

GIS Procurement and RFP Development

Quick Study
 **URISA**





GIS PROCUREMENT AND DEVELOPMENT OF REQUEST FOR PROPOSAL



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INTRODUCTION

This Quick Study provides detailed steps for local governments that are planning to embark on the Request for Proposal (RFP) development process for procuring geographic information system (GIS)-related products and services. The objective of this publication is to provide a reference document to be used in the RFP development process. This publication also provides guidance on developing a specification-driven procurement, even if a formal RFP process is not required.

The Quick Study discusses how RFP procurement fits into the larger GIS development process that includes:

- personnel roles and responsibilities for RFP development;
- RFP preparation;
- specifying a scope of work;
- developing a selection process and evaluation criteria;
- developing effective proposal formats and submittal guidelines;
- the proposal evaluation process; and
- why it is important to have a comprehensive RFP.

RFP types described within this report cover GIS procurements ranging from general professional service contracts to specific design, development, and implementation contracts. Implementation contracts of an RFP are discussed under general guidelines rather than as detailed application specifications.

It is important to note that this report assumes RFP development as the third or fourth step in the overall GIS implementation process. Needs assessment and requirements analysis are initial steps that are utilized to define needs and requirements for inclusion in formal RFP specifications. In addition, a less-detailed Request for Qualifications process could be a precursor step to the formal process that provides general qualifying information regarding potential vendors.

The RFP process is a critical part of the overall GIS development plan. An RFP is a multipurpose document that clearly communicates the purpose and goals of a program, promotes lively competition among potential vendors, and generates high-quality responsive proposals that can be rated in a consistent and objective fashion. With minor modifications, the scope of work described in the RFP will closely resemble the requirements in the resulting service contract.



PROJECT PLANNING AND PREPARATION OF THE RFP

A clear, concise RFP is crucial to a successful project, whether the venture involves GIS planning, study, design, construction, conversion, implementation, or a combination of these elements. A properly written Scope of Services or specification in an RFP provides the foundation for the development of a solid platform for technology purchase and program implementation. This section covers project planning and preparation of the RFP. Subsequent sections in the report discuss these topics in detail.

GIS Project Planning

The most complex GIS RFPs are those for functional systems components (e.g., software and hardware, communication network, data, and applications). Before such RFP documents can be drafted, a thorough project planning phase should be undertaken. The project-planning phase involves establishing the goals and objectives for the project and determining detailed functional needs. If the planning aspects of the GIS program are not clearly defined before drafting the RFP, the resulting effort will not be well structured or clearly define the functional needs of the services to be provided. This could result in a time-consuming and less successful procurement process.

A GIS implementation process involves five main phases:

1. Planning the GIS project-establishing the purpose and scope of the project.
2. Identifying functional requirements.
3. Determining system design and structure that will meet the functional needs.
4. Acquiring and implementing system components-software, hardware, data, etc.
5. Operating and maintaining the system and data. (Somers, 1996)

GIS-component RFPs and procurement come into play in the fourth step of the overall GIS implementation process. The scope of the work and specifications in an RFP are the result of the GIS planning process (planning, needs analysis, and system design). The RFP process can also be used to acquire these services and products. (The GIS planning process is discussed in detail in the URISA Quick Study, A Quick Guide to GIS Implementation and Management.)

It is important to note that RFP development marks the culmination of the strategic planning and

requirements analysis process and represents the formal means for communicating the agency's requirements to potential vendors. Too often, the RFP is viewed as an administrative rather than a technical document. Its administrative function should be secondary to its technical function. The RFP must contain clear and sufficient technical guidance so that the vendor has a definite picture of the requirements and what is to be delivered.

Procurement and RFP Planning

The first step in preparing a successful RFP is **planning and defining the project** and the parameters or limitations. Planning and defining the project will help identify the services that should be purchased and the resulting deliverables. This step also assists in determining the information and experience needed about the company or individuals who will provide the services.

Planning the RFP and procurement process begins with identifying the project team who will be responsible for the GIS procurement and RFP development. Depending on the project requirements, the team may consist of GIS subject matter experts, programmers, analysts, or designers. Additionally, support personnel such as procurement specialists and administrative staff will be needed as part of the project team. RFP personnel requirements will be discussed in detail in the following section of this report.

The next step is **specifying the project goals and objectives** for the project or portion of the GIS project that the RFP serves and ensuring that they are achievable within the time and budget available for the project. The results of this project definition should be included in the RFP, as discussed in the section titled "Project Overview."

The third step is **determining the contents and format of the RFP** so that comparisons can easily be made between the submitted RFPs. The request

should cover such topics as: 1) specific objectives of the RFP services being procured and overall project objectives; 2) detailed information and technical specifications (i.e., precision requirements, hardware/software environment, and quality control procedures); 3) schedule for response; 4) scope of the work; 5) response format (including specific vendor financial information); 6) submittal guidelines; and 7) evaluation information.

Before formal drafting of the RFP, several issues should be discussed with the procurement division, such as the types of contracting tools available (i.e., Firm-Fixed Price, Time, and Materials) and which type fits best for the current GIS RFP.

Contract Types

Choosing the appropriate contract type is essential. The type of contract determines the cost and performance risks that are placed on the product or service provider. There are two broad contract groups—fixed price and cost reimbursement. Within each of these groups are various types of contracts that can be used individually or in combination (NOAA, 2000).

Firm-fixed price contracts. This type of contract requires the vendor to successfully perform the contract and deliver conforming products or services for a flat rate price agreed to before the project begins. This type of contract places much of the performance and cost risk on the vendor. If the project costs the vendor more than expected to complete, the vendor still receives only the amount originally agreed upon. If it costs the vendor less, a greater profit is made. A firm-fixed price contract is suitable for products and services that can be described in sufficient detail to ensure a complete understanding of the requirements by both parties and assessment of the inherent risks.

Cost reimbursement contracts. A cost reimbursement contract allows for payment of all incurred costs within a predetermined ceiling that can

be allocated to the contract, that are allowable within cost standards, and that are agreed to by both parties. Therefore, all types of cost reimbursement contracts place the least cost and performance risk on the vendor. This type of contract is required when the uncertainties of performance will not permit a fixed price to be estimated with sufficient accuracy to ensure that a fair and reasonable price is obtained. For example, assume a GIS development project requires using the latest technology, and the functionality requirements have not been well defined. A great deal of uncertainty about the system remains, so it is likely that the vendor would build in contingency costs to allow for unknowns in a fixed-price scenario. This would drive up the cost to the local government more than if a cost reimbursement contract were utilized. The types of cost reimbursement include:

- cost type — which involves payment of all incurred costs within a predetermined total estimated cost.
- cost sharing — where the client and the vendor agree to split the cost of performance in a predetermined manner. No fee is given.
- cost plus fixed fee — which allows for payment of all incurred costs within a predetermined amount plus an agreed-upon fee that will not change.
- cost plus incentive fee — which provides for adjustment of the fee (either up or down) using a predetermined formula based on the total allowable costs in relation to the total targeted costs.
- cost plus award fee — which provides for negotiation of a base fee with an award fee that can be given based on a judgmental evaluation of vendor performance and cost control.

