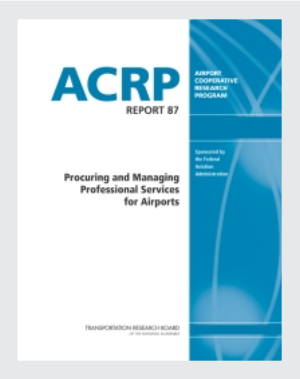

Procuring and Managing Professional Services for Airports

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AIRPORT COOPERATIVE RESEARCH PROGRAM

ACRP REPORT 87

Procuring and Managing Professional Services for Airports

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HNTB Corporation
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AIRPORT COOPERATIVE RESEARCH PROGRAM

Airports are vital national resources. They serve a key role in transportation of people and goods and in regional, national, and international commerce. They are where the nation's aviation system connects with other modes of transportation and where federal responsibility for managing and regulating air traffic operations intersects with the role of state and local governments that own and operate most airports. Research is necessary to solve common operating problems, to adapt appropriate new technologies from other industries, and to introduce innovations into the airport industry. The Airport Cooperative Research Program (ACRP) serves as one of the principal means by which the airport industry can develop innovative near-term solutions to meet demands placed on it.

The need for ACRP was identified in *TRB Special Report 272: Airport Research Needs: Cooperative Solutions* in 2003, based on a study sponsored by the Federal Aviation Administration (FAA). The ACRP carries out applied research on problems that are shared by airport operating agencies and are not being adequately addressed by existing federal research programs. It is modeled after the successful National Cooperative Highway Research Program and Transit Cooperative Research Program. The ACRP undertakes research and other technical activities in a variety of airport subject areas, including design, construction, maintenance, operations, safety, security, policy, planning, human resources, and administration. The ACRP provides a forum where airport operators can cooperatively address common operational problems.

The ACRP was authorized in December 2003 as part of the Vision 100-Century of Aviation Reauthorization Act. The primary participants in the ACRP are (1) an independent governing board, the ACRP Oversight Committee (AOC), appointed by the Secretary of the U.S. Department of Transportation with representation from airport operating agencies, other stakeholders, and relevant industry organizations such as the Airports Council International-North America (ACI-NA), the American Association of Airport Executives (AAAE), the National Association of State Aviation Officials (NASAO), Airlines for America (A4A), and the Airport Consultants Council (ACC) as vital links to the airport community; (2) the TRB as program manager and secretariat for the governing board; and (3) the FAA as program sponsor. In October 2005, the FAA executed a contract with the National Academies formally initiating the program.

The ACRP benefits from the cooperation and participation of airport professionals, air carriers, shippers, state and local government officials, equipment and service suppliers, other airport users, and research organizations. Each of these participants has different interests and responsibilities, and each is an integral part of this cooperative research effort.

Research problem statements for the ACRP are solicited periodically but may be submitted to the TRB by anyone at any time. It is the responsibility of the AOC to formulate the research program by identifying the highest priority projects and defining funding levels and expected products.

Once selected, each ACRP project is assigned to an expert panel, appointed by the TRB. Panels include experienced practitioners and research specialists; heavy emphasis is placed on including airport professionals, the intended users of the research products. The panels prepare project statements (requests for proposals), select contractors, and provide technical guidance and counsel throughout the life of the project. The process for developing research problem statements and selecting research agencies has been used by TRB in managing cooperative research programs since 1962. As in other TRB activities, ACRP project panels serve voluntarily without compensation.

Primary emphasis is placed on disseminating ACRP results to the intended end-users of the research: airport operating agencies, service providers, and suppliers. The ACRP produces a series of research reports for use by airport operators, local agencies, the FAA, and other interested parties, and industry associations may arrange for workshops, training aids, field visits, and other activities to ensure that results are implemented by airport-industry practitioners.

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Thomas A. Defant, Jr., served as the Principal Investigator and co-authored this report with Nancy LaFarge, Peter Denitz, and Glenn W. Ridsdale.

Interview Participants

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(continued on page v)

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FOREWORD

By Theresia H. Schatz
Staff Officer
Transportation Research Board

ACRP Report 87 is a handbook that provides guidance for procuring and managing professional services at airports for use by airport owners and operators. For this research, professional services include planning, environmental, architectural and engineering, information technology, financial, legal, and other key professional services provided to airports. The handbook covers (1) the procurement process, including scoping, pre-selection process, selection criteria, evaluation, and contract negotiations; and (2) processes for managing professional services contracts. The handbook considers all sizes and types of airports.

Most U.S. airport owners engage professional services firms to assist them with the planning, design, and management of capital development projects and other professional services at their facilities. Such firms bring resources, specialized technical capabilities, and subject matter expertise needed that may not be available within the airport owners' organization. Resources exist that include best practices for certain elements of procuring professional services, although no comprehensive resource provides recommended practices that can guide an airport from the initial stages of procuring services through to completion. This resource provides well-documented and practical steps that will improve the consultant selection process and engagement of the firm through completion, resulting in successful and high-quality services.

This research was conducted under ACRP Project 01-20 by HNTB. To accomplish the research objectives, the research team conducted a literature review and comprehensive interviews at eleven airports and four non-airport agencies to gather more information on best practices and lessons learned regarding procurement and management of professional services.

A separate final report, which provides background to the research conducted in support of the handbook, has been posted on the ACRP Project 01-20 web page that can be found by searching the TRB website for *ACRP Report 87*.

CONTENTS

Note: Many of the photographs, figures, and tables in this report have been converted from color to grayscale for printing. The electronic version of the report (posted on the Web at www.trb.org) retains the color versions.

CHAPTER 1

Introduction

This Handbook is intended to be useful for all airports—regardless of size, location or governing structure—in refining their practices for procuring and managing professional services. This Handbook will demonstrate the importance of establishing effective, clearly written procedures; well-defined roles and responsibilities; a flexible approach to developing and managing the scope-schedule-cost of services; a transparent and accountable process for soliciting, selecting, and contracting services; and a communication plan and policy for maintaining a trusting relationship and predictable performance in the delivery of those services.

The intent of this Handbook is not to provide a how-to-guide for scope development, procurement, cost estimating, scheduling, contract negotiations, project close-out, or management of professional services—many sophisticated, thorough, and detailed manuals already exist on these subjects. Rather, the intent is to identify critical organizational principles, policies, procedures, strategies, and standards for procuring and managing professional services.

The Handbook profiles best practices, lessons learned, and innovative ideas throughout the Handbook to demonstrate how agencies have implemented a recommended practice.

The Task Force on Values and Guiding Principles for Public Procurement of the National Institute of Governmental Purchasing (NIGP) sets forth three pillars that should guide any successful government procurement. Public Trust is the first—government employees are held to a far higher standard of conduct than their private sector and non-profit counterparts. Second, Public Service requires that procurement officers make the best use of available financial and human resources; good governance requires government employees to use their authority without bias and to use honesty, expertise, and fortitude to pursue the public interest. Third, Justice demands public procurement professionals exercise judgment to balance competing interests among all stakeholders so that decisions and actions are proper, impartial, fair, and appropriate.

How to Use This Handbook

This Handbook will introduce airport leaders to the fundamentals and guide airports of all sizes in developing a framework for successfully procuring and managing professional service contracts.

Today, agencies are faced with increasing demands to do better with less. There are many challenges to meeting the new goals and rising expectations for performance and delivery of services. This Handbook will outline the key elements that guide the use of professional services and the value of adopting a flexible, accountable, communicative, transparent, and strategic direction (FACTS) process for procuring and managing professional services that saves time and money, improves performance, and increases public trust.

The Handbook addresses four major elements of procuring and managing professional services: (1) Organization and Approach, (2) the Procurement Process, (3) Negotiating and Contracting, and (4) Managing Professional Services. Each chapter presents recommended practices, tools, and technology, along with a list of resources for further reference. Key points and common misconceptions discovered through the research are highlighted in text boxes throughout the Handbook. The appendixes consist of a bibliography, glossary, sample forms and model documents.

This Handbook is based on research that included a substantial literature review coupled with comprehensive interviews. The literature search examined hundreds of documents and websites from many industries, including aviation, transportation, and trade organizations. The research focused on

- Project and program management
- Procurement processes and procedures
- Solicitation and selection
- Contracting and negotiating
- Strategic planning
- Project controls
- Quality Assurance/Quality Control (QA/QC)
- Communication and collaboration practices
- Risk management
- Information technology for procurement

The in-depth interviews were conducted by teleconference and in-person with 11 airport agencies and 4 non-airport agencies selected from the literature search. The purpose of these interviews was to gather more detailed information on best practices and lessons learned regarding procurement and management of professional services. The 11 airport agencies interviewed represented 31 airports (10 large-hub, 5 small/medium-hub, and 16 general aviation [GA] airports), along with three state DOTs and one county transportation agency.

Diversity of Professional Services

In these challenging times, an agency's response to increasing demands to be more cost-effective, efficient, flexible, transparent, and accountable rests solidly in the approach to procuring and managing professional services so as to achieve agency goals and outcomes. Procuring and managing professional service providers (PSP) is integral to the delivery of services and should reflect an agencies' mission and goals. Prior to procurement, an agency should identify needs, goals, and project delivery methods as they relate to "core" responsibilities and then determine the need to retain a PSP. The agency then sets forward the strategic approach to procuring a PSP. The relationship between the agency and the PSP is established at this point, is formalized during procurement, and is realized during management of PSP contracts.

Demystifying the procurement process and opening the channels of communication are keys to successful PSP contracts and results. Transparency and clarity of process can save time and money for both the agency and the PSP.

The appropriate processes and methods used in the procurement phase are defined based on agency policies and governing laws. PSP services are diverse and involve a wide variety of tasks and professionals, so the methods also need to be diverse and flexible and carefully selected to allow for effective delivery of services. An understanding of prevailing laws and regulations, as well as agency policies and procedures, will assist in selecting the right fit for the right task. The procurement process needs to be clearly crafted and communicated to all internal and external stakeholders. The use of the agency's legal, audit, and contract professionals throughout the procurement

process can enable a clear, accountable, and transparent process that allows PSP a full understanding of the agency mission, goals, and objectives while also creating the clarity of purpose necessary to deliver needed services.

Providing information and access prior to solicitation saves everyone time and money in responding to agency needs and opens the door to more creativity. Thoughtful decisions about the development and management of scope-schedule-cost, contract type, and selection process can ultimately determine a sound selection and clear a path to achieve goals.

Current Trends and Practices in Procurement and Management

Strong forces are affecting how airports are organized to do business. On the one hand, significant federal and state political and economic changes are resulting in funding constraints and pressure to do business more efficiently and to deliver services with fewer resources. Airport agencies are responding to those changes while facing their own workforce, operational, and organizational challenges because of declining resources, stricter rules and regulations, and changing demographics. PSPs are facing similar challenges while also responding to agency constraints and striving to meet new demands for acceleration and innovation with fewer resources available.

Traditional rules and funding availability at the federal and state levels are also changing. Rules and regulations that govern available funding have become more stringent. The reduction in funding at the federal level adds more pressure at the state and local level for airports to be more selective on spending and more creative in developing partnerships to fund necessary services. Public perceptions are influencing regulation and have increased the complexity of procuring and managing PSPs with requirements to demonstrate accountability, transparency, and cost savings. These shifts are changing the way business is conducted for both airports and PSPs.

The economic constraints to do better with less and to respond to growing demands for services are resulting in airports re-evaluating missions, re-assessing their organizations' core functions, and transferring more and more functions to PSPs. Staff responsibilities are shifting and services are shifting to meet new demands.

Many agencies are losing staff because of retirement and/or downsizing, thus requiring a re-evaluation of what the agency can perform internally and where the agency needs support from PSPs to deliver services. Reductions in staffing levels at airports are posing operational impediments, such as knowledge transfer, succession planning, and effective management of assets and resources (human, financial, and technological). Current resource limitations have an obvious effect on the staffing and training necessary to procure and manage PSPs. It is increasingly difficult to identify the right people with the right skills to serve on selection panels and to manage the procurement, contracting, and management of professional services.

The consequence of these shifting demands plays out differently, depending on the airport's organization, processes, people, and relationships. For many, these changing times have resulted in re-organizations, changes in use of PSPs, and the implementation of different policies and regulations. Without a clearly identified direction and communication of purpose and process, the results can lead to increased confusion and misunderstanding, erosion of process, and a breakdown in the communications necessary to achieve the new demands and requirements.

Common Denominators and Divergent Practices

Many common denominators (e.g., concerns, innovations, and best practices) and divergent practices (e.g., key issues with contrasting or contradictory practices) were revealed through the research and outreach that relate to procuring and managing professional service contracts.

Generally, there are two governing structures for airports. The first governing structure is an authority. Authorities operate in a closed system under one management structure (typically a board of directors) and contain multiple departments (e.g., Procurement, Legal, and Human Resources [HR]) within the organization. All of the departments in an authority report to the board of directors. The second structure is organized under a government agency, such as a city or county (referred to in this Handbook as Airport Government Agencies or AGA). In an AGA structure, the airport is one of many departments, typically not located within the same physical area, and each department reports to a Mayor or Board of Supervisors. In this Handbook, the term "agency" will refer to both Authorities and AGAs. Some of the typical divergent practices as well as common denominators for Authorities and AGAs are summarized in the following subsections.

Procurement Practices

Common Denominators

The research identified three main areas of common denominators: (1) Organization and Approach, (2) People/Partnerships/Relationships, and (3) Process and Procedures.

Organization and Approach

- Authorities were typically more transparent about the selection, contracting, and debriefing processes.
- Authorities often have more procurement tools available and greater control over resources than their AGA counterparts.
- AGAs typically do not directly contract PSPs for Legal, Information Technology (IT), or HR services, which are usually administered by a central governmental department.

People/Partnerships/Relationships

- Qualified, well-trained staff was recognized by most agencies as a critical component of the procurement process, especially in the context of cutbacks in training funds.
- Agencies noted that, as the volume of work increases and staff resources decline, project managers are assuming more responsibility for procuring and managing contracts without formal training.
- Respondents almost unanimously agreed on the importance of effective communication between internal stakeholders and with PSPs to develop a better understanding of the project needs and to help control scope-schedule-cost.

