paradigm

NSF Vision for Cyberinfrastructure – but vigorous planning process to plan next CI calls for CISE/ENG, cross-cutting

Science Community Participation Process

TeraGrid – next phase planning, GISolve involved

Next Generation CI

NSF is aware of GIScience but could be even more aware

Grand challenge of competing with Computer Science; need to have a CS/IS/Engr person on proposal for CISE; but [CDI \(Cyber-Enabled Discovery & Innovation\)](#) and other programs are broader

DataNet proposals require a sustainability plan. These are huge proposals for up to \$20 million but how about “sustainability” in much smaller proposals?

Proposal on sustainability as main focus might fly with CDI for example; how is this all getting out into society; a good “business model” for example for web services, an SOA for a community

Also, give scientists access to public algorithms (could be part of UCGIS Knowledge Web also?); this is sustainability also

SOA is all about this

Ontologies going to a community (e.g., SourceForge). Is there a SourceForge for ontologies (OOR, Open Ontologies Registry)

Advanced data and visualization services – 2-3 projects at \$3M over 5 year cycle
4 types of services - \$27M per year for 5 years

Sustainability issue – Two important questions at outset, before going after money:
Does our research demand CI capabilities and if so, what are they?
Are we going to build CI, and if so, how do we go about it?

Existing CI can help smaller projects

UCGIS Knowledge Web an example of thinking this through

PPGIS – don’t underestimate what citizen scientist can do; can they share code, methods, services too?

What do we need and when we have this, how is our research improved?

Community information systems in extremely poor neighborhoods (little technology but value the potential; can see the power of spatial)

Where to get the funding for this?

Community groups devastated by budget cutbacks

Prior interaction with Dan Atkins – integration as a key component, knowledge communities

Work with TeraGrid, plug into common CI projects

Mosaic created with \$20K; sometimes most successful outcomes don't have to be funded at huge level

Foundations?

Google provides CI, partnership with IBM for data-centric computing

A disciplinary community to support smaller projects within the community

CDC on a notifiable disease system? WholsSick.org HealthMap.org; value back to the community at a fraction of the larger cost; CDC

How can CI interact more with GeoWeb; GeoCommons.org – users upload data and GeoCommons renders as map, table, chart, tag cloud – can we go beyond map, make rendering distributed, etc. within a Web 2.0 model

NSF is about funding big science for the nation, to meet national needs

- e.g., nationwide network of communities in crisis?

What kinds of big questions need to be answered and then go to appropriate funding agency accordingly

Indiana University Social Efforts and Vulnerability Indicators project? Funded by foundations; Des Moines United Way to integrate their community information system into their existing structure

PARTNERSHIPS!

Not just providing a service, but there is original, compelling research that comes out of the projects

NSF Geography and Regional Science

January 20, 2009???



Opportunities for Action:

1) PNAS special issue – Dawn and Shaowen

2) Advanced Geoinformation Science book - Phil
Linkages to Earth Science community

3) Cartographica article submissions or perhaps special issue – Jeremy

4) DataNet solicitation which would involve multiple institutions – Nancy; preliminary proposal deadline is Nov. 10th;

5) Springer book series on Cyberinfrastructure - Xuan

6) AAG Annual Meeting in Las Vegas – propose a session and CISG and GISS groups would co-sponsor; Oct. 16th deadline

7) CIGI Virtual Organization, part of Open Science Grid, sponsored by NSF and DoE – Shaowen

DoE certificate allowing access to large repositories around the country

8) USGS Specialist Meeting on Ontologies with UCGIS, February, 2009, Washington, DC – position papers for travel funding – coordinated through UCGIS

USGS personnel cannot be PIs on NSF projects, but they can be co-PIs, senior personnel; USGS has big datasets, juicy problems

10) www.GISolve.org - request an account – Shaowen; access to services

11) CISG of AAG – newest group of AAG; vision document/white paper to inform NSF; value of CI for geographic science

Education Committee to educate geographers on value of CI

Outreach Committee – article for AAG newsletter

Awards Committee – student awards at Annual Meeting

THEY COULD USE MORE VOLUNTEERS!

12) CDC Knowledge Base – team.cdc.gov, jtobias@cdc.gov - he can submit to sitescape team; access to CDC enterprise GIS knowledge base; past PPTs, organizational memory; links to other places on the web; some similar content to GIS&T BoK; vendor-specific info; code sets, snippets (e.g., SAS) for generating maps on the fly; 475 users around the world

13) UCGIS Winter Assembly, first week of February, 2009; Workshop on next steps with UCGIS Knowledge Web (Friday morning); Washington, DC; focus on transportation as well

www.ucgis.org