The latter two contract types require considerable monitoring by the project and procurement staff and are usually reserved for highly visible procurements of larger dollar value.

Other types of contracts. Other common contract types include:

- Labor-hour/time and materials - in which rates for services rendered are fixed and rates for materials are at cost plus a handling fee.
- Letter contracts - a preliminary instrument that permits a vendor to begin work when all of the contract terms and conditions have not been agreed upon. This type is only used in circumstances of unusual and compelling urgency.
- Indefinite delivery contracts - the three types include definite quantity, indefinite quantity, and requirements. In general, these contracts provide for delivery of goods or services upon the issuance of a delivery or task order as the need arises.

Determining a Contract Type

Because so many types of contracts are possible when conducting procurement planning, it is essential to communicate with the procurement division to determine the contract type that will best suit the project team's needs. In addition, the procurement division should be consulted for contract "boiler-plate" language that may be required by the contracting agency, such as standard contract provisions, a drug-free workplace, a statement on public entity crimes, and price proposal formats.

RFP Distribution

A last area of concern that should be addressed before beginning a draft of the RFP is determining the format for distribution and the method of advertising. Recent advances in information technology have opened new avenues in terms of distribution mediums, which include Web-integrated distribution in several forms: 1) a word processing document; 2) an Adobe Acrobat (PDF) format; 3) direct download; and 4) file transfer protocol access. In addition, the more traditional forms of distribution, such as hard copy mailings, CD-

ROM distribution, and floppy disk distribution are still prevalent.

Significant cost reduction is possible if the client can provide the RFP document via the Web, alleviating mailing costs. Additionally, using the Web for distribution is an advantage because the government agency is likely to reach more potential respondents if there is greater awareness of the proper procurement information. However, the contracting agency should be prepared for responses from all over the world and will need to strongly consider vendor qualifications and potentially physical location of offices in the evaluation section.

One way that this can be accomplished is through advertising. The following is a list of potential advertising options:

- A link from the client's homepage;
- direct mailings to companies and individuals that are on a vendor list established and maintained by the procurement department (agencies may wish to contact others in the industry such as state GIS coordinators and GIS project managers when developing a potential vendor list to receive the RFP);
- Web and hard-copy RFP announcements from established advertising sources such as the Commerce Business Daily, DemandStar, and Project Guides;
- bid hotlines; and
- newspaper advertising in the classified section.



PERSONNEL REQUIREMENTS FOR RFP DEVELOPMENT

It is important to dedicate sufficient staff resources to preparing the RFP. Writing an effective RFP is time-consuming and exacting work. All too often, this task is assigned to one or two people who already have full-time responsibilities. The result is that either their regular work suffers or the RFP does not receive the attention it deserves. Writing an RFP also involves asking staff throughout the agency to produce detailed information on various areas of subject matter for inclusion in the document. The project manager should ensure that workers responsible for preparing the RFP are sufficiently free from other duties so that they can concentrate on writing, and that they have the authority to get other departments to produce program information for the RFP as needed.

As noted in the previous section, a project team or committee is required to develop an RFP to solicit GIS services and products. Also noted previously, early integrated planning is critical to ensuring the success of the RFP process. Planning begins with the assembly of a core project team to develop a broad-based outline of the directive to be followed. The full RFP team should be appointed and a kick-off meeting held to ensure that the entire team is working to support the same objectives and resulting

deliverables. The team can then begin the process of developing the documents and taking the necessary actions in preparing the RFP.

It takes qualified in-house personnel to develop an RFP and to judge product deliveries, keeping the program headed for success once the contract is awarded. The project team must include personnel from the supporting and using divisions, as well as administrative, contracting, and cost analysis experts. Team members creating the portion of the Scope of Services related to GIS development and services must be knowledgeable in GIS and management. Program office personnel serve as team leaders and making sure that the user and supporting agencies' needs, concerns, and wishes are fully addressed. All of the project team must understand the objectives, the services being procured, and, most importantly, consensus on the resulting deliverables as defined by the functional requirement process. It should be noted that, in many cases, one or two people could serve several of the roles identified below.

Depending on the requirements of the RFP, the project team should consist of personnel providing the following perspectives:

- technical experts/advisors;
- subject matter experts;
- a project manager;
- procurement specialists;
- administrative staff; and
- legal staff.

Each of these potential roles in the RFP development process is discussed briefly below.

Technical Experts/Advisors

The technical team members, which may be comprised of senior programmers, analysts, relational database specialists, and other technicians, aid in preparation of the technical portions of the Scope of Services within the RFP, the data requirements list, evaluation factors, source selection standards, and supporting documentation for the RFP process. The technical experts and advisors work closely with experts of the subject matter and the project manager in the RFP development process. The technical input should be limited to performance-based requirements, unless otherwise required based on the approved contracting strategy and any associated risk management mitigation approaches that may be used.

Subject Matter Experts

Depending on the RFP requirements, various GIS subject matter experts may be needed to support the development of the Scope of Services as well as several of the other parts of the RFP. For example, remote-sensing specialists could be required if the RFP requires the collection of hazard-specific information via remote sensing devices for reports and plans. Other examples of subject matter experts include cartographers, mitigation specialists, urban and regional planners, civil and environmental engineers, and real estate specialists. The list could be longer depending on the RFP requirement.

When looking for subject matter experts, an agency may need to seek outside help based on the personnel currently available. These experts could be obtained from either the private or the public sector. For example, a local government may be able to obtain support from state and federal government agencies and consultants may be able to provide support in this area.

Project Manager

The GIS project manager has the responsibility for project management, knowledge implementation and scheduling, coordination of the RFP development group, and gathering and defining the project. The project manager is responsible for ensuring that RFP team members receive general overview training for RFP development if they are relatively unfamiliar with the process. The project manager should be in charge of leading the acquisition plan development, documenting the overall strategy for managing the acquisition, and detailing a comprehensive approach for fulfilling the project objectives. The plan addresses the “who-what-when-why” of the acquisition and integrates the RFP team members’ expertise into a single plan for fulfilling the project’s needs. The project manager should be in charge of establishing an RFP cross-reference matrix to be used to ensure that the RFP is internally consistent and does not contain errors of omission or duplication after the first draft is completed.

In sum, the project manager should oversee the RFP development process and make sure that the goals and objectives of the project have been well stated and documented and that consensus on all resulting deliverables is achieved. Coordination with other RFP development staff will be essential to ensure that the rest of the RFP requirements are accounted for as well.

Procurement Specialists

Procurement specialists are important members of the project team who provide support with contract

specification requirements, addendum material, local government “boiler-plate” material, and general information coordination with potential respondents. These specialists should review evaluation criteria to ensure objectivity as well.