Process and Procedures

- The interview participants recognized the need to be more flexible in the procurement process, but there was also uncertainty regarding how to translate that into practice, and many agencies harbored concerns that flexibility could lead to litigation.
- Scope and budget were cited as the main drivers for determining agencies' needs, and the availability of funding is the central driver in determining the start of projects. Almost unanimously, the agencies interviewed stated that a good, solid scope will reduce future changes, costs, and disputes as the contract progresses.
- Selection criteria were generally consistent among all agencies interviewed, with a focus on qualifications (key staff, project managers, and firms), relevant projects, and past performance.
- Incentives and penalties were almost uniformly not used for PSP contracts. Respondents typically stated that the cost and time required to administer incentives and penalties outweighed any benefits.

Divergent Practices

- Methods used to enhance transparency and provide information to PSPs were often clouded by concerns that the information might not be uniformly provided to all PSPs and result in potential litigation.
- The approach to including local businesses and Disadvantaged, Minority, or Women-Owned Business Enterprises varied considerably, especially across different markets.
- The inclusion of contract restrictions, such as salary caps or overhead limitations, were diverse, especially across different regions.
- Conflicting attitudes emerged regarding fee types. For example, the same rationale (ease of audits and administrative oversight) was applied to both fee types by various interview respondents for selecting either Lump Sum or Cost-Plus Fee.

Management Practices

Common Denominators

- Several interview respondents stated that project controls were performed by third parties, giving responsibility to one designated, and independent entity to perform critical oversight, monitoring, and evaluation.
- A well-defined, high-quality scope of work reduced the number of change orders that occurred during projects.
- Communication among the agency, PSP, and stakeholders was recognized as key to successful project management and delivery. Engaging the various stakeholders in periodic design reviews reduces potential requests for changes to scope-schedule-cost as the projects move forward.
- Many project managers had to rely on their own experiences without receiving any formal training for managing professional service contracts.
- Contract changes most often resulted from previously unknown site conditions or were generated by tenants and other internal stakeholders.

Divergent Practices

- Although recognizing that communication is a key to successful project management and delivery, most agencies did not have a formal plan to provide the strategic vision and performance expectations to internal departments and external stakeholders.
- The role of the legal and audit departments varied among agencies. Some agencies partnered with the legal and audit departments throughout the contracting process, while other agencies only engaged the legal and audit departments to assist with specific issues as they arose.
- Most agencies recognized that the scheduling of work can be affected both by the internal budgeting process and by the FAA grant schedule, but many agencies did not have a well-developed formal process for scheduling.
- The approach to estimating costs varied considerably by agency and was not a clearly prescribed or well-communicated process at most agencies.
- Quality control was acknowledged as an important factor in managing a project, but most agencies interviewed had not implemented a formal quality process with defined roles or procedures.
- The practice of carrying out PSP performance evaluations was generally regarded as important by most agencies, but the subsequent distribution and sharing of the evaluation results with PSPs was generally not formalized and varied from full disclosure to not providing any access because of litigation concerns.
- Agencies recognized the importance of closing-out projects at completion, but few implemented a formal close-out process and several purposely did not close out contracts in case other related tasks were eventually needed.

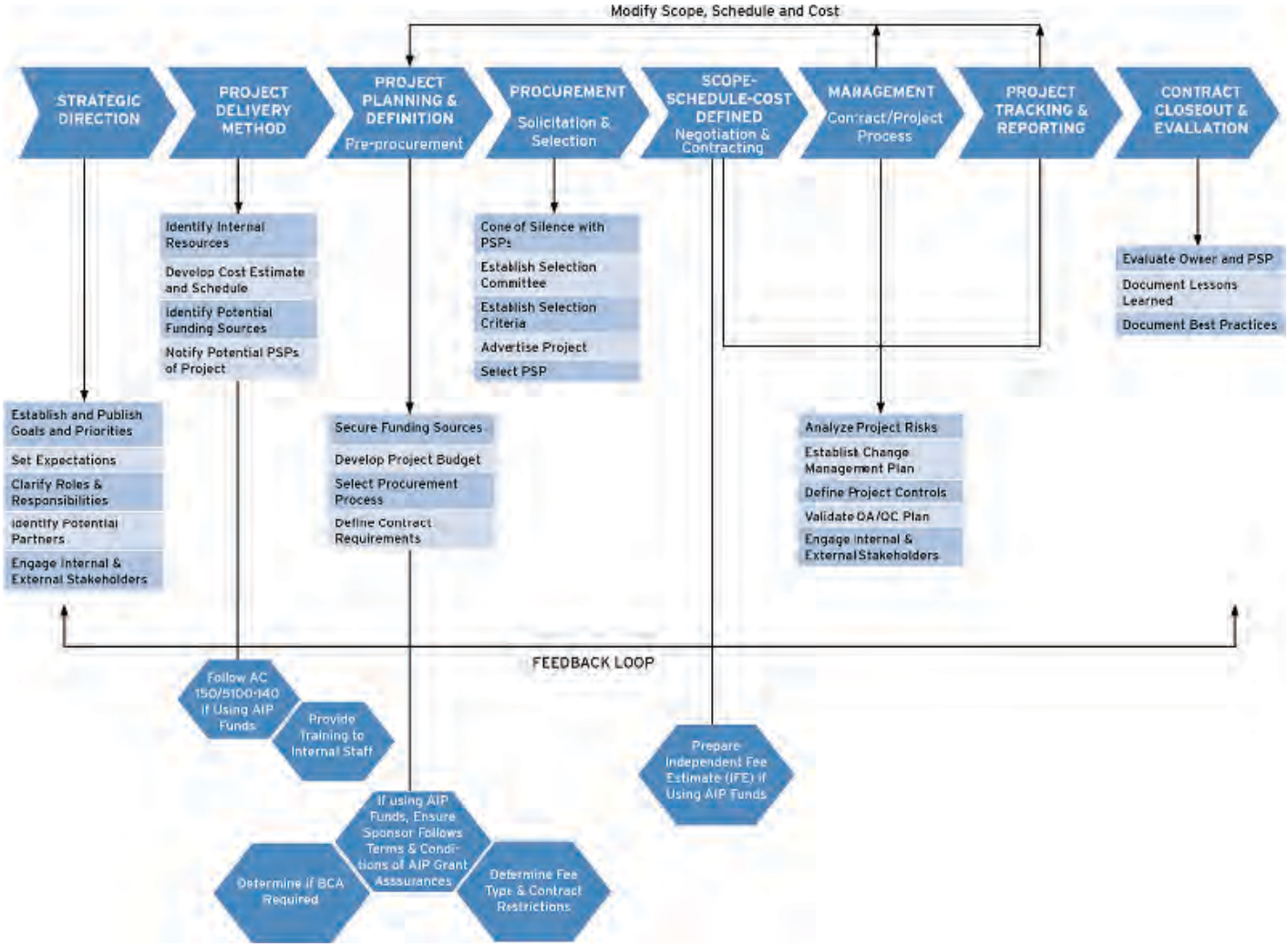


Figure 1-1. Standard critical path.

The best practices and lessons learned regarding these common denominators and divergent practices form the basis of this Handbook.

In addition, some agencies noted the same rationale to justify opposing practices based on a lack of information, misunderstanding of processes, or as a response to political concerns or potential litigation, thereby creating a set of intriguing series of misconceptions. These misconceptions are highlighted throughout the Handbook. Model documents and sample forms are included to demonstrate how other agencies have incorporated successful processes into their organizations.

Figure 1-1 illustrates the standard procurement and management process for professional services at any agency. This process can be adapted to meet the requirements of any airport, regardless of size and organizational structure.

CHAPTER 2

Organization and Approach

The organizational framework is the heart and soul of successful operations and project execution. The mission, guiding principles, and goals of the organization establish the context for policy, procedures, standards, roles and responsibilities, and interactions and communication among departments, stakeholders, PSPs, decisionmakers and customers (see Figure 2-1). This chapter will identify successful organizational principles and management strategies that set the tone for effective procurement and management of professional services focused on quality outcomes.

Organizational Structure

As airport agencies seek to respond to growing demands, fewer resources, and greater public scrutiny, it is imperative to assess how the organization is structured and what resources (e.g., people, finances, and technology) are available to meet those demands. The organization requires a renewed evaluation of what services are best performed internally and what processes are in place to procure and manage services that will be performed by PSPs.

Agencies need to be mindful of the external forces affecting expectations of performance and the delivery of services. Those forces include federal and state prevailing laws, legislation and regulations; labor agreements; funding sources and budgetary obligations; and the needs of customers—agency departments, airlines, tenants, and the traveling public.

To build a more effective organization that will deliver exceptional services as well as increase confidence and investment, it is necessary to harness resources with a clear understanding of the motivations and expectations of the external forces at work. External political, economic, and demographic forces can influence the priorities and structure of an agency. Therefore, it is important to develop a strategic approach to manage and respond to those forces (see Figure 2-2).

It is vital to have a clear understanding of the legal and regulatory authority and the available tools that allow for flexible and innovative approaches to procuring and managing professional services. There may be a need to modify or develop new partnerships or policies to address changing demands and funding availability. Modifications to existing regulations, authority, or process may necessitate an adjustment in organizational approach and resources to communicate the direction and expectations for performance.

Guiding Principles

The guiding principles for procuring and managing professional services begin with a clear vision and a well-communicated approach to an integrated flexible, accountable, transparent and strategic direction to defining scope, schedule, and cost. The vision and strategic direction should be established by the executive leader of the airport agency. In addition, carefully designed procurement and contracting processes will set the tone and direction for the management of PSPs.

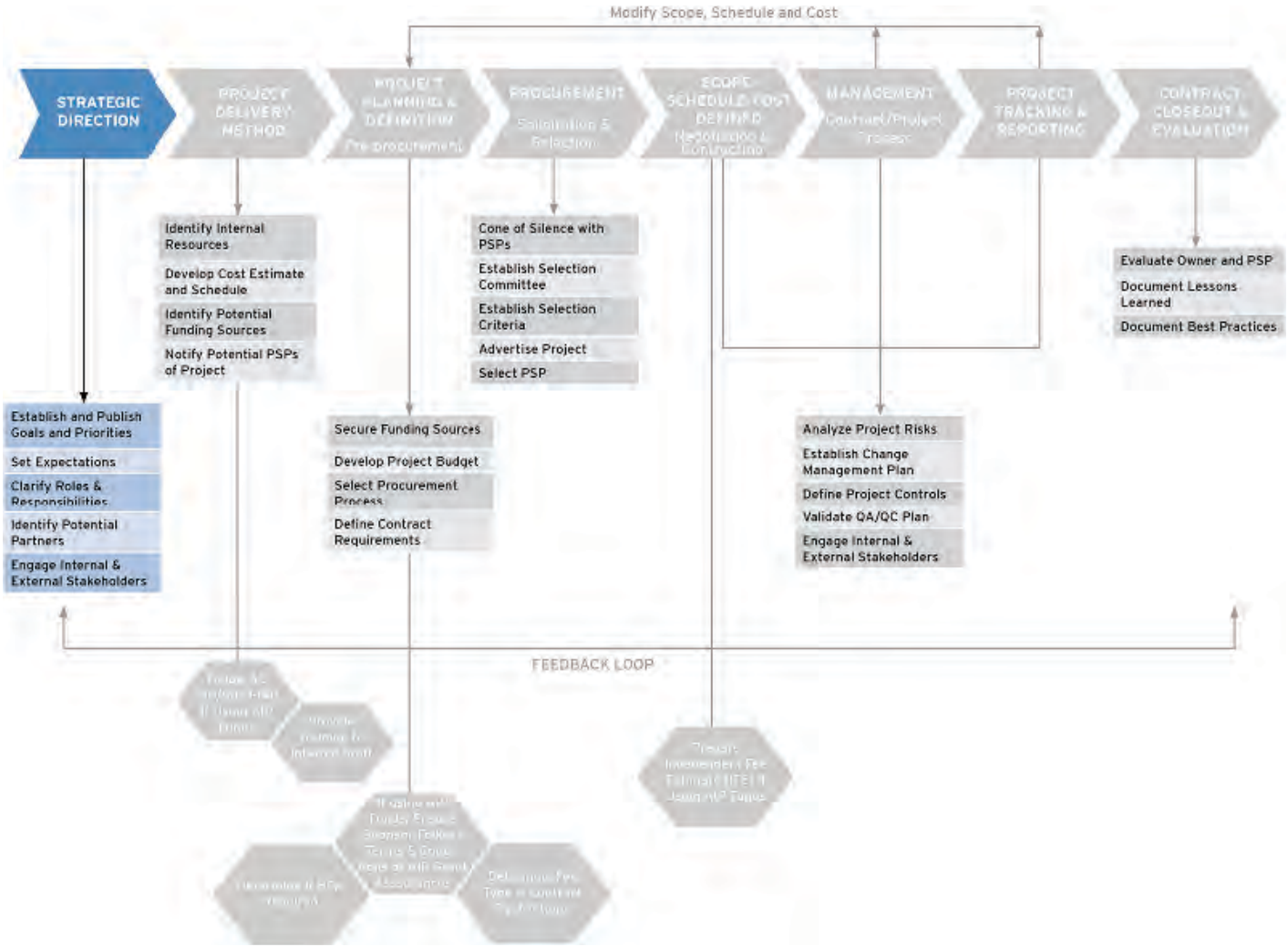


Figure 2-1. Critical path—strategic direction.

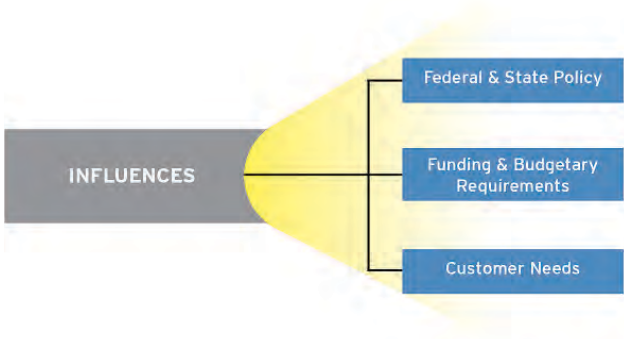


Figure 2-2. Influences on organizations.

