



March 1, 2010

Solicitation
Statement of Interest
Technical Project Manager – Geo Applications Contest

Introduction: Several organizations that serve the Twin Cities and greater Minnesota and which understand the power of using geospatial technology in conjunction with the Internet propose to host a Geo Applications Contest modeled after the [Apps for Democracy](http://www.appsfordemocracy.org/) contest hosted by Washington D. C. (<http://www.appsfordemocracy.org/>) The key outcomes sought by hosting of this contest are as follows:

- Significantly increase the number of organizations that are publishing geospatial web services (includes published documentation for each new service)
- Engage the growing community of internet-related application developers that are outside the typical Minnesota GIS community.
- Spur the creation of new and innovative applications that are based on our services and are of value to our customers and stakeholders.
- Demonstrate public value that can be created through data sharing and use of web services technology.

To effectively accomplish these outcomes and move this idea from concept to reality, a qualified Technical Project Manager is needed. The purpose of this Statement of Interest solicitation is to determine if there are any individuals, with the desired expertise, who are willing to serve in this capacity as a paid contractor. The project particulars are explained in detail in Attachment A and the desired roles and qualifications of the Technical Project Manager are outlined in Attachment B.

Statements of Interest Requested: Interested Individuals, possessing the requisite skills defined herein are encouraged to reply to this request for Statements of Interest. The successful proposer would be retained as a professional services consultant and would work under the general direction of the Geo Applications Project Team. The form of the professional services contract will be determined once the organizational affiliation of the desired contractor is identified. The funding authority for this contract is the Metropolitan Council via MetroGIS, and is anticipated to include at least one other public interest. The goal is to have the individual hired by April 30, 2010.

Proposals will be judged based upon:

- 1) Proposer Statement of Interest in serving as the Technical Project Manager for the proposed Geo Applications Contest
- 2) Proposer qualifications
- 3) Cost

Questions about this solicitation for Statements of Interest must be submitted by close of business Monday, **March 8**, 2010 to be eligible for response. Answers to any and all questions submitted will then be shared on Wednesday, **March 10**, 2010 with all interests who request, and all who have responded to this solicitation of interest. For proposals to qualify for consideration, they must be received by email by the noon, Thursday, **March 18**, 2010. Please submit questions and final proposals (need not exceed 2-3 pages) to Randall Johnson, MetroGIS Staff Coordinator, randy.johnson@metc.state.mn.us – **subject line: Technical Project Manager -Geo Applications Contest.**

ATTACHMENT A

PROJECT CHARTER / BUSINESS CASE

I. Audiences			
Prospective:			
<ul style="list-style-type: none"> • Technical Project Manager • Project Partners • Contest Award Sponsors • Volunteers for Variety of Task-Based Support Roles 			
II. Project Identification			
1. Project Name:	<i>Geo Applications Contest</i>		
2. Committed Funding/ Support Partners:	<i>MetroGIS, Metropolitan Council</i>		
3. Initiation Date:	<i>December 17, 2009 (Coordinating Committee Direction)</i>		
4. Project Managers:	Name	Phone #	E-mail Address
Technical	TBD		
Administrative	Randall Johnson	651-602-1638	randy.johnson@metc.state.mn.us
5. Business Need or Opportunity			
<p>Use of geospatial web services has potential to drastically improve organizational efficiencies for both producers and users of geospatial data. A contest is proposed as a catalyst to promote creation, publishing and use of geospatial web services. Prizes would be offered for specified types of web application development as well as a general category covering all applications. Principal outcomes sought include:</p> <ul style="list-style-type: none"> • Significantly increase the number of organizations that are publishing geospatial web services (includes metadata developed for each new service) • Engage the growing community of internet-related application developers that are outside the typical Minnesota GIS community. • Spur the creation of new and innovative applications that are based on our services and are of value to our customers and stakeholders. • Demonstrate public value that can be created through data sharing and use of web services technology. 			
III. Project Definition			
Ia. Business Objectives			
<ul style="list-style-type: none"> • Promote the creation, publishing and use of geospatial web services, for consumption by public agencies and others • Promote a centralized location for publishing information about geospatial services • Engage emerging and new application developers and the user community • Create public value with new applications available to government and citizens • Promote innovation and new uses of existing geospatial data • Promote and exemplify transparency and open government • Identify cross-sector partnering opportunities to address shared information needs (MetroGIS outcome) • Demonstrate that public value can be created when publicly-produced geospatial data are utilized in web applications developed by non-government interests (MetroGIS outcome) 			
1b. Agency: Intentions, Values, or Services Impacted by this Project			
<ul style="list-style-type: none"> • Low risk way to evaluate new technology/applications using existing data • Identify new users of data and new ways to use existing data • Provide better support to internal and external users by using applications developed via the contest 			

