Mapping Procurement Practices – Best and Wurst

Remember the old saw about how you really don’t want to know how laws and sausages are made? Well, recently there has been a lot of sausage making going on in some corners of the geospatial community as dubious proposals advocating exclusionary procurement policies for governmental mapping and GIS services continue to proliferate.

Advanced relentlessly by a few private engineering and surveying firms, these shenanigans have shifted in form from previously unsuccessful litigation against the federal government (MAPPS v. United States) to a more recent spate of various “Best Practices” proposals for governmental “Procurement of Professional Geospatial Mapping Services.” I think some of us in the GIS and mapping fields may have to agree to disagree on these documents. A fundamental problem with these so-called “Best Practices” proposals, and with so much of the rhetoric on procurement policies from these groups is their dominant focus on and continuous reference, almost to the point of obsession, to the Brooks Architect-Engineers Act, as if that act were somehow central or even relevant to most mapping, GIS (geographic information systems), GPS, remote sensing, or other types of geographic data collection and processing. It is not. The Brooks Architect-Engineers Act was designed for procurement of legitimate architectural and engineering services. The attempts now by a few special interest groups to contort this act to try to extend its scope to obtain near-exclusionary procurement privileges over a very broad range of traditional mapping and new GIS activities, previously performed for centuries or decades by many others, including geographers, is in my opinion a sad chapter in the otherwise distinguished history of cartography, mapping and GIS. It obviously is being attempted out of narrow financial self-interest. I don’t think it serves the nation well competitively, economically or technologically, for a small group of firms or “professions” to try to corner the market on mapping and GIS services via this procurement ruse.

Rather than addressing a reasonable plan or guidelines for good procurement practices (openness, competition, cost-effectiveness, quality assurance procedures, standards, and data specifications, etc.), these recent documents are little more than an extended rationale for injecting the “Brooks Architect-Engineers Act” and related unspecified “licensing,” into nearly all geographic data collection or processing activity. They are not focused on “best practices,” but are clearly advocating a quite separate agenda, which is restrictive and exclusionary procurement of geographic data collection and processing services. That certainly is not “best practices” for anyone, except for those who benefit from the closing off of competition and innovation, and excluding broad swaths of crucially needed expertise and capability from the procurement process.

The Brooks Architect-Engineers Act was never intended for nor is it relevant to the vast majority of mapping, cartography, field data collection, or GIS activities. Why this bogus issue has repeatedly been allowed to dominate the GIS and mapping agenda, via litigation and lobbying by those who stand to gain financially by extending an Architect-Engineering law to cover services long provided primarily by others, is a question worth considering. Shouldn’t we, as mapping scientists, professionals and government GIS officers, perhaps be a bit more focused on the science and technology, or the educational and workforce needs of these issues? Or on innovation and competitiveness of our industry? Is restricting who can bid on mapping or GIS projects really the most important agenda item? For some, it apparently is.
Why shouldn't all knowledgeable individuals or firms which have qualifications and experience related to GIS and mapping, including those A&E or surveying firms which may also have such expertise, be allowed to compete on and receive federal, state, and local government projects and contracts?

Why the larger GIS and mapping community should even consider “negotiating” procurement concessions at all to a narrowly focused Architect-Engineers law that isn't designed to cover most GIS and mapping services in the first place is puzzling. We should also stop confusing the highly misleading term “Qualifications Based Selection” with the narrowly restrictive and anti-competitive procurement reality of the guild-based Brooks Architect-Engineers Act, as is done in these “best practices” documents and commonly elsewhere. “Qualifications based selection” or “QBS” only occurs in the Brooks Architect-Engineers Act within a limited and narrowly defined realm of eligible A&E firms, as specified in the Brooks Architect-Engineers Act (see legal analyses at www.aag.org/GISprocurement). That narrow limitation of competition to only A&E firms is logical if, but only if, the act is actually used for what it was intended, i.e., the procurement of conventional architectural and engineering services. However, should the proponents of extending this Brooks Architects-Engineers Act way beyond its original intended use succeed in annexing the procurement of broad new and old realms of mapping and GIS, of the sort that traditionally have been and currently are provided widely by others including geographers, then many if not most of the current mapping, cartography, and GIS companies, as well nearly all of the most highly talented and qualified individual mapping professionals, would not be eligible to participate under governmental GIS and mapping procurements on an equal footing.

The Brooks Architect-Engineers Act, when it strays into predominantly non-A&E areas of procurement or expertise, such as mapping and GIS broadly, clearly does not support a “Qualifications based selection,” but instead limits it sharply by excluding the significant Qualifications of a very large number of relevant non-A&E firms and individuals, as well as much important expertise, experience, and other crucial Qualifications traditionally found outside the A&E professions, from the selection process.

It also is obvious that adopting restrictive and exclusionary special interest procurement practices, such as those of the Brooks Act, will dampen US economic growth and competitiveness, and new technology development in the GIS and mapping fields. Legal analyses of the Brooks Architect-Engineers Act, as well as common sense regarding the wide range of other expertise such as computer science, geographical and geodetic sciences, information technology (IT), spatial modeling, statistics, database development, GIScience, and many other forms of non-A&E science-based “qualifications” and knowledge necessary for large scale geospatial services projects, provide just a few of the reasons why I disagree with the premises and conclusions of the recent spate of “Wurst Practices” for procurement of mapping services documents.