As important, a sound procurement process can decrease risk and change orders and ensure a successful delivery of the project in terms of scope-schedule-cost. The practice of tying scope, schedule, and cost together from strategic planning through close-out is critical for managing change and controlling risk. For this reason, scope-schedule-cost will be referenced as one word throughout this Handbook.

Decoupling scope, schedule, and cost will increase change orders, add risk, and jeopardize results.

Several themes emerged from the research that can be appropriately summarized with the acronym FACTS: Flexibility, Accountability, Communication, Transparency, and Strategic Direction. An airport will realize benefits from integrating the guiding principles of a FACTS-based approach into the organizational process to procure and manage professional services.

Empower staff and delegate responsibility to appropriate people with the tools and resources to deliver, measure, and account for performance.

- **Flexibility.** Balance the need to (1) adjust in changing times, (2) work in dynamic political and economic environments, and (3) collaborate with changing expectations, with an accountable process that allows for negotiation and management of various contracting venues and expected services from various expert service providers. Provide flexibility to fit the best process to the service desired.
- **Accountability.** Provide stakeholders with a clear, concise, cost-conscious, and effective process for contracts which provides an open, clear process to validate spending, manage performance, and mitigate conflicts.
- **Communication.** Foster regular, open, and honest communication among the providers of professional services. Establish a line and method of communication early to develop trusted relationships with the stakeholders and a better understanding of needs and expectations.
- **Transparency.** Clearly define needs, expectations, and requirements and facilitate open, honest, and clear dialog on how, why, when, and with whom processes, procedures, and products are developed to achieve buy-in and confidence among all participants. Communicate rules and procedures and set clear expectations to increase productivity and reduce the potential for conflicts.
- **Strategic Direction.** Harness and fit the resources, partners, and funds available for projects that meet agency goals. The need to meet expectations does not diminish when funding is limited. In the face of restricted funding, airport agencies are challenged to be innovative when procuring and obtaining services so as to maximize available funding to realize the goals and needs of the airport. Strategic direction should include identification, evaluation, and coordination of all partners in the process.

As agencies redefine their core missions based on decreased funding and workforce and increased expectations, it is useful to engage many partners to define the current direction and to plan for the future of the organization. For example, as an organization reshapes to adapt to today's constraints, the organization also should be keeping an eye toward tomorrow's opportunities. Succession planning and partnerships are important organizational tools for growth. The specific services provided by PSPs today may not necessarily be appropriate in the future, especially if there is a strategic approach to build more capacity at the agency. Therefore, continual evaluation of core responsibilities, staff resources, and procurement and management strategies need to be flexible and reflect that organizing principle.

The successful procuring and managing of professional services is intrinsically linked to the agency's approach. To execute a strong mission with clearly established goals and expectations of performance, the agency should devise a set of guiding principles based on FACTS, identify the most suitable managers, provide the appropriate resources and tools, and delegate the necessary authority to empower the managers to effectively meet those expectations and to deliver the best services (see Figure 2-3).

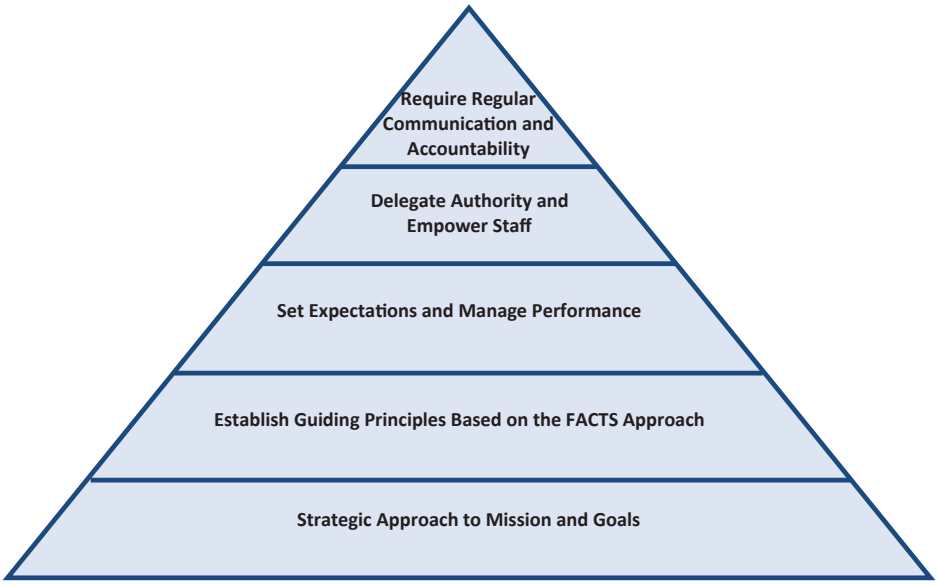


Figure 2-3. Establishing a strong foundation.

Misconception: Flexibility, Accountability, Communication, Transparency, and Strategic Direction (FACTS) Conundrum

Several airports interviewed for this research cited concerns about incorporating flexibility, communication, and transparency into their approach to procurement, expressing fears that doing so would increase the cost of doing business as well as make agencies vulnerable to litigation.

Reality

Contrary to this perception, airport agencies that made information (e.g., selection criteria, selection committee notes, and debriefings) publicly available and established regular communication and evaluation of PSPs were more accountable and transparent and reported fewer disputes and limited litigation. Although it takes time to implement organizational changes to achieve these results, many agencies have found that litigation, costly changes, and inadequate outcomes will decrease, not increase, when the FACTS methodology is put in place.

As public and political pressure increases to improve delivery with fewer resources, agencies need to demonstrate sound accountability and transparency in their processes to gain the confidence of stakeholders. The more open and communicative an agency is, the less confusion and erosion of trust occurs and, therefore, more reliable results are obtained.

Agencies should be more flexible, accountable, communicative, transparent, and strategic to adapt to changing times and meet new and growing demands in a cost–effective manner. The FACTS approach can be implemented without compromising operations and performance when there is strong leadership with a commitment to provide resources and people from the start. The benefits of integrating a FACTS–based approach to procuring and managing professional services can result in an improved process that reduces the cost and time involved and increases the public's confidence in the agency.

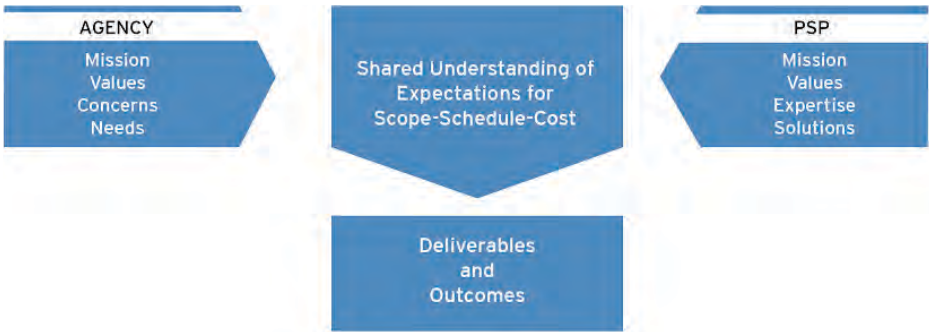


Figure 2-4. Achieving common ground.

Policy and Standards of Performance

The research shows that a formal and clearly defined approach that sets achievable expectations for performance, communication, and accountability is vital for success. This process begins with taking the time to understand the agency's needs and the PSP's orientation to providing needed services. Then ideas, resources, and expectations regarding scope-schedule-cost should be shared (e.g., what is known, what is the risk, what is the plan to manage change and develop deliverables?). This establishes the basis for a common ground in relationships. It is equally important to position the appropriate staff to develop strategic partners as a precursor to building trusted relationships (see Figure 2-4). Relationships built on trust, understanding, a shared vision, and expectations of outcomes can save time, money, and stress for all parties.

Meet, Talk, Learn, Agree, Act

The composition of the management team and the ability of each member to be a mutual resource are essential for delivering better with less. The agency and the PSP must discuss the composition of the workforce, experience, organization of labor, growth opportunities, training, and educational requirements to allow for better sharing of resources. To this end, both sides must take the time early, clearly, and often to discuss concerns so as to identify resources and determine the best approach for delivery of services.

People

Select the right people with the right skills, experience, training, and authority to manage the process, PSP contracts, projects, and services. Basic actions to guide the identification and placement of people are as follows:

- Select, train, and empower the appropriate personnel to procure and manage professional services and to create a platform for collaborative interaction throughout the life of the professional service contract.
- Define roles and responsibilities, and redefine as necessary. Strong strategic direction needs to be established up front and communicated to managers and PSPs regularly and often. The organization and managers need to focus on process, people, and relationships and must maintain high integrity and a commitment to achieving desired outcomes/results.
- Expectations need to be clearly communicated and established to avoid unnecessary risk, project changes, and lower quality.
- Recognize that agencies and PSPs do not consist of just one person. Each has several key managers and decisionmakers who have different views and priorities based on their roles and experience. Know the players and their needs, skills, and resources.

- Understand mutual needs and shared values. This may require bringing different people to the table. Ask questions; identify the needs, concerns, and goals of key players; and come to a shared understanding of expectations and deliverables.
- Assemble the right people for effective outcomes, which are best defined and delivered by using the diverse skills and understandings of different people. Everyone communicates, listens, and understands differently. Collaborate and work together to identify the best approach. One size does not fit all. Each situation is different, and available tools and resources change constantly.
- Be open to change and new ideas. Work with partners to test ideas and develop processes to manage risk but also to identify and track opportunities.
- Evaluation of performance is important. Engage in an evaluation process. Formalize regular meetings to allow for continual monitoring of performance and refinement of actions and practices. Track performance and exchange lessons learned to enhance the ability of the agency and PSP to manage change, modify actions, and improve performance.
- Proactively implement succession planning. Professional service needs change constantly, and the workforce is dynamic. Look ahead and develop staff to manage change, maintain relationships, and prepare for tomorrow.

Misconception: Anyone Can Do the Job

The research found that, as resources become more constrained and the size of the workforce declines, staff is taking on more procurement and management responsibilities with the assumption that they can do both jobs. The workload is not declining but the available staff and training is declining. Agencies experiencing these changes tend to consolidate very different functions under one manager.

Reality

It takes a team to procure and manage PSPs, and various skill sets, experience, and training within the team are required to procure and manage professional services. The research shows that having the right people, appropriately trained and skilled, to perform the required services is at the heart of achieving the best results.

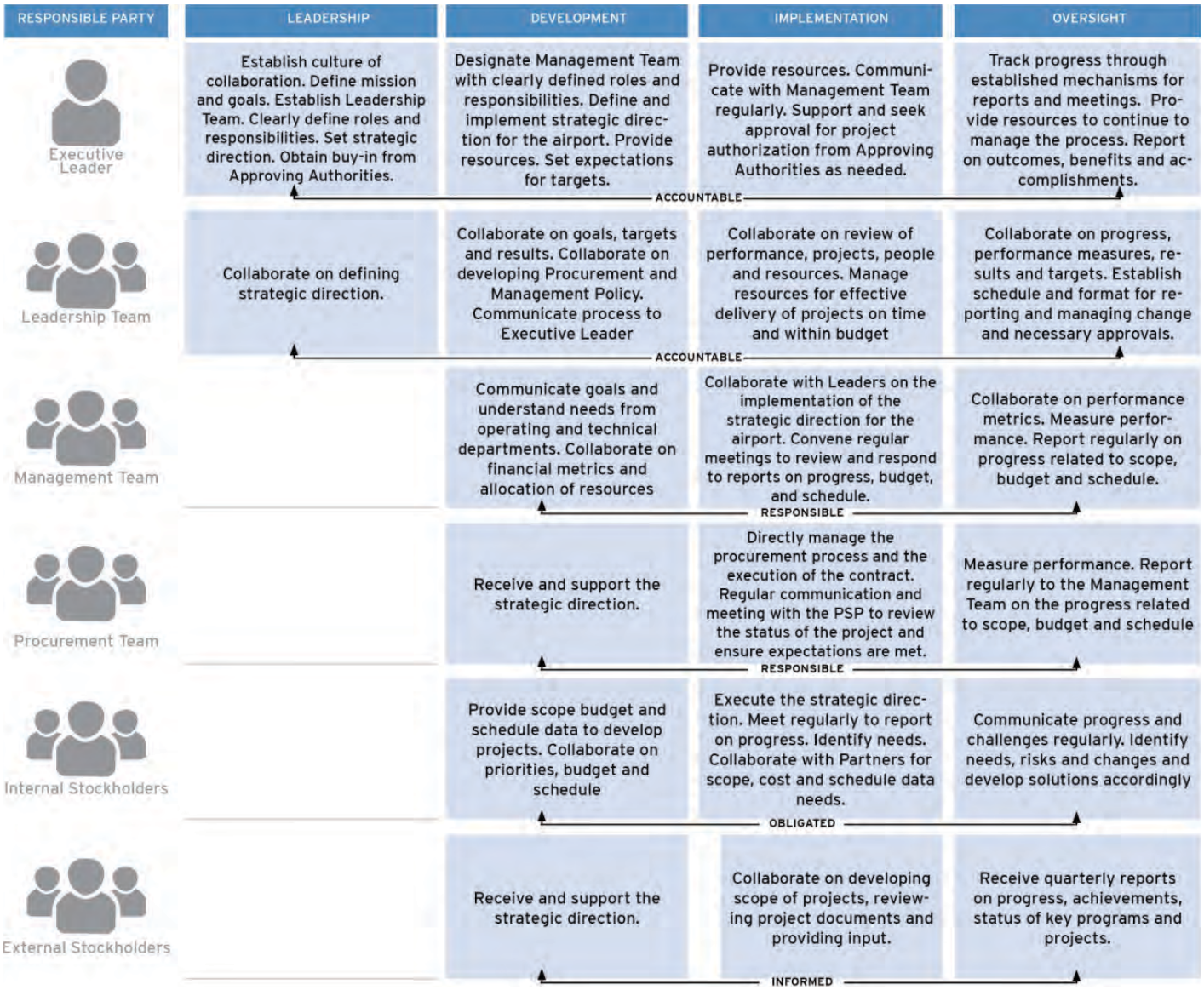
A skilled and competent manager of procurement does not necessarily have the appropriate experience, resources, relationships, and training to effectively manage PSP performance and oversee contract implementation, and vice versa.