It is beneficial to take advantage of available contracting expertise, both in drafting the RFP and in finalizing the contract. Because these specialists are experienced with the procurement process on a day-to-day basis, they provide the knowledge base essential for appropriate development and distribution of the RFP. The GIS project manager will coordinate closely with the procurement specialists.

Administrative Staff

An administrative staff is essential to supporting the project team by assisting with documentation, copies, distribution medium, advertising, and information coordination with potential respondents.

Legal Staff

The legal staff may be called upon in the GIS RFP requirements to deal with vendor specifications such as copyright and proprietary issues. For example, a local government’s third-party software being utilized for permitting applications needs to have a GIS interface established, and an RFP for these services needs to be drafted. The legal staff may be utilized to see if there are any overriding issues with the current software that does not allow for potential respondents

to gain access to the data schemas and formats necessary to establishing the GIS interface. More commonly, however, legal staff is not required until a vendor has been selected and contract negotiations have been initiated. However, if legal review can be conducted in a timely fashion, it would not hurt to do so before official RFP release.

The RFP project team members are required to conduct a review of the RFP process from both a macro and a micro perspective, an explanation of the objectives of the RFP, identification and explanation of primary and corollary responsibilities and roles of individual RFP project team members, and identification of the subprocesses and events required to develop an RFP.

It is important that each member of the RFP project team have a general understanding of the overall RFP development process including where his or her assigned activities fit. Without this understanding, they will likely end up supporting only a small segment of the process (their own task) rather than the effective overall development of the RFP. It is important that general RFP process overview training be provided to the project manager and core team members early if they have not been involved in an RFP development process before. The procurement specialists should be able to help in this area. Once the project team has been established and the project-planning phase completed, it is time to develop the GIS RFP. The following sections discuss the components that make up the RFP.



COMPONENTS OF AN RFP

Background and Organization Overview

Background information. The RFP typically includes an overview of the agency's current state-of-affairs concerning GIS and provides a brief historical perspective. Information on organizational setup, vision, mission, business objectives, and, when applicable, hardware/software environments are included. The RFP also provides descriptions of working and legal relationships with other agencies, work facilities, automated information systems, relational databases, and other infrastructure or supply matters as appropriate.

Additionally, the background section describes the local government's current **project definition**. The problem or work product that the RFP addresses may be relatively well-defined to the local government; however, to a potential respondent or other reviewer, it may appear to be a bundle of unrelated problems or work products.

Begin by describing the cause of the problem or reason for the RFP (e.g., an initiative to bring Web-based GIS to the county) and what has occurred to date with regard to the initiative (i.e., the vision, mission, and business objectives if completed). In some cases, the solution to the problem or initiative(s)

may be obvious and should be stated in clear, simple language. On the other hand, the local government entity may want to know "what is the solution?" For example, it may be clear that new GIS hardware and software are needed, but the agency is unaware of the costs and resources needed to purchase and implement them. As consulting firms evaluate if and how they want to respond to the request for assistance, it is very helpful if they understand the reason behind the RFP. This information will improve the quality of responses received.

In addition, the background should address whether the project has important secondary issues, such as past difficulty with network performance. The local government agency should be sure to address these issues in the RFP to avoid potentially under-scoped responses. An honest and complete account of current program problems and strengths will result in better responses to the RFP.

Organization overview. The local government agency's organizational makeup should be briefly discussed in the RFP in terms of who is responsible for coordinating and managing GIS development and implementation within the agency as well as who is operationally responsible. Interactions between

departments, such as data sharing and planning initiatives, should also be discussed. In short, this section of the RFP should review current GIS management and organizational structure within the local government agency.

Vision. The background section of the RFP should include the local government agency’s vision statement in order to orient the potential respondent to the underlying importance of the GIS as described. An example vision statement might be “To deliver a user friendly GIS that advances communication, data sharing and technology integration to enhance agency-wide decision-making.”

Mission. This section of the RFP should include a mission statement to help potential respondents better understand what the agency intends to accomplish with the GIS program. An example may be to enhance the agency’s business functions and decision-making through GIS by supporting strategic goals, serving customers, enabling collaborative planning, and promoting information and application sharing.

Business objectives. In this section of the RFP, the agency should describe business requirements, if applicable to the project. This would be common to a GIS planning or procedure development RFP. In such an example, the agency should focus on the following key areas in terms of business objectives:

- Applications and business processes that the GIS supports. Are some services more mission-critical than others?
- Current GIS service levels. What are the current goals and performance in such areas as availability and utilization? How are these metrics gathered and reported? Are there areas in which improvements could be realized through investment in automated Information Technology solutions?
- Technology. What hardware and software are running on the network? Has any equipment or

software been modified to support nonstandard protocols or systems? What type of communication network is in place to move information through the agency?

- Help desk. Should one be established?
- Current budget. How much are current expenditures on personnel, hardware, software, network management, etc.? Take time to understand the components that will not be reduced or changed by outsourcing, such as salary.

The most important thing to remember when drafting this section of the RFP is “garbage out, garbage in.” This section is asking potential vendors to understand your agency and long-term goals. In other words, if this section of the RFP is comprehensive and honest, the proposals received are likely to be comprehensive and honest. Contracting has the potential to fail when the customer and vendor are discovering information about each other during the term of the contract. The concept is to create a mutually beneficial relationship through this process. Share as much information as possible with potential vendors when developing the background section.

Project Overview

In this section of the RFP, the agency will essentially describe the RFP’s Statement of Purpose—the nature and extent of the services to be provided and the overall goals and objectives of the resulting contract.

Project goals and objectives. The goals and objectives of the project referenced in the RFP could address one or more of several GIS-related issues. The following represents a sample list of what some of those issues might be.

- A problem or situation that needs to be resolved.
- A new GIS design, development, or implementation.
- Enhance business functions by focusing GIS development on core services.
- Anticipate customer needs.

- Promote partnering.
- Invest strategically (e.g., by integrating GIS with other departmental information systems and technologies).
- Invigorate staff through innovative GIS approaches.
- Automate GIS business processes.

A lack of agency direction in the form of clear goals and objectives will likely impede progress on the project referenced in the RFP and make it difficult for potential respondents to develop a proposal that adequately meets agency goals. Activities to rectify this include the development of formalized direction, goals, objectives, and measurement criteria for success with regard to the project.

Statement of request for vendors. The project overview section of the RFP should include a concise statement of request for vendors that clearly represents the current state-of-affairs, what the project is about, and the general services that are required for the project. Although not all-inclusive, the following list highlights some examples of material that may be included for different types of GIS RFPs. These include RFPs for GIS needs assessment, hardware, software, project management, security, and maintenance-type contracts.