Defining shared application needs and catalyzing collaborative solutions to those needs, is MetroGIS's top priority for 2010. \$18,500 and a portion of the Staff Coordinator's time have been allocated to addressing this need.

2. Project Values

- Minnesota government agencies and other organizations have a significant opportunity to increase efficiency by sharing businesses data and processes through web services.
- Focus - geospatial web services
- Non-spatial services welcome, but not main focus.
- Geographic extent - Minnesota
- Increased public awareness of the govt./agency resources (especially datasets) - leading to more efficiencies and more members of the community taking advantage of those efforts

3. Project Support/Participation Roles

a) Project Managers:

- Administrative Manager
 - MetroGIS Staff Coordinator – Estimate 1/8th to 1/4 FTE over 6+ months (125-260 hours)
 - Schedule meetings and coordinate resources
 - Manage budgets and contracts
- Technical Project Manager & Manager - Estimate 1/8th to 1/4 FTE over 6+ months (125-260 hours)
 - Lead the project
 - Develop project scope and work plan
 - Chair Steering/Advisory Team

b) Task-Based Support Roles

- Steering/Advisory Team (*Technical Project Manager to Chair*)
 - Provide oversight & guidance to project managers
 - Assist with ad-hoc project needs
 - Promote and educate
- Contest Administrator
 - A hired consultant/vendor
 - Organizing & conducting actual contest
 - Make final rules, accept submissions, oversee judging
- High Level Champions/Advocates
 - Multiple – state, regional, county, city, etc.
 - Advocate for contest at high level
 - Encourage involvement of peer organizations
 - Advocate for funding
- Bush Beaters
 - Contact, encourage & assist potential data providers
 - Help document data and put in service format
- Data Producers
 - Stand up services

c) Participants – Develop awesome new apps

4. Focus

BREADTH

Any business process that relies upon use of geospatial data can theoretically make use of geospatial web services. The breadth of applicability of the proposed contest is limited only by the application developers' imagination of how to utilize web mapping services and the extent to which the producer-organizations elect to convert their data to services and make them available to others.

DEPTH

The application must utilize at least one GIS map service containing spatial data that falls within the state of Minnesota.

OTHER

Sponsors of specific awards may have input on the type of application that can win that award.

5. Context

DEFINITIONS

Definitions are provided here in the [MetroGIS Glossary](#) for 2010.

ASSUMPTIONS

- If more organizations were to publish their data via web services, significant improvements in organizational efficiencies would result. (Less duplication of effort and more leveraging of finite resources)
- Once web services are made available, the owners will recognize the value to themselves and others and continue to maintain them.
- The contest will be announced at the 2010 Mn GIS/LIS fall conference to engage producers to publish their data via web services in preparation for the contest and encourage application developers to begin to think about participating.
- Greatly expanded availability of data via web services, sufficient to provide the incentive to web application developers to participate in the proposed contest, will be available by early 2011 when the contest begins.
- Hosting a contest presents a low-cost, low risk way to catalyze innovation across all sectors regarding creation of web applications; some of which are expected to create public value important to the producers of the web services at no cost to them. This model was demonstrated to be effective in 2008 by Washington D.C with its Apps for America Contest.¹
- The benefits of the proposed contest are compelling enough to attract:
 - A number of volunteers who are willing to serve in a variety of leadership roles
 - Several organizations that are willing to contribute funding for a qualified contest administrator and other staff roles that may not be able to be effectively supported by volunteers.
 - Several organizations that are willing to sponsor awards
 - Numerous application developers who are willing to participate.