Coincidentally, in addition to attempting to restrict governmental mapping, GIS, and GPS/GIS field data collection to only a few private firms (themselves), many of those advocating these policies also actively oppose and have attempted to block the use of federal tax dollars to support state, federal, or local governmental mapping agencies, and also seek to prohibit universities, faculty members, and students from working or collaborating with local and state governments on mapping and GIS projects, on the premise that only the private sector should be able to engage in such activities.

Procurement Principles

Rather than focusing obsessively on restrictive and exclusionary policies, a truly Best Practices procurement document might instead focus on openness, ensuring the best quality data and results, competitiveness, cost-effectiveness, science-based and demonstrable quality assurance practices, transparency, and inclusive policies that will foster rather than undermine a vital, innovative, and competitive GIS and geospatial industry and capacity for the nation, and for the world. To that end, below are a few preliminary suggestions for some truly “Best Practices” principles for procurement of governmental mapping, geographic data collection, and GIS services:

- Geospatial and geographic data services procurements should be open to all companies or individuals who have expertise in mapping, cartography, geographic data collection, or GIS.
- Geographic information systems and geospatial technologies procurements rely heavily on expertise from computer scientists, geographers, planners, information technologists, database specialists, and many related subject matter disciplinary sciences. These scientists and GIS professionals should not be excluded from bidding on governmental contracts or procurements by licensing or other exclusionary mechanisms.
- Government procurement of geospatial services should recognize the dynamic and rapidly evolving nature of the Geographic Information Systems (GIS) and geospatial technology fields. This rapid innovation and dynamic growth should not be stifled through restrictive or exclusionary procurement practices, particularly licensing.
- Government procurement policies should recognize that licensing in one field, e.g., engineering or surveying or hairdressing does not represent expertise in other or broader fields, such as geographic information systems, cartography, mapping or geospatial technologies.
- Government Agencies should be supported financially in order to develop strong staffing and internal expertise in geographic information systems and geospatial technologies.
- The private sector can and should play an important role in national, state, and local geospatial science and technology service programs, but governmental mapping agencies also should have adequate funding and expertise for planning and...
Economic Geographer David P. Angel Named President of Clark University

Economic geographer and AAG member David P. Angel, Clark University Provost and Vice President for Academic Affairs, has been selected as the next president of Clark University.

Angel, age 51, has served as Clark’s provost since 2003, overseeing all undergraduate and graduate academic programs, as well as admissions, student affairs, sponsored research, and University libraries. Under his direction, Clark University completed an important review of its undergraduate liberal arts curriculum. As a result, program changes are underway which will help to incorporate the broader, global viewpoint and interdisciplinary vision necessary to prepare students for the complex challenges they are likely to meet in today’s world.

Angel joined the Clark University faculty in September 1987. He received a B.A. at Cambridge University and his PhD at UCLA. Angel is Leo L. and Joan Kraft Laskoff Professor in Economics, Technology and Environment in the School of Geography at Clark University.

As a pioneering researcher on industrial environmentalism and clean technologies, Angel has helped steer Clark’s many innovations in campus sustainability. He will oversee implementation of the University’s Climate Action Plan, which commits Clark to eliminate campus greenhouse gas emissions by the year 2030.

Angel is the recipient of numerous grants and awards, including an Abe Fellowship awarded by the Center for Global Partnership in conjunction with the Social Science Research Council and the American Council of Learned Societies. His research includes work conducted for the U.S. Department of Commerce, the U.S. Agency for International Development, the Asian Development Bank, the John D. and Catherine T. MacArthur Foundation, the U.S. National Science Foundation, and the United Nations Industrial Development Organization.


From the Meridian continued from page 4

overseeing such programs, or for conducting mapping programs internally when appropriate or cost effective.

- Universities and community colleges should be supported to develop and sustain expertise and experience among faculty and students. This should include opportunities to enter into collaborative agreements with governmental agencies for consulting and services as a means to share research and benefit student development.

- Not just Private-Public partnerships, but also University partnerships with governmental agencies and private firms should be encouraged and supported. The economic threats to public education and to U.S. public research universities are serious, and excluding their engagement with governmental agencies threatens the development and training of the next-generation workforce of scientists, engineers, and GIS and mapping specialists.

- Research should be an integral component of federal agency geospatial services programs in order to develop best practices and to keep the US competitive and at the forefront of the geospatial services and technology fields.

- Governmental procurement policies and practices related to geographic or geospatial data and services should foster competitiveness and cost-effectiveness by ensuring that the pool of potential qualified data and service providers is as large and diverse as possible. Data and service procurement proposals should be evaluated in such a way as to maximize the value proposition that the acquiring/procuring agency itself defines. Evaluative criteria should include experience, expertise, past project work of a similar nature, cost of services, internal and external QA and QC procedures, educational background and certifications, and references from prior project work.

- To ensure accountability and transparency, the preferred quality of data and services and the means for measuring that quality must be specified in advance and made available to the public. These metrics should be sound, science-based, repeatable, and auditable. QA plans and QC procedures should be required to ensure the quality of the data collected, according to the specifications desired. All procurement activities should be based on data and performance standards that inform clear work specifications and deliverables.

- Innovation – The acquisition of geospatial data and services should encourage, not discourage, innovation and new processes and methods, with an eye toward highest societal value as a consideration when evaluating proposals.

These ideas are far from perfect, and I am sure that many others can improve on these principles, but it sure would be refreshing to discuss procurement of mapping services from a starting point of concepts other than narrow self-interest, exclusion and greed.

Doug Richardson
drichardson@aag.org

www.aag.org AAG Newsletter 5