1. *General considerations.* Provide an overview of the current GIS environment. For example, one might include the number of users, the geographic dispersion of GIS services, applications, equipment, software, security, network infrastructure, network management, help desk, and network service levels.
2. *Needs assessment and project planning.* Provide an overview of the current GIS structure and organization. List the users and/or departments that may be involved in the project and whose requirements should be addressed. Briefly describe the project planning that has taken place to date and what is envisioned for the future.
3. *Hardware and equipment specifications.* Outline the specifications for the hardware/equipment that is required for a vendor to supply or manage. Is there a particular vendor standard? GIS hardware requirements might include large format plotters, T-1 or DSL network equipment, oversized monitors, remote access concentrator, routers, and firewalls.
4. *Software specifications.* List specifications for the software that are required for a vendor to supply or manage. This could include Web-enabled GIS components, compression software, security client, data editing software, and relational database software.
5. *Installation and project management.* Outline the expectations for installation and project management. Examples of some of the types of questions that should be addressed in this section are: How long will the project last? What are the requirements for the vendor's personnel to be qualified for project management? How many years of experience are required? Is there a requirement for the vendor's personnel to be located within a certain geographic region? What is the implementation timeframe for new users?
6. *Configuration management.* Outline expectations for configuration management, if applicable. How often are changes implemented? Will configurations need to be stored in more than one location? Make sure that the vendor's "back-out" procedures (should a configuration change go wrong) are questioned in the statement of request.
7. *Performance management.* Outline the performance management requirements and reporting needs. What will management expect from the vendor? What is the status and reporting frequency? Make sure the requests are reasonable yet meet the needs of the agency's GIS business users. GIS performance management might include availability, latency, mean time to restore, utilization, and Web-based management reports and maps.

8. *Security management.* Along with protecting the agency from intrusion, security management is key to understanding how the vendor manages the security of the GIS network. For a GIS network, make sure that the vendor is able to understand the exact level of security requested by encryption, key management, authentication, and varying levels of user access depending upon function (i.e., editing, read only, or write access).
9. *Maintenance.* Provide a statement of request for software and hardware maintenance. List the number of years desired for continued maintenance and what the services involve. Depending on the level of maintenance required, this could include severity levels and downtime response.

In this section of the RFP, it is important to note that the agency gives a brief description of the statement of the request for vendors. Each of these areas would be discussed in more detail in the Scope of Services section of the RFP.

Procedures and guidelines. When developing the RFP, the agency should be aware of any applicable procedures and guidelines that they wish to have applied to the products and services that the vendor is to provide. This applies only if the agency wishes to utilize those written procedures and guidelines. For example, perhaps there are local, state, or federal standards and/or documents that should be referenced in the design, development, and implementation of the agency's GIS.

Several states and local governments are currently developing, maintaining, and utilizing such guidelines. Agencies on the forefront of such efforts include the Maryland State Government Geographic Information Coordinating Committee, the New York State Archives and Records Administration in association with the National Center for Geographic Information and Analysis, MetroGIS, the Metropolitan Council in Minneapolis, MN, and the

Oregon Geographic Information Council. In addition, the Federal Geographic Data Committee, the Open GIS Consortium, and other professional and industry groups develop standards that an agency may wish to follow. References to these agencies' Web sites for additional information are given in the Appendix at the end of this document.

Within these GIS development guidance documents, standards and procedures are suggested for various GIS components. Examples include data standards, data models, metadata standards, data sharing and distribution, software standards, and personnel standards.

Adherence to such standards, even when not required, can enhance an agency's ability to share data and integrate into the larger GIS community. The RFP developing agency should research state and local resources to ensure that GIS development is coordinated and existing guidelines are followed to facilitate potential future data exchange, integration, and sharing on a local, regional, and state level.

Goal of the project overview. Different vendors may approach the project differently. What the agency wants to know is how the vendor will fit into their team. It is critical that the agency understand the vendors' methodology for communication. By asking the vendors to describe their approach to providing a solution for the statement of request, the agency will be able to evaluate the following elements:

- top management support,
- team-building meetings,
- goal-setting strategies,
- procedures for communicating on a regular basis,
- assigning responsibility and authority,
- development of a tracking and evaluation system,
- follow-up, and
- expect quality control and quality assurance measures used by the vendor and the agency.

Scope of Services

After defining the project, the agency must organize in detail the tasks to be completed. The Scope of Services (a list of tasks describing what the agency requires the vendor to do to resolve a problem or to facilitate GIS development) does not necessarily need to be a complete listing; it can be a requirement of the vendor in the RFP response to expand this listing. In such a case, the vendor would be tasked to take the agency's outlined Scope list and further define it. If the vendor does not understand why the agency needs this accomplished or how it is to be accomplished, the list of tasks they offer may be insufficient. That is why the project background and project overview sections are so important to developing a clear understanding of the agency's requirements.

The redefined list of tasks that the vendor will provide is utilized to determine the amount of time necessary for the project and the fee for the product or service. If the Scope of Services is comprehensive and easy to understand, the agency will be able to avoid responses that are "over-scoped" and "under-scoped." Over-scoping is the provision of more products or services than required, and under-scoping is the provision of less than required. Proper definition of the scope will help keep the project within budget.

Some items are not required but may be beneficial to include with the product or services provided. These may or may not be within the budget. By letting potential vendors know that certain tasks are optional, the agency will receive appropriate responses so that they can choose to accept those services if financing allows. In addition, certain unforeseeable costs may become known during a project, particularly in a development project. It is important to identify these potential tasks in the Scope of Services, if possible. The agency can limit the risk associated with such costs by choosing a risk-managing contract mechanism such as Time and Materials as discussed in the section titled "Project Planning and Preparation of the RFP." By making the vendor aware of such potential additional tasks, the agency will learn how

the vendor is likely to handle these types of product and service modifications.

Vendors may reorder tasking that they feel is not logical or they may include optional tasks. An RFP needs to clearly state if reordering and/or providing optional tasks are appropriate, will be considered, and how this will be reviewed and evaluated.

Scope specifications. The Scope of Services is a clear statement of contract requirements that identifies the work effort to be performed, and it is expressed in terms of project needs and requirements. Described are tasks to be performed that cannot be contained in a specification or written into a schedule as contract line items. It is essential that the Scope of Services be streamlined to ensure that actual requirements in the scope include the technical and operational specifications or give adequate reference to previous requirement documents.