At airports with limited staffing and funding, it may not be feasible to convene a comprehensive internal procurement and management team. Some practical solutions to this situation would include cross-training available staff in functions, sharing resources with other airports in the region, or hiring a third party to handle the process.

Roles and Responsibilities

The procurement and management process detailed in Chapters 3 through 5 identifies the potential key participants and their associated responsibilities. As illustrated in Figure 2-5, the following description summarizes the typical responsible parties and their roles in the procurement and management process:

- **Executive Leader.** The individual at an airport responsible for determining the strategic direction of the airport, managing all operations, and accountable to regulatory and approving authorities



Accountable: ultimate ownership of all decisions, actions and outcomes of the Agency
Responsible: executes actions, makes decisions and ensures the outcomes of the Agency
Obligated: actively participates in the process; provides data required to support decision-making
Informed: receives information and provides feedback as needed

Figure 2-5. Responsibility matrix.

for the financial integrity of all operations, programs, and services, including the delivery of projects. The Executive Leader can be the Executive Director or President and CEO of the airport or the Director of the airport facility of a multi-purpose authority, depending on the size, governmental structure, and complexity of the airport.

- **Leadership Team.** The leadership team consists of senior managers responsible for accomplishing the mission and overall operations of the airport. The senior management staff within an airport organization consists of those individuals responsible for overseeing the financial, engineering, planning, operating, administration, and IT departments. The leadership team at a GA or small-hub airport may be the same as the management team.

- **Management Team.** The management team consists of senior managers from those departments responsible for and accountable to develop, implement, and oversee the strategic direction of the agency. The composition of the management team will depend on the size, governmental structure, and complexity of the airport. For example, a management team at a large-hub airport might include a CEO of the authority, director of aviation, director of operations and maintenance (O&M), and senior managers from finance, planning, engineering, and IT.
- **Procurement Team.** A procurement team consists of procurement and project managers who implement individual projects under the strategic plan of the airport, are responsible for delivering the projects on time and on schedule, and are accountable to the project's internal and external stakeholders. The procurement team should be involved in the project from the initial project concept to the final close-out to maintain continuity and ensure that the initial project expectations are met. A typical procurement team might include the contracting officer and the airport's project manager or designee.
- **Internal Stakeholders.** Internal stakeholders are individuals, groups, or departments internal to the airport organization and may include the executive administration, O&M, administrative, and technical departments, and any board of directors internal to the airport.
- **External Stakeholders.** External stakeholders are those individuals, groups, or organizations that exist and operate outside of the airport organization and may include financial, regulatory, and approving agencies such as the FAA; TSA; outside boards and commissions; federal, state, and local governmental agencies; tenants (e.g., airlines, concessions, and car rental agencies); and the general public (e.g., neighbors, advocacy groups, and the traveling public).

Figures 2-6 and 2-7 illustrate two different sample structures for airports of various size and governing structures and where potential participants in the procurement process may fit into the responsible party categories described above. These categories and the responsibility matrix can be adapted to airports of all sizes and structures.

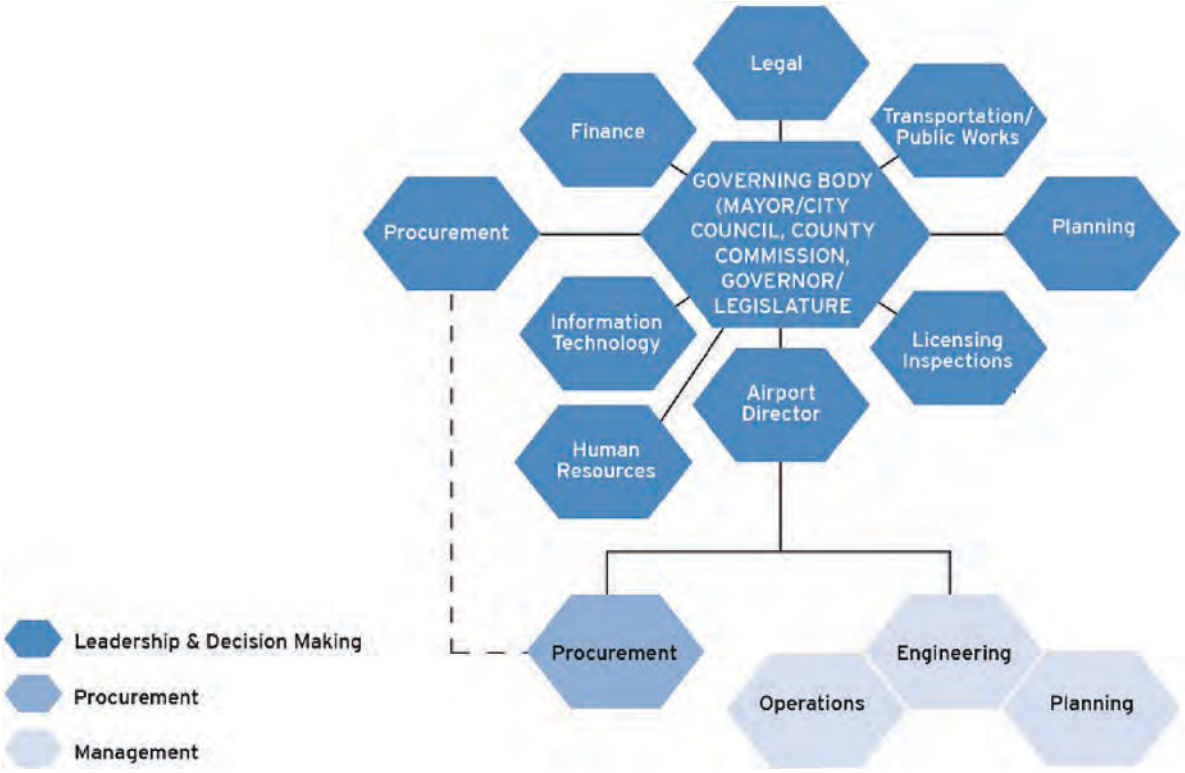


Figure 2-6. Typical structure of AGA.

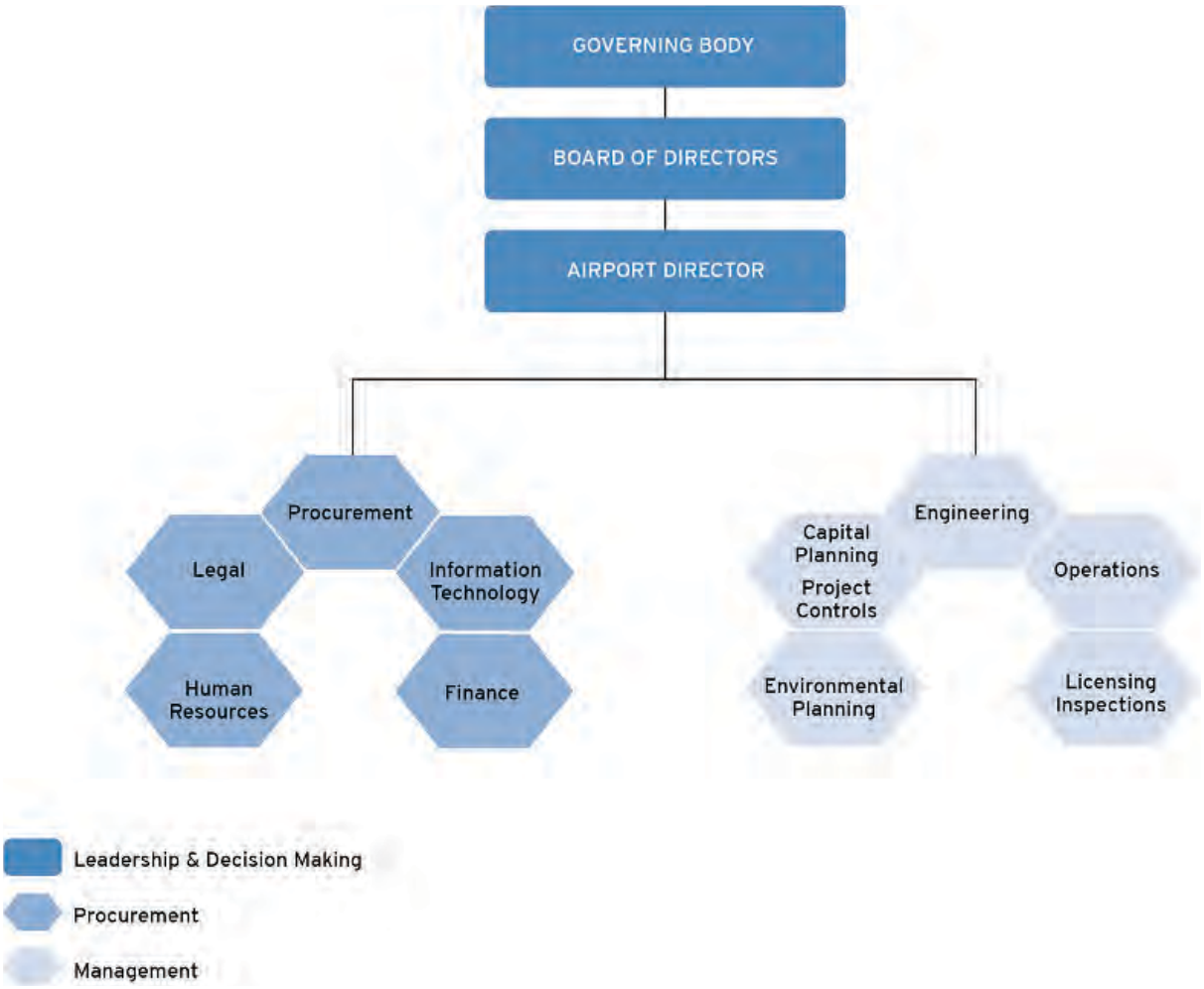


Figure 2-7. Typical structure of authority.

Communication Strategy

Communication forms the basis for trust and partnerships that are necessary during changing political and economic times and throughout the course of each project (see Figure 2-8). As such, it is essential to document the process and communicate changes often and regularly during a project. Have as much face-to-face interaction as possible to ensure that expectations are mutually understood and that scope-schedule-cost milestones and deliverables will be achieved.

Each participant brings different skills, concerns, and ideas, so match the appropriate people to communicate and develop a shared understanding of needs, approaches, and expectations. How to identify the best people will be different for each situation. For example, appropriate selection committee members will vary based on agency or department need. People with a different set of skills are needed to negotiate a contract. A management team will need to possess different administrative and technical skills critical for developing the procurement and management process. It is important to know the players and what they bring to the discussion. Finally, as the process is not a one-time event, it will require that a formal system of communication be established through regular reports and meetings, with the goal of identifying issues early to better address ongoing concerns.

Engage the right partners; define needs, concerns and ideas; work together on an approach; and meet often to monitor and review process.

Figure 2-8. Effective communication.

Basic elements of effective communication include

- **The Art of Listening.** There has to be motivation and willingness on both sides to listen and understand other's perspectives and to agree on expectations and approaches.
- **Develop a Common Language for Goals and Values.** Use unbiased, clear terminology that each party understands. For example, use language that talks about "profit" or "lump sum" or "acceleration" simply and clearly so the terms, value and approach are understood. Take the time to clearly define and agree on terminology and expectations. Agencies and PSPs must have a mutual agreement on terms and outcomes.
- **Diversity Quotient.** Bring different people with diverse skills and backgrounds to the table. Everyone learns, sees, and understands differently. Bring together different expertise and perspectives to allow for a broader and more comprehensive view of needs and concerns while opening the door to more creative and strategic solutions. One example is the accommodation of the various needs of people with disabilities. Include members of that community at the table to share their insights with owners, managers, and PSPs who do not have direct experience or understanding of the barriers.
- **Be Open to New Ideas.** The "we have always done it this way" mentality is at the heart of some of the most frustrating and counterproductive organizational challenges. Learn the motivations, training, skills, and willingness to change of the people involved in procuring or managing a professional service. For example, are the people involved in negotiations well-prepared, do they understand the agency's goals, and are they able to listen and be open to new approaches where both sides can mutually agree and be successful?
- **Ego.** The ultimate end of collaboration begins with ego. Assess whether the people involved are able to develop mutual understanding and exchange ideas. Team members must be willing to participate with respect and openness in shaping the direction and managing the process.
- **Succession Planning.** Inevitably, people move on to other positions or retire. Fostering growth and developing talent is critical to sustaining any organization—agency or PSP. Creating opportunities for training and engagement is an important part of developing good managers and leaders.
- **Play to One Another's Strengths.** Work with the knowledge and experience of team members to explore opportunities for innovation and develop better solutions. Understand the competencies and interests of the individuals involved. For example, on the PSP side, technically trained staff may have the innovative solution with the right support and interaction among their peers, but those same individuals may not be interested in working with the public or in

public speaking. On the agency side, individuals may know the process well, but may not be interested in engaging in conversation with the PSP.

- **Set the Context and Tone Carefully.** Provide the best environment for a productive conversation to occur. Determine the desired outcome: result-focused (i.e., partnership, collaboration, and insight) or compliance-focused (i.e., provide direction, establish oversight, and exert control). Be clear on the approach so as to set the parameters and tone of a meeting.

Selection of the appropriate PSPs should consider the specific agency need and desired outcome. A requirement for a routine service is distinctly different from a need for a creative and innovative solution. When creativity and innovation are needed, the process for soliciting and selecting the PSP will need to be commensurate with that expectation in mind. Determine in advance what you are willing to pay for a service and understand the risks and expected duration. Risky, high-demand projects will require a more sophisticated approach. "Right-size" each project. Define the task, select the right people to manage it on the agency side, and then tailor the process to get the best results.