¹ In 2008, in Washington DC, the Office of the Chief Technology Officer had the goal of making DC.gov's Data Catalog useful for the citizens, visitors, businesses and government agencies of Washington, DC. The solution created was "[Apps for Democracy](#)" – a contest that cost Washington, DC \$50,000 and returned 47 iPhone, Facebook and web applications with an estimated value in excess of \$2,600,000 to the city. The first program was so successful it was followed by Apps for America 2 that was hosted last summer (<http://sunlightlabs.com/contests/appsforamerica2/>).

CONSTRAINTS / FREEDOMS

- A thorough project proposal must be developed by volunteers and volunteers must also solicit interest among candidates for serving in the critical role of Technical Project Manager. This process takes time, at the expense of losing valuable project momentum.
- The role of Technical Project Manager may be found to be too time-consuming to expect a volunteer to accept it. If this is the case, additional fund raising will be needed to retain a qualified individual. A thorough project proposal must be developed by volunteers and volunteers must also solicit interest among candidates to serve in this capacity. The workgroup strongly believes that a pure volunteer for managing the project is unrealistic.
- A firm/person qualified to administer the contest may not be able to be retained for the available funding.
- A Technical Project Manager needs to be secured before a detailed support plan and related budget can be finalized to give the Project Manager an opportunity to oversee and take ownership of these efforts. Potential sponsoring organizations will likely want to review the project budget before they authorize funding.
- Best practices for contest rules have been developed and tested by others which can be leveraged.
- It was widely agreed that this project will require sponsorship dollars in order to succeed. How much influence those sponsors have on defining the desired judging criteria was discussed and some degree of control on that needs to take place.

RISKS / OPPORTUNITIES

- If a Technical Project Manager is not secured by May 2010, it will be difficult to influence 2011 budgets of potential sponsoring organizations.
- The window of opportunity for this novel web application contest idea may be not be as viable later this year as it was last year when the idea was conceived.

6. Budget

• <u>Technical Project Manager</u>	\$24,000
• <u>Contest Administrator</u> – (use Wash D.C. Apps for Democracy as a guide?)	\$30,000
• <u>Assistance with development of Metadata for Mapping Services</u>	\$10,000
• <u>Misc Support (travel, supplies, advertisement, etc)</u>	\$1,000
• <u>Awards/Prizes</u> (assume provided by sponsors? E.g., \$1,000 per award?)	\$ 0? (<i>Partners</i>)
	<u>\$65,000</u>

7. Partners (Committed to date)

- MetroGIS / Metropolitan Council (2010 budget)
 - a) \$15,000 for contest administration expenses,
 - b) Approximately a quarter time FTE for project/contest administration
 - c) 3,500 for metadata development to incentivize existing public interests to document and publish their existing geospatial data via web mapping services.

IV. Proposed Solution and Desirability

1. General Description of Proposed Solution

December 2009-March 2010:

- Create workgroup to lead effort until Technical Project Manager can be secured
- Clarify objectives, refine project plan (project charter)
- Clarify responsibilities of the Technical Project Manager and Administrative Project Manager
- Identify and secure agency(ies)/organization(s) partner commitments needed to host the contest
- Identify candidates/procurement method to fill Technical Project Manager role
- Create plan to expand number of map services available

March-April 2010:

- Secure Technical Project Manager
- Launch procurement process to secure contest administrator
- Obtain commitments for all other support roles

April– December 2010:

- Set the ground work for the contest (pre-contest preparations)
- Engage data producers and expand number of web services available
- Establish contest rules and processes
- Identify possible award sponsors and secure commitments (set categories during rules creation)
- GIS/LIS conference (October 13-15) – advertise & educate, announce that the contest will begin in early 2011 and encourage data producers to participate by publishing their data as services and encourage application developers to be thinking about applications they could submit. .
- MN geospatial broker/commons (check availability of broker)