Duplication of requirements in contract documents should be avoided because this can cause contract problems when there are conflicts or when one document is updated with a formal contract change while the other document is not changed. The Scope of Services should provide the basic, top-level objectives of the project, and the formal RFP would require potential vendors to propose their response to the Scope that could become part of the awarded contract. Some examples of what the Scope of Services should include are:

- specific tasks (quantifiable, measurable, and testable);
- specifications and standards to be used for the project (relying on commercial standards and practices, when possible);
- requirements for the vendor to provide a comprehensive layout of project schedules (e.g., internal reviews, testing, and technical meetings);
- requirements for relevant and pertinent subject matter experience;

- requirements for a thorough software development plan (if applicable) and plans for implementation and updates or to include a proposed test process plan;
- requirements to describe use of the chosen programming environment (e.g., Web or client/server) and commercial-of-the-shelf GIS software (e.g., ESRI, Integraph, or Autodesk);
- requirements for appropriate software documentation;
- requirements for an open systems architecture and architecture performance verification;
- requirements for prototyping, benchmarking, and/or demonstrations (ideally, a demonstration of an executable architecture as part of the proposal);
- requirements for a progress, process, and quality measurement program;
- requirements for a risk management plan if a development project;
- requirements for a GIS process improvement plan and its implementation;
- requirements for developing interface software with other system software and/or hardware (e.g., a custom GIS and relational database interface); and
- requirements for application of formal business processes that do not follow a “boilerplate” vendor approach.

In sum, the Scope of Services defines the specific duties to be performed by the vendor and the expected outcomes. These include both project outcomes (e.g., more GIS user stations within the local government) and systems outcomes (e.g., trained staff, interagency coordination, and improved automation). Additionally, the Scope includes a detailed listing of vendor and agency responsibilities, as well as those of any partnering agencies or subvendors.

Finally, while the Scope of Services states the specific tasks to be performed, it must not tell the vendor how to do the required work. The agency’s concern should

be the resulting deliverable, not the process to create it. The vendor will provide that information. Do not spell out specific qualitative and quantitative technical requirements in the Scope of Services. Vendors should propose their solution to the stated need of the agency.

Scheduling and Budget Requirements

Project schedule. Have the potential vendor provide an estimate of how long it will take to complete the project and when work can begin. The agency should provide an estimated start date and any absolute deadlines that have been developed and indicate when the project must be completed. The agency can then compare the project schedules of the potential vendors to see if there are significant discrepancies.

Sometimes the project schedule is referred to as a WBS, or work breakdown structure. The WBS is highly integrated with the Scope of Services. As previously mentioned, the Scope of Services is the primary document for translating performance requirements into contractual tasks. The Scope must be consistent with the WBS. It also should contain subtasking information as needed.

Selection schedule. The selection schedule depends on the required completion date for the tasks covered by the RFP in accordance with the overall project schedule. Additional scheduling factors include: 1) when the RFP was issued; 2) the time required for review and selection; and 3) the due date for submittal of the recommended selection to a formal governing board such as a GIS Steering Committee or Board of County Commissioners. When setting the schedule, the agency should consider the following:

- When must the work be completed to achieve the overall project objectives?
- When must the project kick off to be completed on time?
- How much information is needed to make a qualified decision?
- Is it planned to select from the proposals or will there be a short-list and interview process?

- How many individuals, committees, and boards must review the proposals before a decision can be reached?
- How will the RFP be disseminated (invitation or advertisement)?
- What procurement requirements are in place for notification and posting of the RFP (a minimum of 30 days, 14 days, etc.)

Of course, potential vendors would like as much time as possible to respond. If their time to respond is severely limited, the responses will likely be insufficient. Depending on the complexity of the GIS RFP, a deadline may be anywhere from 3 to 10 weeks after the RFP has been made public.

Provide a full schedule of events in the RFP, including:

- timeline for the vendors;
- date of the RFP release;
- pre-bid meeting (optional);
- letter of intent to respond (optional);
- submission of clarification/questions;
- response to clarifications/questions;
- proposal due date — deadline;
- vendor presentations (if required);
- contract award; and
- notice to proceed.

Budget. There are several advantages to providing general budget information in the RFP to potential vendors. The information allows the vendor to become aware of the scope of the project and to provide several alternative approaches to solving the proposed problem or providing an adequate product or service within the budget. The project budget provides information about what the agency expects and what level of response is appropriate.

In some cases, it may be more appropriate to ask the vendor to supply a cost proposal with their response, without provision of any budget information by the agency. The agency may wish to do this under the

following circumstances:

- Cost is a key criteria used in the evaluation process.
- Products or services have been deemed essentially the same in earlier studies, and cost is the only differentiator.
- A complete budget has not yet been approved, or the amount of funds is not known.

Withholding information on the budget should be avoided because it increases the risk for the agency as well as the potential vendor.

Evaluation Criteria

Properly completing the previous steps will help the RFP development and contracting process by minimizing misunderstandings, reducing changes in the Scope of Services, and keeping the project within budget and on time. This will allow the agency to focus on the next essential portion of the RFP, which is the establishment of evaluation criteria.

Evaluation methodology. The evaluation team should establish a methodology that defines the decision-making process when evaluating the RFP. At a minimum, this methodology should include the following:

- review submission for completeness and format (some proposals could be disqualified for incomplete information provision, etc.);
- evaluate the technical proposal in detail to ensure that the vendor understands the project and has presented a methodology and schedule that meets your needs;
- evaluate the cost proposal;
- rank the proposals;
- short-list vendors for oral presentations (note: this step is optional and the number of vendors should be limited to three or less to keep costs down); and
- project award.

Evaluation criteria. The evaluation criteria section of the RFP informs the potential vendors of the relative order of importance (quantitatively and qualitatively) of the criteria, so that an integrated assessment can be made of each vendor’s proposal. The RFP project team develops the mission capability, proposal risk, performance confidence assessment, and cost/price evaluation factors for the evaluation. Hardware or software specifications must be thorough, and source selection evaluation factors should be rigorous.

The evaluation factors should only measure the items that are valid discriminators and directly traceable to requirements. The RFP should require that for each vendor sufficient information be submitted, including the following:

- relevant experience and qualifications (e.g., GIS software, integration, and application development); this will be required by all vendors and subvendors;
- specific application tool availability;
- product assurance/quality assurance (if applicable);
- team skills and experience;
- software and hardware maintenance support;
- project management capabilities;
- availability in terms of resources and schedule;
- project approach and methodology; and
- current references and references for past implementation of projects for similar or relevant work.

The vendor’s proposal should describe how their product, service, and/or process will satisfy GIS requirements and desired functionality if this is a development project.

For evaluating the proposals, the GIS RFP typically involves a weighting system. An example is shown below.

| EVALUATION CRITERIA | PERCENTAGE |
|-----------------------------|-------------|
| References | 10% |
| Organization and Experience | 20% |
| Staff Qualifications | 10% |
| Technical Proposal | 30% |
| Cost Proposal | 30% |
| Total | 100% |

Weightings vary depending on the agency and the nature of the project. Sometimes additional criteria are included, such as the minority- or women-owned business inclusion, proposed technological innovations, or for transition plans. As another example, the evaluation criteria could be more refined, where a weighted rating is equal to the assigned weighting multiplied by the vendor rating. Using the evaluation criteria below, a sample calculation for a vendor may look as follows:

$$\text{Hardware requirements} = (20\%) \text{ assigned weight} \times (0\text{—}100 \text{ points}) \text{ vendor rating}$$

In this case, the vendor can achieve a weighted rating between 0 and 20 points.