Oversight

Procuring and managing professional services encompasses a set of procedures that provides a roadmap to identify needs, set expectations, and monitor performance. The formula for a successful procurement process (see Figure 2-9) includes the following steps.

1. **Written Documentation.** Establish and formalize all procedures in writing; document the purpose, rationale, expectations, and outcomes of the procurement. Establish strong and flexible procedures that set expectations up front for project controls, delivery, and close-out and formalize the management of risk, change, and performance. Procedures should include steps that require accountability, evaluation, and review that are consistent, reliable, and regular in their occurrence.
2. **Effective Communication.** As processes and procedures change over time, a mechanism must be in place to communicate those changes to both internal and external stakeholders, including agency staff, tenants, PSPs, and the public to ensure transparency and so that everyone knows the rules. Establish expectations regarding performance and improvement for all involved. Develop written procedures on how to get the job done and communicate them across departments.
3. **Training.** As organizations, funding, and resources are constantly shifting, rules and regulations are also changing. Training must be provided regularly for staff to be fully aware of changing rules, ethics, and funding requirements. Training needed for procurement staff is not necessarily the same as training required for PSP managers. Contract officers must know the prevailing rules, laws, and regulations and understand how and when to use the best method for service and outcome. On the management side, project managers need to understand how to execute their contracts and must have a clear understanding of different project delivery mechanisms and how to contract for the best result.

Form a basis of understanding—ask questions and share information and expertise.

Figure 2-9. Formula for a successful procurement.

4. **Tools and Technology.** Resources must be made available to execute the process, communicate effectively, empower staff to procure and manage professional services, and provide continuous feedback and improvement. Resources include tools (e.g., manuals, organization charts, model documents and forms) and technology (e.g., software and websites) for carrying out procurement processes, eliciting information, and educating stakeholders. For example, a procurement officer should have appropriate software to distribute RFPs, notify PSPs of upcoming opportunities, perform quantitative analysis, create and manage budgets and schedules, and access data required to procure and manage PSPs effectively.

Strategic Approaches

For the process to manage and procure PSPs to be effective, the approach needs to reflect the strategic direction of the agency. The strategic direction should define both the current mission and future goals, beginning with FACTS–a flexible, accountable, communicative, transparent, and strategic process for defining scope-schedule-cost. The Dallas-Fort Worth International Airport and Massachusetts Port Authority were found to be excellent examples of agencies that devised and promulgated a formal strategic direction for the airport that aligned the available resources with the procurement and management process for PSPs. These agencies also shared their strategic direction with PSPs so that PSPs could better align their resources with the agency's, resulting in a more efficient process for both the agency and the PSP.

Create a Fair and Level Playing Field

The research shows that airports that facilitate fair competition and a level playing field will obtain the best results in the procurement process. The best method to create fair competition and a level playing field are to ensure that the procurement process is communicative and transparent to all internal and external stakeholders, including the PSPs. The strategic direction, mission, and goals of the airport, as well as any upcoming projects, should be openly communicated to all stakeholders. This communication can be done at meetings with individual PSPs, at regularly scheduled quarterly/bi-annual meetings, and through technology (e.g., website postings and email subscriptions).

Misconception: Keeping PSPs at Arm's Length Leads to More Protection for the Airport

One consequence of increased regulations guiding procurement has been the separation of airport managers from PSPs. Many of the agencies interviewed for this research noted concerns about the appearance of collusion or favoritism as well as concern for disputes and litigation.

Reality

The research showed that agencies that clearly explained the process and communicated expectations early developed successful partnerships with PSPs. Almost every agency interview commented on the importance of developing and maintaining strong communications and relationships with PSPs to manage change, address risk, avoid conflicts, and monitor quality and performance. Airport agencies that engaged in constant communications with PSPs had fewer conflicts, change orders, and disputes, and experienced more effective delivery of scope-schedule-cost as a result of their efforts. An open and transparent communication with PSPs achieved a better understanding of project purpose and expectations of performance.

It is critical to establish clear rules of engagement, which are different between the procurement and management cycle, to allow the fair and open exchange of information and to create a level playing field. Allow PSPs to meet with and learn from an agency prior to advertisement to allow for a good understanding of the needs of the agency—This promotes more thoughtful, quality responses that can assist in guiding development of scope-schedule-cost and the selection of the best PSP for the service.

Establishing a level playing field need not be at the expense of sharing useful information with interested parties. Be open about the needs and resources, allow a conversation to occur, and encourage site visits and research on needs and conditions prior to solicitation. Several airports that participated in the outreach had established a best practice of instituting a "cone of silence" once a solicitation had been advertised. With the cone of silence, the agencies would not meet individually with any interested PSP after advertisement, but communicated exactly the same information (e.g., changes to the solicitation) to all parties, via the same methods (e.g., internet postings, email subscriptions, or briefings). The cone of silence rule has been implemented by Indianapolis Airport Authority and Dallas-Fort Worth International Airport during their procurement processes. The implementation of this rule has resulted in fewer disputes during the procurement process and has created a level playing field for all participants.

Create a Strong Foundation in Scope-Schedule-Cost

Create a foundation for the efficient management of professional services to achieve project goals and outcomes. This foundation is the practice of keeping scope, schedule, and cost tied together, from strategic planning to close-out:

- Scope: develop a well-defined scope with clarity of purpose and clear objectives through an engaged and interactive process.
- Schedule: plan for all operational requirements, funding, and budget mandates while anticipating and managing change and risk factors.
- Cost: develop forecasts using reliable data while managing the expectations of stakeholders and maintaining clear, concise, and regular communication.

The ability to prepare a well-defined, concise scope-schedule-cost for a project is the first step to a successful procurement. Based on the research, the decoupling of scope-schedule-cost is the single biggest contributor to project change orders, cost overruns, and schedule delays.

A well-communicated strategic approach that clearly defines needs sets the foundation necessary to align the resources to develop scope-schedule-cost (see Figure 2-10).

Identify and Prioritize Needs

Ideally, projects will be identified and prioritized based on the needs and strategic direction of the airport. In reality, several other factors influence the selection and prioritization of projects, including safety/security improvements mandated by the FAA and/or the TSA, operational impacts/improvements, economic viability, customer service improvements, tenant requests, political influences, and other factors (e.g., environmental or sustainability requirements and internal/external stakeholders demands). Agency leadership must balance these factors and ensure that projects meet the strategic direction of the airport.

Research indicates numerous methods agencies use to identify and prioritize upcoming projects. Successful organizations integrate the guiding principles of FACTS into the identification and prioritization process.

- **Flexibility.** The process should balance the requirements of the FAA/TSA with the needs of the airport stakeholders including airport tenants (e.g., airlines and concessions) and the traveling public.

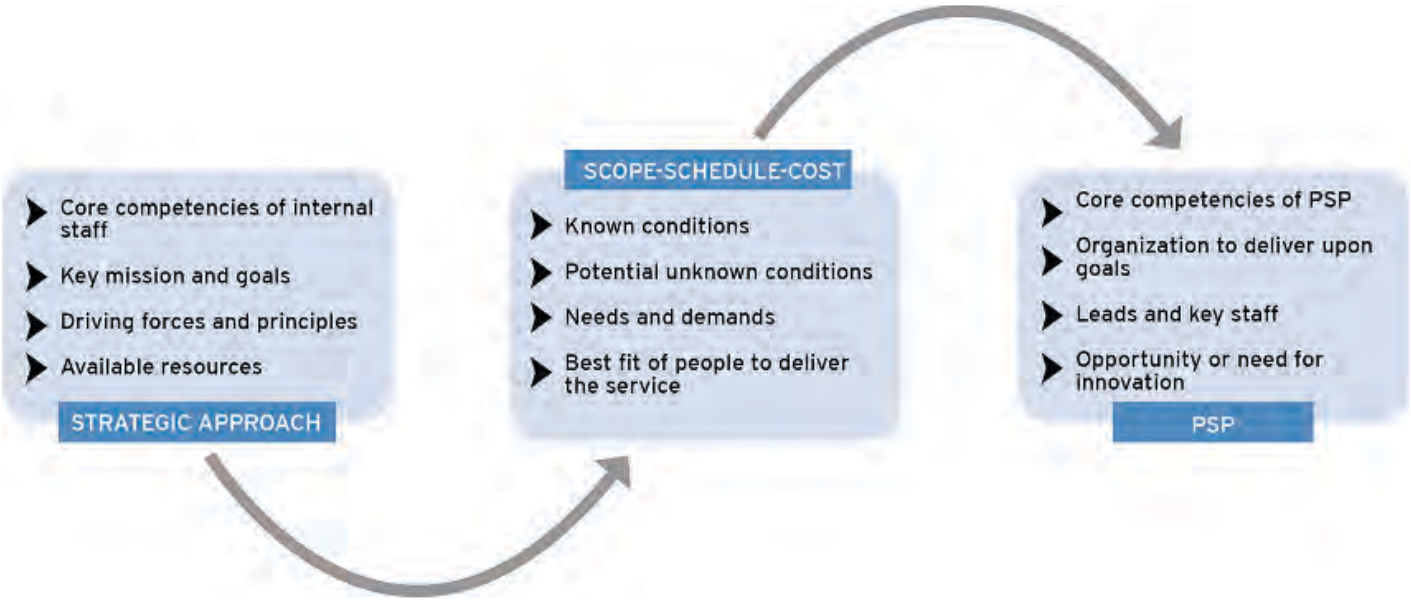


Figure 2-10. Collaborative and interactive approach to develop scope-schedule-cost.

- **Accountability.** The process should be clear and concise. Project costs and performance objectives should be factored into the prioritization process.
- **Communication.** The process, expectations, and results should be clearly communicated to all internal and external stakeholders.
- **Transparency.** The criteria for the process should be clear and consistent. The final selection and prioritization should be available for review by internal and external stakeholders.
- **Strategic Direction.** The process should incorporate the strategic direction of the airport in the selection criteria.

An example of a document incorporating the guiding principles into the identification and prioritization of projects is the "Project Priority Ranking Form" provided in Appendix D, Sample Forms.

Identify Resources and Match Needs

This exercise will require reaching beyond one's area of expertise and engaging others to better define needs as well as to develop methods and a process to address those needs. As future events and hidden conditions cannot be known ahead of time, it is critical to make strong connections and share resources to manage change and risk effectively.

There is a limit to how much can be known about site conditions, but taking the time to talk to those familiar with the area and managing or operating in the site may reduce the unknowns and more clearly define a project or even change the direction of a procurement as better information is gathered. On the other hand, external forces may require early delivery of a project. Reaching out to agency partners to learn each other's concerns as well as defining the best method to develop scope-schedule-cost may reveal a new way to amend the procurement method to achieve best results. Careful conversations about process and risk, clearly communicated to participants, will be required so that expectations will be clear. The bottom line is, we do not know everything going into any venture. However, having a system to communicate regularly, monitor performance, and make adjustments throughout the process allows for mutual understanding and optimal mitigation, thereby saving time and money.

Integrity, Ethics, and Conflict of Interest

Integrity and ethics are the foundations of a successful procurement process. Agencies and PSPs should practice being honest and ethical during the procurement process. For example, agencies should provide exactly the same information to all potential PSPs during the process. One method of ensuring this is to hold regular, open meetings with the PSP community to discuss the strategic vision of the airport and any upcoming projects that will be advertised in the near future. This ensures that PSPs have the same information and can pursue the projects that best fit their experience and skills. Agency personnel should not allow situations that could lead to an ethical dilemma, such as permitting PSPs to request information not readily available to all.

In addition, agencies and PSPs should avoid conflicts of interest as a matter of law and professional conduct. A conflict of interest is defined as a set of circumstances that creates a risk whereby professional judgment or actions regarding a primary interest could be unduly influenced by a secondary interest. A best practice employed by several airports for avoiding even the appearance of a conflict of interest is to limit the type of work that PSPs can pursue. PSPs are required to select a type of work they will pursue at the airport (e.g., design or construction management). Once the type of work is selected, PSPs cannot change the type of work selected without notifying the airport and ensuring that all prior design or construction management work is completed before pursuing additional projects.

By ensuring that the procurement process is handled ethically and with integrity and by avoiding even the appearance of conflicts of interest, internal and external stakeholders can trust that a fair, open, and competitive process has been followed and the best solution for the airport has been selected.

Tools and Technology

Tools

Tools that can provide guidance in developing policies and procedures for procurement include an agency's mission, goals, and guiding principles that are thoughtful, well-documented, and clearly communicated. A carefully devised capital plan, comprehensive procurement manuals, forms, and templates are also useful for supporting the process. Regular meetings and reports facilitate accountable procurement and management. Local, state, and federal knowledge bases regarding relevant laws and regulations allow staff to gain a solid understanding of limitations and restrictions.

Another useful tool is an organization chart that illustrates the available human resources and identifies key decisionmakers. Critical elements include points of contact, chain of command, and availability. Agencies need to know whom to contact if problems arise or needs change so that people and resources can be adjusted to mitigate any adverse impacts on scope-schedule-cost. The agency's organization chart should be shared with the PSP so that the PSP can organize appropriately, respond more effectively to solicitations, and better understand the agency's needs and resources to develop an effective scope-schedule-cost. Typically, agencies will require PSPs to furnish organization charts in their proposals detailing availability, lead expertise, and staff resources; this information should be shared with the agency's procurement staff and with those who will be managing the PSP.

Mapping relationships can be an effective tool to identify the right match of people that will attain the best results. This should be done on both sides of the table. Agencies and PSPs do not consist of just one person; key managers and decisionmakers each bring different views, priorities, concerns, and skills to the table based on their respective roles and experience.

Project charters can be worthwhile for identifying roles, responsibilities, and authority for formalizing partnerships in managing complex projects. At minimum, a project charter should include clearly defined

- Purpose, scope, and agency/partner organization(s);
- Membership, including roles and responsibilities;
- Meeting schedules, quorums, and operating guidelines; and
- Key milestones.

Technology

Technology used in developing and implementing the organization's approach to procurement includes various methods of communication and collaboration as well as software to prepare and manage capital plans, budgets, and schedules.