2011:

- Contest runs approximately March through June
- Judging of entries in July and August
- Awards at 2011 GIS/LIS Conference in October

2. Benefits

IMPROVED SERVICE

- Catalyzing of cross-sector sharing of data is expected to result in better data to support decision making and improved service delivery.
- Increased sharing of geospatial data, in the form of web mapping services, has been shown in other areas to catalyze development of applications that create public value and which are useful to the producer (e.g., BART, Washington D.C.), at no expense to the producers.

REDUCED COST

- Changing an organization's business model to increasingly rely upon use of web mapping services as a means to make data available to others has the potential to greatly reduce costs in comparison with supporting data access requests manually.
- Use of web mapping services by the data user can greatly improve productivity over manually accessing data produced by others. The most recent version of the data is automatically received; saving time and effort because no need to manually update and store locally.

3. Feasibility

Explanation: Three critical elements must be in place for a successful project, most likely by early spring 2010, to enable launching of the contest at the fall 2010 Mn GIS/LIS conference:

- Technical project manager
- Partner commitments (funding and/or support commitments)
- Contest sponsors (awards)

These commitments must be secured by volunteers who have limited time to dedicate to this project.

4. Sustainability

Explanation:

- **For the contest itself**, sustainability is not an issue as this contest is intended to be a onetime event.
- **For the Geo Applications** developed for this contest, the Technical Project Manager will oversee the development of contest criteria. Sustainability is anticipated to be one of several topics that will be discussed as candidates for judging criteria, along with usefulness and creativity.
- **Partnerships** will be identified to host web applications that provide public value and address shared information needs that cross sectors and agencies. These partnerships will be sustained as the applications are able to meet business needs.

5. Alternate solutions considered, with assessment

MetroGIS hosted two forums (January 2008 and November 2008) designed to define shared mapping services/web application needs for action by the MetroGIS community. The January forum produced a consensus on the roles that the MetroGIS should play regarding the definition of define priority shared application needs and seeking collaborative solutions to them. At the December 2008 forum, several shared web service needs were defined and a solution to each has been implemented (e.g., geocoding service) or has been authorized (e.g., proximity finder and best image service). However, these forums and the resulting web services have not accomplished the objective of wide spread publication of web mapping services nor resulted in development of web applications that take advantage of them.

The proposed contest is viewed as a low-risk, low cost means to **accomplish the above-defined objectives** and **demonstrate tangible benefits** possible through expanded use of web services in a manner that **policy makers can compare and contrast to their existing business practices**.

ATTACHMENT B

RESPONSIBILITIES AND QUALIFICATIONS – TECHNICAL PROJECT MANAGER – GEO APPLICATIONS CONTEST

Responsibilities of Technical Project Manager:

Project Manager will:

- Lead monthly meeting with advisory group
- Lead monthly meeting with other groups, as needed
- Lead development of fundraising strategy
- Define target participants/groups
- Lead development of bush-beating strategy
- Define conceptual judging strategies and preliminary criteria
- Facilitate a project definition meeting with stakeholders
- Develop a draft project plan to be approved by advisory group

The plan should include: fundraising strategy, understandable project charter with all benefits clearly defined, RFP for contest administrator, defined requirements framework for the contest, defined prizes and prize categories, outline for general judging criteria (what is important to us), contest timeline, defined criteria for providing code for applications submitted.

Qualifications of Technical Project Manager

- Has strong conceptual understanding of geospatial data, geospatial services and applications.
- Has understanding of the collaborative environment that has been cultivated in the Twin Cities metropolitan area and across greater Minnesota to widely leverage geospatial related investments that have been made by the various stakeholders.
- Has demonstrated experience serving in the capacity of a project manager, in particular, for projects that entail multiple participant organizations.
- Has statement from employer that they support the candidate serving in this capacity.