The remaining criteria would be determined similarly, resulting in a value that the vendor receives as a percentage of a total.

Evaluation Criteria

1. Hardware requirements, including memory capacity (RAM), CPU, cycle time, storage medium and amount, and speed and quality of printer.
2. Operating System Characteristics, including language requirements (compilers), DBMS, and utility programs required.

3. Application software, including mapping, reporting, querying, inventory, permits, and zoning.
4. Special Requirements training, manuals/documentation - hard copy or digital, assist in file conversion, maintenance, and programming support.
5. General, including delivery and acceptance standards.

Lowest bid vs. best value approach. Of all the issues to be considered in the bidding process, the most problematic is how to evaluate proposals fairly and select the best vendor for the job. Vendors and local government agencies generally agree that the present methods of evaluating proposals place too much emphasis on the proposed cost of service and not enough on factors such as the quality of the proposed approach, the value of technological enhancements, and the skills and experience of the vendor. Therefore, costing information from the vendor should be provided separately from the technical portion of the RFP in order to ensure evaluation on technical merit and best solution, then on cost.

“Best value” is part of a recent trend for government agencies to develop a wider strategy to modernize local government. It involves placing a duty on local authorities to obtain the best value from services. The aim is to place an emphasis on the quality of service as well as the cost, rather than the “lowest-bid wins” approach so common in past government contracting practices. One of the disadvantages of lowest bid is that it produces a climate of fear, resulting in failure to disclose information even between departments of local agencies. In addition, it does not guarantee the best quality of services. The real danger of unrealistically low bids, even when the vendor is well qualified but forced by the competition to underbid, is that eventually service quality suffers.

With the advent of best value, a duty to consult with users, employees, and community organizations is

placed on local authorities in the preparation of plans for services and facilities and in assessing performance of these services against best value criteria. Thus, best value represents a culture change for local agencies. They now need to focus on effectiveness and quality as well as economy and efficiency. The aim is toward greater accountability, which necessitates openness and transparency, as opposed to the closed approach of lowest bid. To make best value work, local agencies need to become skilled at carrying out fundamental policy and performance reviews, often together with other agencies. They must also develop their skills at procuring services to obtain the best service delivery possible. Best value supports improved performance measurement when departmental services need to be integrated with those delivered by other public or private agencies and service providers.

Proposal Format

Content specifications. Proposals are time-consuming and costly to prepare. If the process is too cumbersome in comparison to the size of the project, the number of vendors willing to respond to the RFP will be limited. By only asking for information that is truly important in the selection process, the review will be streamlined, since there will not be unnecessary information to evaluate. This may also result in an increase in the number of responses. There has been a growing trend among project administrators to limit the number of pages that vendors may use, either in the entire proposal or in certain sections of the proposal.

Proposal preparation instructions. The proposal preparation instructions tell potential vendors how they must structure their proposals. The instructions must be consistent with the proposal evaluation factors included in the previous section of the RFP and contain sufficient guidance to ensure that proposals are properly formatted and have the information necessary for evaluation. The following contains information about putting together a required proposal format. The format will vary

depending on the type of GIS contract being procured. Following a specified format will allow for consistency through the evaluation process.

1. *Introduction.* Clearly define the expected proposal format, to whom and how the proposal should be delivered (including the number of copies, whether digital submissions will be accepted, and should one be clipped for copying purposes), and how questions regarding the RFP will be handled (will the agency publish all vendors' questions and answers to all potential vendors). Another option is to ask for a Letter of Intent from the vendor. This will give an indication of how many proposals to expect and therefore the level of time and effort involved in the RFP. The Letter should not be mandatory. If a Letter of Intent is not submitted, it does not preclude the vendor from submitting. However, it may reduce the number of vendors who will receive responses to questions or any clarifications that are produced at a later date.
2. *Content.* Define the section layout of the proposal. Ensuring a consistent proposal format and content will save time in the evaluation process.
3. *Cover/transmittal letter.* This should include, at a minimum, a statement that the agency is intending to purchase a GIS product or service (Note that since the RFP is a tool ultimately used to choose a vendor's product, the statement should not say that the agency is intending to purchase any particular vendor's product). The letter may also contain any organizational information, such as the type of facility, size, annual revenues, growth pattern, expected future growth, mission, purpose, etc. Instructions to the vendor may also be included in the letter.
4. *Response Date.* The agency issuing the RFP needs to communicate a deadline for vendor response. This should include the time of day (e.g., Friday, April 1, 2002 at 3:00 pm Eastern Standard Time). It is also common to include a statement informing the vendor that their company will not be considered after a given date. List all dates of importance - Letter of Intent, questions and clarifications, responses to questions and clarifications, pre-bid meeting, proposal submission, and award date.
5. *Number of copies.* Since an agency typically has a team of people working on the project for which the RFP is required, specify how many copies of the vendor's response are needed. Multiple copies will make the review process easier for the agency and take the burden of copying off of the project manager
6. *Deadlines.* Keep the deadlines for the project realistic. Offer the vendor timelines that are flexible, but will enable the agency to meet its goals for project implementation and completion. Informing the vendor of the agency's desired timelines will better enable them to offer the most accurate feedback and pricing information. The deadline for evaluation of all the RFPs should also be included.
7. *Organization contacts.* During the proposal development period, several questions or issues may arise that need clarification before proposal submission. The vendor should be given a contact name in the Purchasing/Contracts Department that will serve as the single point of contact throughout the RFP pre-submission process. However, a specific date should be established that will serve as a cut-off for all questions. In addition, all vendor questions should be provided in writing. The responses to these questions and written clarifications should be released to all vendors or those who have submitted letters of intent to respond.
8. *Formal vendor presentations.* The RFP should include a section informing the vendor that the agency may require a formal presentation or demonstration of the vendor's product(s). This section may be worded in a way that allows the agency to receive presentations prior to any internal evaluation process or only after RFP evaluation, when the list of potential vendors has been narrowed. The presentation or

demonstration section should state exactly what the agency expects to see or hear. A statement notifying the vendors of their responsibilities for any expenses associated with the presentation or demonstration also should be included if an oral presentation is required.

9. *Project background, overview, and Scope of Services.* These sections are the most important to the RFP. Their purpose is to let the vendor know what the agency will actually require of the GIS product or service. This requires the agency to identify its list of requirements and the optional products and services.

The following are sample questions that the agency may want to include in the Scope of Services section. They are important as they enable the vendor to communicate the following information to the agency:

- Are all the necessary product/services included?
- Does the vendor provide all the products and services?
- Can the products be integrated with the agency's current software?
- Are the products updated? How often? Is maintenance and support available?

10. *Hardware and software specifications.* This section is also important to the RFP. Its purpose is to offer the vendor a guide that shows the agency exactly what hardware and software will be required to implement the GIS project.

The following are sample questions that may be included in the Scope of Services section. They enable the vendor to communicate the following information to the agency:

- Is the agency's current hardware and software adequate?
- Does the vendor include hardware and software in their pricing?