Communication and collaboration technology includes

- Email;
- Software and web-based systems for shared document creation and content management;
- Conferencing via telephone, video, and web; and
- Interactive whiteboards.

Technology to assist in capital planning ranges from simple productivity software as the least expensive option (e.g., spreadsheets, word processing, and rudimentary databases), to sophisticated capital management systems that allow multiple simultaneous users to update data and monitor all phases of capital projects. At the most comprehensive (and expensive) end of the range, enterprise resource planning (ERP) systems can integrate financial and HR information with capital program management and asset management systems, allowing instant access to data that measures progress and performance.

Resources

Publications

- *ACRP Report 16: Guidebook for Managing Small Airports,* TRB
- *ACRP Report 20: Strategic Planning in the Airport Industry,* TRB
- *ACRP Report 49: Collaborative Airport Capital Planning Handbook,* TRB
- FAA Advisory Circular (AC) 150/5100-14 Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects
- FAA Airport Improvement Program (AIP) Handbook
- Federal Acquisition Regulations (FAR)
- *Improving the Quality of Airport Projects: Best Practices,* Airport Consultants Council (ACC)/FAA
- *NIGP Values and Guiding Principles,* National Institute of Governmental Purchasing (NIGP)
- *Seven Steps To Performance Based Acquisition - Executive Summary,* GSA
- *State & Local Government Procurement: A Practical Guide,* National Association of State Procurement Officers (NASPO)

Forms

- Project Priority Ranking Form (See Appendix D)

CHAPTER 3

Procurement Process

Procuring professional services begins with identifying the project needs; selecting people and processes to develop the scope, schedule, and cost; choosing the most effective delivery mechanism; developing the decision-making process; and managing internal resources to administer, document, and close-out the process (see Figure 3-1).

Introduction to Procurement

This section of the Handbook presents basic techniques as well as areas for further consideration in pre-solicitation, solicitation, selection, and notification of the selection. Based on the research, the following are recommended for a successful procurement process (see Figure 3-2).

1. Develop cooperative, communicative, and respectful relationships with PSPs and with external and internal stakeholders.
2. Establish selection procedures and methods for streamlining the process and refining the scope.
3. Establish contract language and mechanisms for controlling scope-schedule-cost as well as for addressing change, risk, and disputes.

Prevailing Laws and Regulations

Agencies have several sources of funding for projects (e.g., Airport Improvement Program [AIP] grants and TSA agreements, Passenger Facility Charges [PFC], state grants, and/or airport bond funds). Therefore, airports must research and understand resource constraints, opportunities, and regulations, especially the FAA's selection requirements for the use of AIP funding in projects. FAA Advisory Circular (AC) 150/5100-14 and FAA Order 5100.38 provide guidance for airport sponsors in selecting and engaging PSPs. FAA AC 150/5100-14 requires that airport sponsors use a qualifications-based selection (QBS) process, and price must not be a factor in selection. In addition, an independent fee estimate (IFE) is required to be completed during the negotiation phase and the airport sponsor must include FAA Grant Assurances in the terms and conditions of the contracts (FAA AC 150/5100-14, FAA Order 5100.38, and the FAA Grant Assurances are available on the FAA website).

Large-capacity projects receiving AIP discretionary grant funds in excess of $10.0 million are required to perform a Benefit-Cost Analysis (BCA) of the project prior to receiving the funds. The FAA can also require a BCA for less costly projects. Airport sponsors should be in contact with their local FAA office to determine any specific requirements early in the grant application process.

Common issues that airport sponsors should consider when using AIP funding for projects are as follows:

- The selection process is required to be qualifications based and price must not be a factor. Therefore, the solicitation cannot request a price estimate be submitted with the proposal or

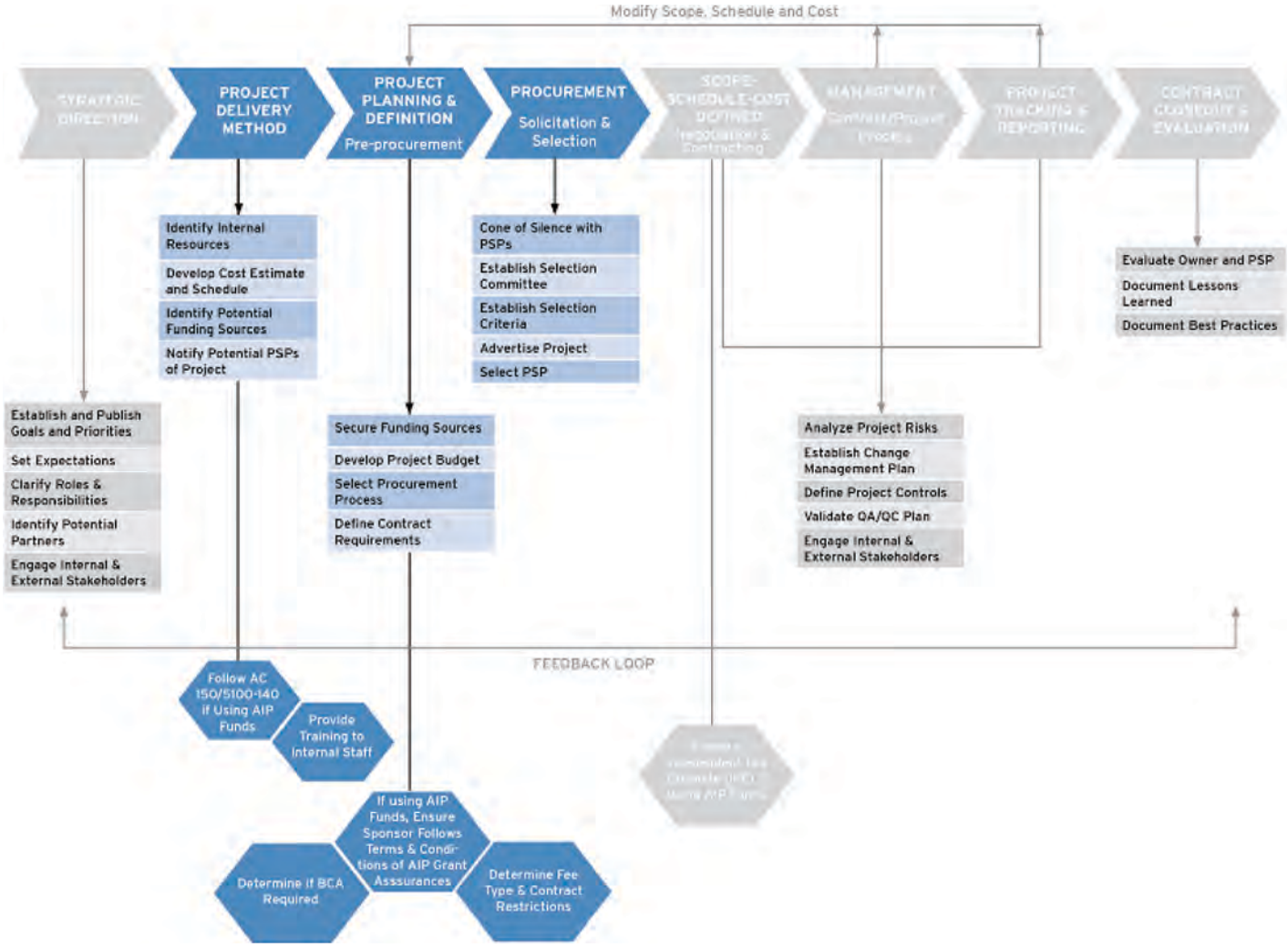


Figure 3-1. Critical path—procurement.

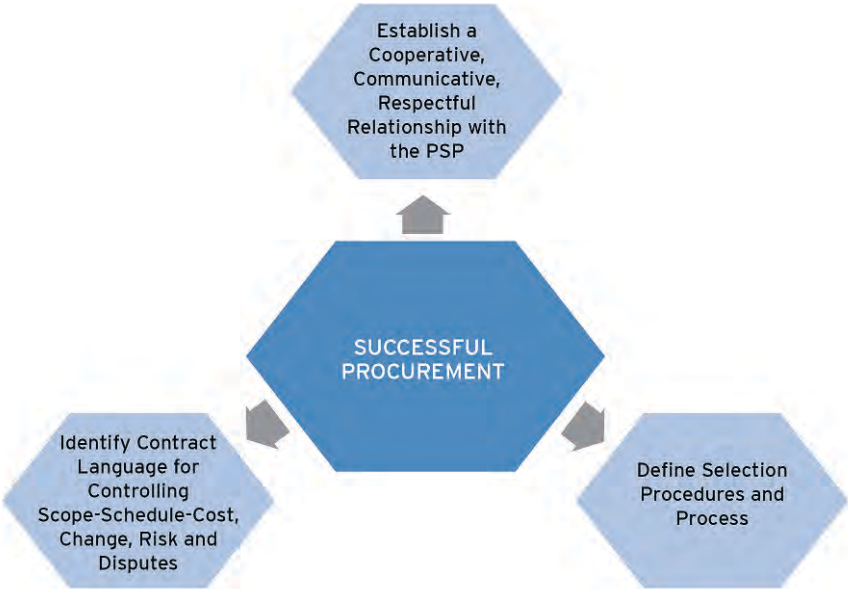


Figure 3-2. Keys to a successful procurement and management process.

any pricing information (e.g., estimate number of hours to accomplish the project, hourly rates, and overhead rates).
- Bonus payments for early completion of work are non-allowable costs and will not be reimbursed under an AIP grant.
- The consultant's liability is limited to the scope or purpose of the contract. Expansion of the consultant's liability beyond the scope or purpose of the contract is prohibited by the FAA.
- Agencies must ensure that the method of compensation is allowable for each specific procurement. For example: Cost-Plus-a-Percentage-of-Cost is not an allowable compensation method under an AIP grant.
- If an alternative delivery method (e.g., Contractor-at-Risk or Design-Build) is selected for an AIP-funded project, it is recommended that the airport sponsor contact the local FAA office to determine specific requirements. In the selection of a Design-Build contract under an AIP grant, the selection must meet the requirements for both a professional service contract (QBS without price being a factor) as well as the price competition for the construction portion of the project.

Airport sponsors are reminded that FAA AC 150/5100-14 and FAA Order 5100.38 should be reviewed for specific requirements on the selection and contracting of PSPs prior to starting the solicitation process.

The resources of procurement departments can be used by other departments to facilitate interaction and oversight during the process. Procurement departments are either centralized (typically in city or state government) or decentralized (typically at quasi-government or authorities). PSPs should be informed of the organization and limitations of the agency's procurement department so that PSPs can work within the local requirements.

Smaller agencies should consider developing partnerships with other regional agencies to enable sharing of resources in the delivery of services and projects.

Keep doors of communication open and make all information available to partners. Engagement and communications should be constant from inception through contracting for clear identification and agreement of goals and expectations.

Provide information on needs (e.g., scope, schedule, and cost) to all interested PSPs to enable PSPs to be creative in their responses.

Opportunities for Innovation

A flexible procurement process enables agencies and PSPs to be innovative in the approach and delivery of projects. Open communication between the agency and potential PSPs during the planning of the project will help in determining the best delivery method to provide the required scope within the cost and schedule constraints while meeting any regulations. In addition, agencies should be open to streamlining the procurement process for routine projects.

Streamlining processes can be effectively used to accelerate procurement; however, streamlining can create confusion and unnecessary expense to PSPs and to agencies if not done strategically. Removing steps when not necessary, such as interviews, from the selection process will enhance airport ability to perform services faster and save costs for both agencies and PSPs. Some airports have streamlined straightforward tasks by identifying the range of known needs and selecting a PSP on a qualifications basis only as a general engineering consultant (GEC) and then issuing task orders on a non-competitive and as-needed basis to fit the day-to-day requirements. Other airports have streamlined the process by pre-qualifying a pool of PSPs for certain tasks and then selecting from this pre-qualified list as necessary. These processes save money and time for both agencies and PSPs.

26 Procuring and Managing Professional Services for Airports

Streamlining should be done cautiously when the project being procured is complex, unusual, or long term.

Do the Research

Research is often an overlooked element to a successful procurement process and is necessary for both the airport agency and the PSP. The research identified the following recommendations for airport agencies:

- Research and develop an understanding of the rules and regulations associated with the selected funding sources for the projects. Some airports can fund large projects using multiple funding sources with different allowable items for reimbursement. The airport agency needs to be aware of what tasks can be funded by the various funding sources (e.g., AIP grants, TSA agreements, PFCs, and bonds) and specific procurement requirements (e.g., qualitative vs. quantitative selection, DBE [Disadvantaged Business Enterprises] requirements, and allowable contract restrictions) to ensure compliant audits.
- Understand both the advantages and limitations of alternate delivery systems for specific projects. Network with other airport agencies to discuss the successes and failures of the project delivery systems used on various airport projects and communicate with various PSPs prior to a specific solicitation to determine the familiarity of the local business community with alternate delivery systems.
- Training is a requirement for internal airport agency staff so that they can possess the skills necessary to procure and manage projects. Agency staff must also be provided access to the necessary tools and resources.

The research identified the following recommendations for PSPs:

- Examine and learn about the airport agency and its strategic direction. This knowledge will confirm that the PSP understands the internal resources available to the agency and the PSP's role in helping the agency achieve success.
- Understand the expectations of the airport agency for each project. This understanding will allow the PSP to provide (1) the required resources and skills necessary for the successful completion of the project and (2) suggestions for the best delivery method.
- Understand the various rules and regulations associated with each of the funding sources for a project. The PSP should develop a method to document the reimbursable items for potential audits.
- Research potential partners (local and DBE firms) who will bring additional skills and resources so that the agency is provided with the best possible project.

Partnering for Success

As traditional funding sources decline, developing new partnerships is critical. Resistance to developing partnerships is often based in either not knowing who can be trusted or because of concerns with giving up control and authority. Partnerships should be formed with internal departments, stakeholders, and PSPs. Key relationships need to be identified, defined, and understood. Each party needs to learn each other's goals, objectives, and needs as well as to set and agree to expectations around performance.