- Can the hardware and software share applications with those applications already used within the agency?
- Will the vendor survey the agency's location and plan the site?
- Can the vendor provide programming support if required?

11. *Warranties.* The RFP should outline the agency's expectations of warranties. The agency may outline the exact terms it requires or simply state a request and negotiate later.

12. *Product maintenance.* The RFP should outline the agency's maintenance expectations. The vendor should use this section to outline maintenance plans and options that are available to the agency. Both sides may wish to negotiate this section once further evaluation of the RFP is completed.

13. *Training and support.* The agency should require the vendor to outline training and support policies and procedures. The vendor may have specific training and support plans that apply to the products and services to be utilized in the project. The vendor should map out all training and support that is included as well as any additional training and support that may need to be purchased separately. The agency should also request that the vendor outline any time frames regarding the training and support. All additional expenses incurred due to travel should be outlined and the responsible party identified.

14. *References.* The RFP should request a list of references from the potential vendor. A standard guideline is a minimum of three references, but not to exceed five. The references should list clients with relevant projects of similar size and scope of the agency's project as well as similar objectives. If it is of value, the references may be categorized by sector (e.g., local government references or more localized such as local government references in Michigan). Identifying references in a particular state may but does not always imply the vendor familiarity with local

government operations and laws that govern them. Reference checking can be conducted before, in conjunction with, or after the evaluation process. The list should include:

- client organization;
- location;
- facility size;
- phone number;
- fax number;
- e-mail address;
- contact person and title;
- product or services provided; and
- project completion date.

15. **Quote/cost.** This section should be as specific as possible. The agency should request the format in which it would like to see the pricing information. How the agency requests costs to be presented is critical to the evaluation process. These can be defined by deliverables, components, hours, etc. Costs must be submitted in the same way to ensure consistency in the evaluation and for an “apples to apples” comparison. The RFP may specify that the agency wants to see the costs outlined in more than one format with different components. For example, one format may include a software and hardware cost quote versus a software-only cost quote. This section may require input from other departments throughout the local government agency, such as purchasing or human resources. The RFP should also request information on additional project team rate schedules for added or optional tasks and services that may come up during the project. Costing for optional items should be represented as separate line items.
16. **Evaluation criteria and evaluation of proposals.** In this section of the RFP, the criteria that will be used in the agency’s evaluation process should be explained to potential vendors.

Typical criteria that should be included:

- the vendor’s previous experience with similar projects;
- a firm understanding of purpose, expectations, and complexities of the project;
- a statement of understanding;
- the approach and scope;
- the expertise of the professional staff;
- total estimated project costs;
- compliance with the RFP requirements; and
- quality and completeness of work and plan.

17. **Term of contract.** The expected length of the contract and any options for renewal are provided.
18. **Deliverables.** Explain that the vendor must list and schedule all products, reports, and plans to be delivered to the contracting agency. This could be covered in the Scope of Services section or in a separate “deliverables” section of the RFP.
19. **Outcome and performance standards.** If the contracting agency has existing performance standards, they should be listed here. The outcome targets (e.g., 500 users with access to Web-based GIS maps) and minimum performance standards (e.g., map draws in 35 seconds) expected of the vendor should be noted, including all federal and state standards. Methods for monitoring performance and process for implementing corrective actions should be stated as well.
20. **Payments, incentives, and penalties.** The terms of payment for adequate performance should be noted. Any basis for incentives for superior performance and/or penalties for inadequate performance or lack of compliance should be listed, if applicable.
21. **General contractual conditions.** Include any standard government contracting forms, certifications, and assurances that are boilerplate requirements from the procurement department.

22. *Special contractual conditions.* Include forms for requirements unique to this contract (e.g., the size of the performance bond).

Visual specifications. Consider what items will help the agency quickly and easily review the proposals. Here are a few items to consider:

- Cover of the proposal: the agency may request that certain identifying numbers, dates, or names be on the cover.
- Maps and/or photos: color or black and white.
- Binding: depending on copying requirements, the agency may request three-ring binders, plastic comb binders, or unbound proposals.

Timing of the RFP. In terms of the RFP release timing, the RFP process should include an invitation to the prospective vendors notifying them of an interest in obtaining a proposal that will meet required specifications. It is important that all vendors be notified simultaneously and that they are given a reasonable length of time in which to respond. It is also important to clearly state that responses received after the established deadline will not be considered

Writing an RFP does not need to be a difficult process. However, the process does need to be completed in a manner that will benefit the agency. Since the RFP will be the most effective tool for the agency to base its decisions upon, the time spent creating the RFP should be considered valuable to the project.

Proposal Evaluation Process

There are several steps in the evaluation process that will take place once proposals have been received from potential vendors. The steps are briefly discussed in the following sections. These steps are not in a particular order, but rather should be utilized as a whole for the RFP evaluation process.

Evaluation team. The evaluation team should be comprised of several of the members of the project

team that developed the RFP. Depending on the type of GIS RFP, the evaluation team may include some of the following personnel:

- GIS project manager;
- subject matter expert;
- information technology expert;
- MIS manager; and
- Web-programming specialist.

Obviously, this is only a sample list. Each agency will need to construct an evaluation team based on RFP requirements and staff allocation and availability. Instructions for evaluation have been articulated and should be put together to guide the team as well as set their deadlines.

Evaluation assessment approach. A team-based evaluation should include a process that balances group discussion and decision-making with organized scoring and ranking. The RFP team is comprised of a number of individuals, each bringing certain knowledge and strengths. The agency should make the best use of this expertise by relying on experts to review aspects of the proposals about which they are knowledgeable, and share their insights with the team. For example, a database-creation RFP team may have a surveyor that evaluates data-collection aspects of proposals, although they may know little about the data modeling aspects. Likewise, the information technology expert may have the expertise to evaluate the database implementation and operation aspects, but know little about the data content or quality. Team evaluation should include the best use of expert knowledge to evaluate and enlighten other team members. (Somers, 1996)

Structured methods for scoring and ranking proposals may also be necessary. A proposal evaluation assessment form depends on the type of GIS procurement and will include various criteria such as cost, reliability, management capabilities, and maintenance support that were specified in the evaluation criteria section. One of the easiest and

most comprehensive methods that could be utilized is to construct two spreadsheets to perform side-by-side comparisons. Use one for quantitative assessments and the other for qualitative assessment.

It is important that the prospective vendors understand the evaluation criteria. The quantitative assessment spreadsheet should include each section and requirement as specified in the RFP, in the Scope of Services, and in the proposal format sections, along with a rating system weighted by agency criteria. This matrix is useful for tracking vendors' scores.

A qualitative assessment is equally as important. Although somewhat subjective, this spreadsheet would help determine the overall feel for vendors' responses. How well do the vendors understand the business requirements? Are the vendors flexible? How well do they understand the agency's situation? A similar rating system could be utilized for the qualitative assessment as well; however, because these assessments are somewhat subjective, they should be given less weighting than the quantitative criteria.

Proposal review and question follow-up. Once the proposals arrive and have been opened by the Procurement Department, the assessment form is read and completed. Often, it is best to read the vendor's bid more than once before assessing. If time permits, review the proposals again a day or two after the initial assessment. Make sure that the assessment is independent of any other review. It may be surprising how the assessment may change. Compile a list of questions for the vendor while assessing each bid. Did the vendor address 100% of the requirements in the Scope of Services? If an answer does not seem to make sense, the vendor may have misunderstood the requirement.

If time permits, give vendors a chance to clarify their proposals, either in print or in person. The agency could choose to submit questions to each vendor and request a written response, or have vendors address questions at their proposal presentation. The most

efficient way is to have only those vendors who are on the short list submit answers to written questions, as the other vendors should have been eliminated due to various other criteria (i.e., cost, schedule, and references). Near the end of the assessment and question phase, the agency should have a very good idea which vendors can capably meet the agency's needs.

Reference check. The local government agency should check a minimum of three references of current and past performance evaluation of the potential vendor. Although it is unlikely that the vendor would provide bad or insufficient references, it is important to check references in case a discrepancy emerges or additional information may be made available that could differentiate between vendors. The reference check should follow a list of questions previously developed so that each reference is asked the same questions. The questions should leave room for discussion, but one essential question is "would you hire this vendor again." The reference checks should be accomplished by the same person for consistency sake.

Vendor interviews. There are two circumstances where vendor interviews may be required: 1) it is the policy of the local government agency to short list a minimum of three vendors for interviews; or 2) there is not a clear best choice from the proposals. The vendor presentations should be used as a final qualitative assessment of the candidates.

Final assessment. If none of the proposals meet all of the stated GIS requirements, the RFP efforts still have been valuable. The agency could choose to only outsource the components of the RFP that vendors can meet. For example, if the agency needs to update parcel and right-of-way boundaries frequently, it might not be cost feasible to outsource parcel and right-of-way maintenance.

In any case, the RFP exercise will give the agency a comprehensive understanding of the GIS functions

that are strategic to the business processes that cannot be outsourced, as well as the tactical functions that make good outsourcing candidates.

Final considerations. Before signing a contract with a vendor or vendors, review all of the project requirements as noted below:

- Review the processes. Take a final look at the vendor's implementation, development, management, needs assessment, and modeling processes. Make sure the Scope of Services meets the agency's needs.
- Meet the personnel. Meet the vendor's management personnel and make sure that they meet the agency's qualification and experience requirements.
- Finalize the contract. Review the contract, paying special attention to vendor deliverables and scheduling requirements. Make sure that they are reasonable.
- Ask questions. Get answers to any final questions.
- Look for quality. Look for quality in the vendor's products, services, processes, tools, and personnel.

GIS Procurement and RFP Process Review

The purpose of this section is to provide a checklist of the major highlights of the GIS procurement and RFP development process. From the time that the RFP is released until contract signing, the local government agency must complete most, if not all, of the following tasks:

- distribute the RFP to all interested parties;
- request a letter of intent to respond (optional);
- receive and respond to written questions about the RFP and send responses to all interested parties;
- conduct a pre-proposal conference for interested vendors;
- produce and distribute a transcript of the conference to all interested parties;

- distribute any amendments to the RFP resulting from vendors' inquiries;
- receive, review, and rank proposals based upon evaluation criteria outlined in the RFP;
- check vendors' references;
- request written clarification of proposal information from some vendors;
- hear oral presentations from top-rated short-listed vendors;
- recommend a winner to the appropriate decision-making authority, complete with documentation for the recommendation;
- negotiate amendments to the proposed contract with the vendor selected;
- notify other vendors of the impending decision;
- respond to inquiries or protests from the vendors not selected; and
- participate in a public meeting in which the contract award is made (common for city and county contract awards).

Improving the RFP

Several key elements of the RFP should be emphasized to ensure an effective RFP:

- Clearly define the outcomes to be achieved under the contract and evaluate the technical proposals based on how likely each vendor is to achieve these outcomes using the resources and methods proposed. Evaluate cost proposals on the potential return on investment, rather than on cost efficiency.
- Use a "best value" procurement method that allows the agency to select the vendor whose proposal offers the best combination of cost and technical features (e.g., qualified staff, automation, and management innovation), even though the award may not go to the vendor with the lowest bid. However, the agency should not pay significantly more for slightly superior technical features. Cost considerations, while important, should be secondary to technical scores when evaluating proposals.

- The RFP should place more emphasis on what the vendor is to accomplish rather than how it is to be accomplished.
- More detailed proposal review criteria need to be developed and used that can differentiate unacceptable technical proposals from acceptable and superior proposals.
- Proposal evaluation criteria, along with their relative weights, need to be clearly stated in the RFP.

The Importance of a Comprehensive RFP

The importance of a comprehensive RFP cannot be overstated. It is a multipurpose document that, among other things, must clearly communicate the purpose and goals of the project to be executed, promote lively competition among potential vendors, and generate high-quality proposals that can be rated objectively. With minor modifications, the Scope of Services described in the RFP will closely resemble the requirements in the product or service contract.

A well-written RFP is the foundation of a solid contract. Therefore, it is important that the RFP describe in detail the purpose of the contract, the vendor's duties, the expected outcomes and deliverables, performance standards, methods for payment and penalty, and the responsibilities of the vendor.

A comprehensive RFP provides the following:

1. The agency is required to think, discuss, and develop what their department requirements are and to provide documentation accordingly.
2. The need to restate the detailed requirements multiple times to each potential vendor is eliminated.
3. The vendor is likely to gain a more precise understanding of the agency needs and therefore a more responsive solution is encouraged.
4. The vendor will provide a more structured and comparable response and therefore allow a more effective evaluation.
5. A potential version of the final contract and Scope of Services will be implemented for the project.



REFERENCES

NOAA, 2000. NOAA/AGF/Acquisition Management Division:<http://www.ofa.noaa.gov/~amd/contra~1.html>

Somers, R., 1996. "How to Implement a GIS," Geo Info Systems, January 1996, pp.18-20.

Somers, R., 2001. Quick Guide to GIS Implementation and Management, URISA.



APPENDIX

Examples of GIS standards and development guidelines

1. Federal Geographic Data Committee:
www.fgdc.gov
2. Maryland State Government Geographic Information Coordinating Committee:
www.msgic.state.md.us
3. MetroGIS - Minneapolis, MN: www.metrogis.org
4. New York State Archives: www.archives.nysed.gov
5. North Carolina: www.cgia.state.nc.us
6. Open GIS Consortium: www.opengis.org
7. Oregon Geographic Information Council:
www.sscgis.state.or.us
8. TriService Spatial Data Standards: <http://tsc.wes.army.mil>



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