Understanding the relationships that exist in each organization is especially important for sharing resources—people, finances, or technology. For example, agency relationships with their funding partners can make a difference in the flexibility they can bring to a process. Managers' relationships with decisionmakers such as a CEO or a legislator can influence the flexibility in regulations and confidence in the organization to be innovative and be a good steward of funds.

- **Agency and Stakeholders.** There needs to be mutual understanding of each other's roles and responsibilities, constraints, and opportunities. There may be ways to share resources or modify approaches to fulfill needs but such sharing cannot be done in a vacuum and without regular interaction and conversation. Effective partnerships need to be established with internal stakeholders, especially with audit, legal, finance, and HR departments in the agency with the knowledge of essential tools and resources to support and deliver services as follows:
  - Finance: developing the best cost estimate through research on industry standards and collective agency experience.
  - Audit: defining a procurement method that meets needs and is accountable and transparent to all participants.
  - Legal: advising on language to use in contracts that is of common interest to both parties.
  - HR: identifying staffing resources and training to better support the process.
- **Agency and PSP.** This relationship needs to be founded on a mutual understanding of purpose, role, and expected outcomes. There needs to be trust and good communication. The more complex an assignment (and especially for long-term assignments), the more critical the relationship between an airport and PSPs becomes. It is necessary to have clear rules, transparent processes, and accountable performance to meet established expectations, along with early, clear, and frequent communication.
- **Public and Agency/Airport.** The public is demanding more transparency. The primary mission is to meet customer expectations, whether that is the traveling public or the airline or tenant. All have different needs and concerns. Understand what information is needed and provide it in a simple and easily accessible format.

Misconception: Audits Result in More Stringent Regulations

The research identified organizational disconnects where oversight by audit and legal created a reactive approach to both procurement and management of PSPs. Many respondents cited concern with meeting audit expectations and, therefore, created more stringent processes that reduced flexibility and communications between departments to avoid any conflicts. Some of the disconnects were either due to an organizational separation of departments or poor understanding of the benefits of better partnerships.

Reality

Agencies that developed strong partnerships between procurement/management and auditing/legal staff throughout the entire process extolled the value added by that participation, because it provided useful insight into ways to increase flexibility, accountability, and transparency.

Partnerships developed with audit and legal aided procuring and managing departments in selecting the best project delivery methods, fair and equitable contracting terms and conditions, and clarity of the process to manage scope-schedule-cost.

The research noted that those agencies that asked audit and legal department professionals to guide the use of regulations for procurement, have a seat at the negotiation table, and perform over-the-shoulder reviews during the management of PSPs experienced better communications; transparent and cleaner execution of contracts and management of services; fewer change orders; and decreased litigation. The Lee County Port Authority and Dallas-Fort Worth International

Airport are examples of agencies that partnered with the audit and legal departments throughout the procurement and management of professional services processes. Both of these agencies reported that the inclusion of the audit and legal departments resulted in fewer amendments and disputes during projects.

Know Your Core Business and Define Your Needs for PSPs Accordingly

Many agencies are losing staff to retirements or downsizing, requiring a re-evaluation of what the agency can perform internally and where it needs support from PSPs to deliver services. The core functions selected to be performed internally should support the strategic direction of the airport agency. Some core functions that many airport agencies perform internally are facility maintenance, construction management, operations, HR, auditing, legal services, financial, IT, and design services.

Once the agency determines the core functions that will be performed internally, the remaining functions can be supported by external sources, such as PSPs. The agency should notify the PSPs of these opportunities, so that they can provide the necessary support services for the airport agency to properly function and meet the needs of internal and external stakeholders.

Fit Your Procurement Process to Your Defined Need

The procurement process has to be flexible to meet the needs of the internal and external stakeholders as well as the project. The following areas should be considered and determined, based on the scope-schedule-cost of the project, the prevailing regulations, and the previous experiences of the agency:

- **Fee Type.** The fee type should match the type of contract being procured. Lump-sum fee type lends itself to projects with well-defined scopes and schedules. By having a well-defined scope and schedule, the PSP can provide the airport with a cost that is reasonable and also well-defined. A cost-plus fixed fee type is appropriate for complex projects in which the scope and schedules are still being developed. This will allow the airport to better control the project costs until the scope is fully defined. Once the scope is fully defined, the PSP can provide the airport with a realistic cost and schedule for the project completion.
- **Contract Restrictions.** The inclusion of contract restrictions (e.g., overhead, escalation, local business requirements, and overtime caps) is used more often for cost-plus fixed fee type contracts. Contract restrictions can (1) cause additional work for the airport in the review of monthly invoices for compliance, (2) reduce competition from firms that exceed the restrictions, and (3) exclude some businesses outside the local area. Any contract restrictions should be clearly defined and included in the initial advertisement for the project.
- **Staffing Requirements.** The identification of key staff positions and the specific requirements for the positions (e.g., years of experience, education, professional engineering license, and/or certifications) should be clearly defined and included in the initial advertisement for the project. The agency should also define expectations for key staff members (e.g., relocation to the project site and/or availability issues). In addition, the solicitation should request that each proposal address how the departure of the specific identified key staff members would be addressed by the PSP during the duration of the project.
- **Contract Incentives/Penalties.** The decision to include incentives to complete the project early or penalties for missing deadlines should be made early in the process and included in the initial solicitation. Any contract incentives/penalties should be well defined and used only as necessary.
- **Disadvantaged Business Enterprises (DBE).** Inclusion of DBE firms is required by the FAA as noted in AC 150/5100-14. The DBE goals will be set by the authority having jurisdiction and the PSP must show a good faith effort to meet these goals.

- **Interviews.** The research indicated that some airports perform an interview for every procurement while other airports rarely interview. To be fair and cost-effective, interviews should only be conducted where there is a valid, productive reason for inclusion in the procurement process (e.g., the need for further information or because the assignment is complex).

Misconception: One Size Fits All – The Recipe Approach

As agencies face declining workforces and increased regulations and workload, they have tended to simplify the management of the process and delivery of services by using one system, method, or recipe for procurement and management of PSPs.

Reality

The problem with the "one-size-fits-all" approach is that all services are not the same. The selection of a procurement and project delivery method should fit the need and be adapted to the desired outcome and the type of PSP required. For example, one fee type will not fit all procurement processes. The research revealed a great deal of divergence regarding the use of fee types and contract restrictions for professional services. For example, various agencies applied the same rationale regarding auditing oversight to explain the decision for selecting fixed fee (lump sum) or cost-plus for similar services.

Many tools are available, but each needs be used in the appropriate circumstances to get the best result. Adapt the procurement and contracting method to the need to obtain reliable results as well as innovation without adding undue burden, confusion, or costs to the process.

Projects that are more complex, have many unknown conditions, or require creativity to find innovative solutions will require a more sophisticated procurement process with terms and conditions that support those situations. Conversely, for routine and simple projects, procurement and terms and conditions should allow for streamlined, cost-effective selection and management.

Engage the right partners to share the resources and work to develop the right approach, method, and tools to address the diversity of services needed.

Some examples of fitting the procurement process to the defined needs follow:

- **Small procurement (less than $100,000) with a well-defined scope.** The agency should consider a lump-sum fee type and reducing the procurement process by not requiring interviews.
- **Small procurement (less than $100,000) with no defined scope.** The agency should consider a cost-plus fixed fee type and reducing the procurement process by not requiring interviews.
- **Large Design/Build procurement (in excess of $10.0 million).** The agency should consider a procurement process that includes a review of the submitted proposals, a short list of several qualified proposers, an interview of the short-listed firms, and a final selection based on the original proposal and the interview.

These are just a few examples of potential project approaches. Each agency's staff should review the projects and ensure that the procurement process will be sufficient to select the right PSP for the project.

Pre-Procurement Strategies

Agencies should consider the following strategies prior to issuing the solicitation.

Scope Development

Project Definition

The project definition should clearly define the service needs (e.g., planning and on-call) and must include a detailed project description that is agreed on by invested stakeholders. In addition, any agency-specific standards (e.g., drafting, software requirements, and submission requirements) should be included. The project definition should set budget and schedule expectations and provide enough detail so that potential PSPs clearly understand the project requirements and expectations. An example of a project definition form is included in Appendix D, Sample Forms.

Develop Scope-Schedule-Cost As One Connected Item

Scope, schedule, and cost are interrelated (a change to one affects the others) and should be managed as a single item. Decoupling of scope-schedule-cost will affect the reliability of PSP performance and delivery of services. Both comparative and historic project data, if available, should be used in preparing the scope-schedule-cost.

Developing Cost Estimates and Budgets

Use historical information and industry standards to identify the range of acceptable costs prior to development of scope. Identify available funding sources and the regulations associated with each source. The budgetary constraints established while developing the range of acceptable costs should be considered during further evaluation and refinement of the project scope. Examples of cost estimating templates are included in Appendix D, Sample Forms.

Developing Schedules

Schedules for procuring and managing projects are developed based on several factors, including

- Legal mandates. The schedule can be driven by an imposed mandate/deadline for safety or operational improvements.
- Stakeholder needs/requirements. The operational requirements of the airlines and the impact on the passengers should be considered.
- Funding deadlines. Some funding sources (e.g., FAA AIP grants and TSA agreements) require that funds be expended within a certain timeframe.

These factors along with project scope and budget should be considered in developing the schedule.

Project Delivery Mechanisms

The project delivery method should be established prior to solicitation. The selection of the delivery method should reflect the type of work to be performed and the advantages (cost and schedule) to be obtained by using an alternate delivery method (e.g., Design/Bid/Build [DBB], Design/Build [DB], or Construction Management at Risk [CM@R]). If the project delivery method is selected after the start of the procurement process, some of the benefits from the alternate delivery method may not be realized. Some alternate project delivery methods (e.g., DB and CM@R) may not be approved if the project is being funded by an AIP grant. Airport sponsors need to review the requirements of FAA Order 5100.38 and check with the

local FAA office prior to solicitation to ensure the selected project delivery method is approved for AIP-funded projects.

Checks and Balances

During the pre-procurement process, the agency can check to safeguard that the procurement process is balanced and fair. For example,

- The agency can provide the same information to all potential PSPs.
- Once the solicitation is advertised, the agency can institute a cone of silence so a PSP is not given additional information or is deemed to have an unfair advantage.
- The agency can provide a sample contract, including the standard terms and conditions for the contract, within the solicitation to be sure that all PSPs are fully informed prior to proposing. The standard terms and conditions should include any restrictions on overhead, profit, and/or fee, as well as insurance requirements.
- The agency can match the scope of work to the budget and schedule for the project.
- The agency can assess whether or not prevailing rules and regulations are being followed based on federal, state and local laws.

By balancing the mission and goals of the agency with the needs of PSPs, a fair and successful procurement will result.

Selection Process

The overall goal of the procurement process is to select the most qualified PSP for the project being advertised. This is accomplished during the selection portion of the process and relies on having the proper people and partnerships in place to be successful. Agencies should consider the following tasks during the process.

Define Pre-Selection Process and Schedule

The pre-selection process is defined as the time between identification of the project to advertisement of the solicitation. The following tasks should be completed during the pre-selection process:

- Identify a project that meets the strategic direction of the airport.
- Notify internal and external stakeholders of the project. Guidance for requesting qualifications from PSPs can be found in the ACC Consultant Request for Qualifications Template, included in Appendix C, Model Documents. FAA Form SF 330 (Architect-Engineer Qualifications Template) for inclusion with PSP proposal submissions is available at the FAA website.
- Set expectations for the project.
- Develop a high-level cost estimate and project schedule.
- Identify potential funding sources (e.g., AIP grants, PFC, State grants, TSA grants, and/or bonds). Determine the rules and regulations associated with the potential funding sources.
- Determine the delivery method for the project (i.e., traditional DBB, DB, or CM@R).

The overall schedule for the pre-selection process can vary—from a few weeks for small, routine projects, while large, complex projects with several funding sources could take months.

Define Selection Process and Schedule

The selection process is defined as the time from advertisement of the solicitation to final selection of the PSP. This period includes notification of the selection to the unsuccessful PSPs, as well as a debriefing to discuss the reasons for not being selected. The selection process should

be tailored to the need and reflect the airport agency's mission and goals for budget and schedule. The following tasks should be completed during the selection process:

- A detailed project description, scope, and schedule should be included in the solicitation. This information is useful for the respondents to develop quality proposals to fulfill the required tasks and deliverables.
- Selection criteria should be clearly defined and the level of importance or weight of each criterion noted.
- Allow PSPs a reasonable amount of time to respond and be considerate of holidays.
- Interviews may be required in the selection process for large, complex projects and should be used to elicit new information from the proposers. An interview is often not necessary for procurements of routine projects.
- A level playing field should be maintained by the agencies for all potential firms. A cone of silence regarding the project should be instituted by the agencies from the time of advertisement through award in order to protect all involved parties.
- All proposers should be provided with a post-selection debriefing. The debriefing should be an in-person meeting that provides a review of the proposal and useful feedback for future proposals.

The schedule for the selection process should be reasonable in length for both the agency and the PSPs with discreet milestones for the completion of tasks. The overall selection schedule will depend on the type of project (complex or routine), the number of proposals received, the method of delivery, if an interview is necessary, and any requirements based on the funding sources.

Develop Selection Criteria

Selection criteria should be established in advance and shared with PSPs. The scoring matrix should be transparent and reflect the agency's strategic approach and service needs without a bias to any one firm. Typical criteria may include understanding of the project and needs; key personnel, qualifications, and experience; firm's qualifications and recent experience; and availability and ability to meet agency goals for schedule. An agency may also want to consider attention to quality control and project controls, depending on the complexity of the project and type of service needed; geographical location; DBE/local firm participation; and previous performance evaluations. Depending on the funding sources for the project, an agency can also use billable rates and/or pricing as a factor, if allowed.

Establish Selection Committees

The selection committee should have technical experience with the proposed work, and all members should be trained on how to review and evaluate proposals/submittals. There is value in having select members continue on post-selection during management as an oversight mechanism to guide future selection, contracting, and management processes. Selection committee members must be free of conflict of interest and knowledgeable of the project's technical requirements. The committee should have at least three members, and rules of conduct must be established in advance to provide guidance throughout the process.

Develop Format and Method of Evaluation (Qualitative vs. Quantitative)

The criteria and method of evaluation can include either qualitative (i.e., ranked as high/medium/low or 1st/2nd/3rd) and/or quantitative criteria (i.e., numerical value assigned to each criteria and possible weight). Weighting the criteria is useful and requires an agreement of

the committee to satisfy each stakeholder's priorities and needs. The selection criteria should be clearly and concisely communicated to the PSPs as part of the solicitation.

Notification of Selection

After the agency has received the proposals, the next step is to evaluate the proposals and select the most qualified PSP (see Figure 3-3).

Decision-Making Process

Selection Process

The selection process will depend on the size and complexity of the project being solicited. The complexity and cost of a project should be used to determine the need for an interview. Selections are often made by committees, which should be composed of individuals with specific expertise relevant to the project as well as staff with training and experience in evaluating proposals. A committee scoring sheet can be used during deliberations to total scores for each individual proposer and results can then be shared with the PSP during the debriefing after selection. An example of a committee scoring sheet is included in Appendix D, Sample Forms.

Evaluation of Proposals and Short List

The scoring of the proposals is based on the selection criteria. Two examples of evaluator rating sheets are included in Appendix D, Sample Forms. After the proposals have been

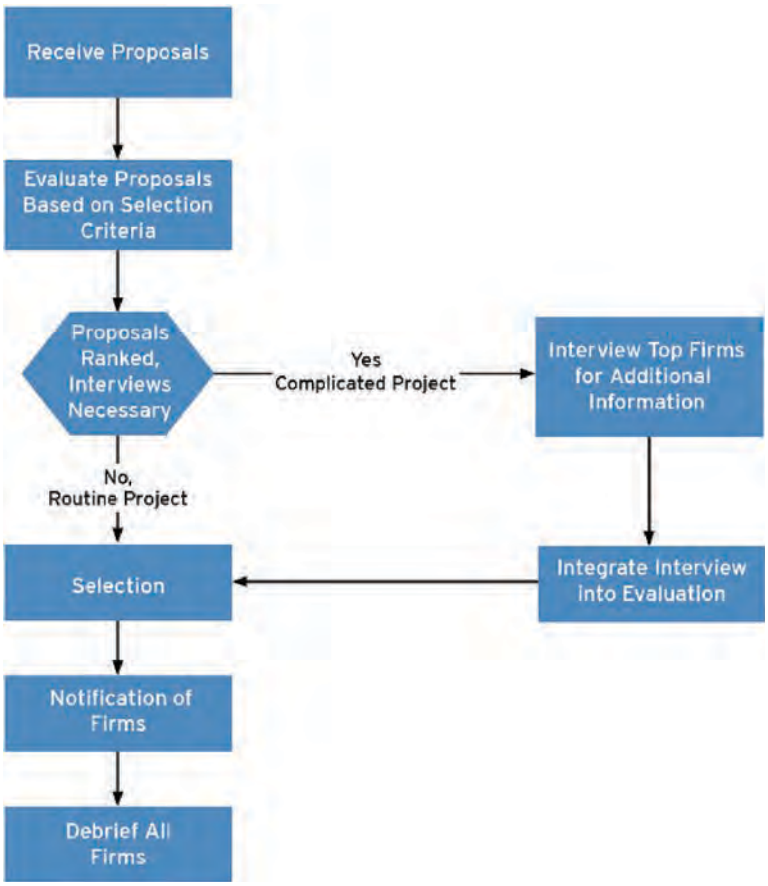


Figure 3-3. Decision-making process for selection.

evaluated and ranked, the requirement for an interview should be determined. Interviews are necessary if there is a need for further information or on a complex assignment. There also may be a need to actually meet the project managers and team based on project demand or to further clarify an approach or solution. If it is determined that an interview is necessary, a short list of the top qualified firms should be developed. The short list for the interview should consist of only the top two or three ranked firms based on the proposal evaluation. Interviews are expensive for PSPs and so should be limited to firms with a realistic chance of being selected.

Interviews and Final Selection

The agency should provide clear direction on the purpose of the interview, if necessary, and the information sought and share the evaluation criteria with the PSPs, if possible, in advance of the interview. Adequate time needs to be allowed for each interview and the scoring of interviews. The results of the interviews should be integrated into the evaluation. After the interviews, the proposals should be re-ranked, including the interview results, and the most qualified firm selected. Interviews should only be required if new or additional information is required by the agency to determine the most qualified firms for the project.

Communication (Notification and Debriefing)

Notification

All PSPs that proposed should be notified in writing in a timely manner of the decision. Proposers should be provided with the scores for both their proposal and interviews, if necessary.

Debriefing

PSPs should be afforded an opportunity for individual debrief for both the interview and proposal. The individual debriefs should include a candid discussion of the strengths and weaknesses of the proposal and provide the PSP with constructive criticism to encourage better proposals in future.

The entire selection process should be transparent to inspire public confidence and achieve buy-in and confidence among all of the participants. The Massachusetts Port Authority is an example of an agency that has successfully implemented a transparent selection process by holding selection meetings that are open to the public. By holding open selection meetings, the time necessary for the selection process has been reduced and the quality of the proposals received by the Massachusetts Port Authority has been enhanced.

Tools and Technology

Technology can save money and time through streamlined processes and improved efficiency. Although tools (e.g., documents, reports, and meetings) and technology (e.g., software and systems that enhance productivity, tracking, and communication) greatly facilitate procuring and managing professional services, technology is only as useful as the individuals who use it. Nothing replaces the need for human interaction and a shared understanding of expectations and outcomes.

Although many state and local agencies use electronic tools for procurement, the principles for managing the process remain the same. The most fundamental element in improving any system is a thorough assessment of current practices, beginning with a high-level overview of the process, followed by a detailed review of each step and each person's role, and then the creation of standardized comprehensive processes that are communicated clearly to all parties.

Tools

The most valuable tools in procurement are a solid knowledge of procurement policies, laws, regulations, funding sources, and project delivery methods; clear, consistent communication, including regular meetings and frequent contact with stakeholders, partners, and PSPs; properly prioritized needs; a strong understanding of each project; and a well-researched, thoughtfully developed scope-schedule-cost where the scope is clear and detailed, the cost estimate is accurately researched, and the schedule includes all key milestones.

Whenever AIP funding is involved, strong comprehension of the requirements of the FAA is essential. Refer to FAA resources such as Order 5100.38 (which provides guidance and procedures to be used in the administration of the AIP), Advisory Circular 150/5370-10 (which outlines standards for specifying construction of airports), Advisory Circular 150/5100-14 (which provides detailed guidance for selecting architectural, engineering, and planning consultants for airport grant projects), and *FAA Program Guidance Letter 12-03* regarding cost analyses mandated to be performed by sponsors.

Additional tools useful in the procurement process include a sample contract incorporated into each solicitation that outlines general contract provisions, overhead, profit and insurance requirements; agency organization charts and staff biographies for use in discerning the level of training, skills, and experience of available in-house personnel; change management plans that delineate the procedures to follow whenever changes inevitably arise from unknown conditions or external forces; and a comprehensive manual for PSPs that communicates all policies, processes, and expectations.

Technology

Technology can enhance transparency, efficiency, and tracking in the procurement process. Electronic procurement (eProcurement) software can improve vendor management and increase sourcing options. Electronic distribution of solicitation materials allows a wider range of potential proposers and provides a level playing field for all. Agencies can use websites to post solicitations and upcoming opportunities and to broadcast communications to all internal and external stakeholders. Electronic repositories can allow internal and external participants to share and archive procurement documents. Video chat and web conferencing systems permit agencies to meet face to face with discipline specialists located at a great distance from the airport.

Electronic submission of proposals from PSPs provides an instantaneous receipt and better tracking for the agency. Some jurisdictions have laws that stipulate that proposals must be submitted as hard copy documents, but these laws may eventually be re-evaluated by legislators as eProcurement evolves and expands.

Additional technology used in the procurement process includes software for creating estimates, budgets, and schedules, as well as document sharing and collaboration systems. Software systems can also be used for tracking projects, grants, and expenditures.

eProcurement Systems

eProcurement systems automate, standardize, and streamline the procurement process and enhance both transparency and accountability. These systems provide a communication tool between buyers and vendors that can increase the pool of qualified vendors. eProcurement systems can decrease administrative costs and increase efficiency by speeding up business processes and reducing administration time.

Many agencies are now using formal eProcurement technology. Some agencies have created custom eProcurement systems, but, depending on the level of complexity and local requirements, some agencies may find it more cost-effective to purchase a scalable off-the-shelf system and

implement only the modules needed in a phased approach. Some challenges facing agencies in implementing new eProcurement technology include financial constraints, resistance to change, chaotic workflow, and lack of leadership.

Typically eProcurement systems are web-based, thus no software installation is required, and information is accessible 24 hours a day from any computer with access to the internet.

eProcurement is useful for ensuring a wide-ranging outreach and, therefore, broader diversity in PSPs. The vendor registration function allows for better management of opportunity notifications, sourcing activities, and invitations to potential proposers via email and public posting. Typical components of eProcurement systems include purchasing, spend analysis, sourcing, vendor invoicing, and payment. Most eProcurement systems provide sophisticated security for protecting data and confidentiality.

Procurement Websites

Many agencies include a "Doing Business With . . ." section on their websites to post procurement information (e.g., solicitations and contract awards); however, award information posted on a website should be in addition to, not a substitute for, notifying proposers in writing of the status of their submissions. Interactive websites allow agencies to exchange real-time data to facilitate communication throughout the procurement process, as well as to provide vendors with a better understanding of the agency's needs. Some agency websites also provide access to download important documents (e.g., procurement regulations, codes of ethics, diversity program information, design/engineering standards, and detailed consultant manuals) (see Figure 3-4 for an example).

Web technology also provides the opportunity to present live or pre-recorded webinars to potential proposers and to host online question-and-answer meetings to ensure that the same information is available to all potential PSPs. The Metropolitan Washington Airports Authority (MWAA) uploads pre-proposal presentations on its website when available, furnishing potential PSPs with critical information about the specific solicitation as well as the procurement process in general.

Resources

Publications

- *ACRP Report 16: Guidebook for Managing Small Airports,* TRB
- *ACRP Report 21: A Guidebook for Selecting Airport Capital Project Delivery Methods,* TRB
- *ACRP Report 49: Collaborative Airport Capital Planning Handbook,* TRB
- *Airport Owner's Guide to Project Delivery Systems – 2nd Edition,* ACI-NA, ACC, Associated General Contractors of America (AGC)
- *Cost Estimating and Assessment Guide: Best Practices for Developing and Managing Capital Program Costs,* Government Accountability Office (GAO)
- Federal Acquisition Regulations (FAR) - Volumes 1 and 2
- FAA Advisory Circular (AC) 150/5370-10 Standards for Specifying Construction of Airports
- FAA Advisory Circular (AC) 150/5100-14 Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects
- FAA Order 5100.38 Airport Improvement Program Handbook
- FAA Program Guidance Letter 12-03
- *Improving the Quality of Airport Projects: Best Practices,* ACC/FAA
- *Seven Steps To Performance Based Acquisition,* GSA
- *State and Local Government Procurement: A Practical Guide,* National Association of State Procurement Officers (NASPO)

Figure 3-4. Sample procurement website.

Websites

- FAA Airport Improvement Program (AIP)
  http://www.faa.gov/airports/aip/
- FAA Procurement and Contracting Under AIP
  http://www.faa.gov/airports/aip/procurement/
- Project Planning, Delivery and Controls. Whole Building Design Guide (WBDG), National Institute of Building Sciences (NIBS)
  http://www.wbdg.org/project

Model Documents (Appendix C)

- Consultant Selection Request for Qualifications Template, ACC

Sample Forms (Appendix D)

- Project Definition Form
- Cost Estimating Templates
- Committee Scoring Sheet
- Evaluator Rating Sheet

FAA Forms (Available at the FAA website)

- FAA Advisory Circular (AC) 150/5100-14 Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects
- FAA Order 5100.38 Airport Improvement Program Handbook
- FAA Grant Assurances
- FAA Architect-Engineer Qualifications Template (SF330)

CHAPTER 4

Negotiating and Contracting for Professional Services

The negotiating and contracting phase establishes the basis and tone for a successful project. It is the time when expectations are established between the agency and PSP, the terms of engagement are framed, desired outcomes are outlined, and the tone is set for a successful relationship (see Figure 4-1). A poorly conceived and executed process for negotiating and contracting is a precursor to misunderstandings, scope creep, and budget erosion, and yields products that fall short in content and schedule, no matter how capable the technical team. Conversely, a well-conceived contracting process enables technical work to proceed with confidence and clarity.

Clear and forthright communication is critical for setting expectations and defining deliverables in managing professional services. Negotiating is focused on cost and conditions of service while contracting establishes the legal roadmap for executing and delivering that service. The contracting process at its best ensures that a contract does not impede the ability of the parties to fulfill their contractual obligations. The negotiating and contracting phase is the time when decisions are made regarding how much control is exercised, how much risk is maintained or transferred, and the extent to which innovation can be encouraged and rewarded.

Negotiations

Pre-Negotiation Plans

Many agencies, as well as their PSP counterparts, maintain formal or informal written pre-negotiation plans prior to commencing negotiated procurement situations. Significant advantages to using this kind of document include the following:

- A reasoned analysis of the proposed scope, schedule, and budget ensures clarity and validation of the original solicitation and proposal, which leads to the establishment of negotiation objectives and parameters acceptable to each party.
- A pre-negotiation plan facilitates clarity of purpose for the agency, stakeholders, and PSP prior to representatives convening for a formal negotiation. In this way, internal differences can be resolved before negotiations begin, producing negotiation objectives that everyone can support.

An example of a pre-negotiation checklist is included in Appendix D, Sample Forms.

Approach and Strategies

The basic foundational purpose of negotiations is to define services to be provided in a way that minimizes risk, improves project performance, and leads to desired and dependable outcomes. Both parties to the negotiation may attach different attributes and metrics to these facets, but the

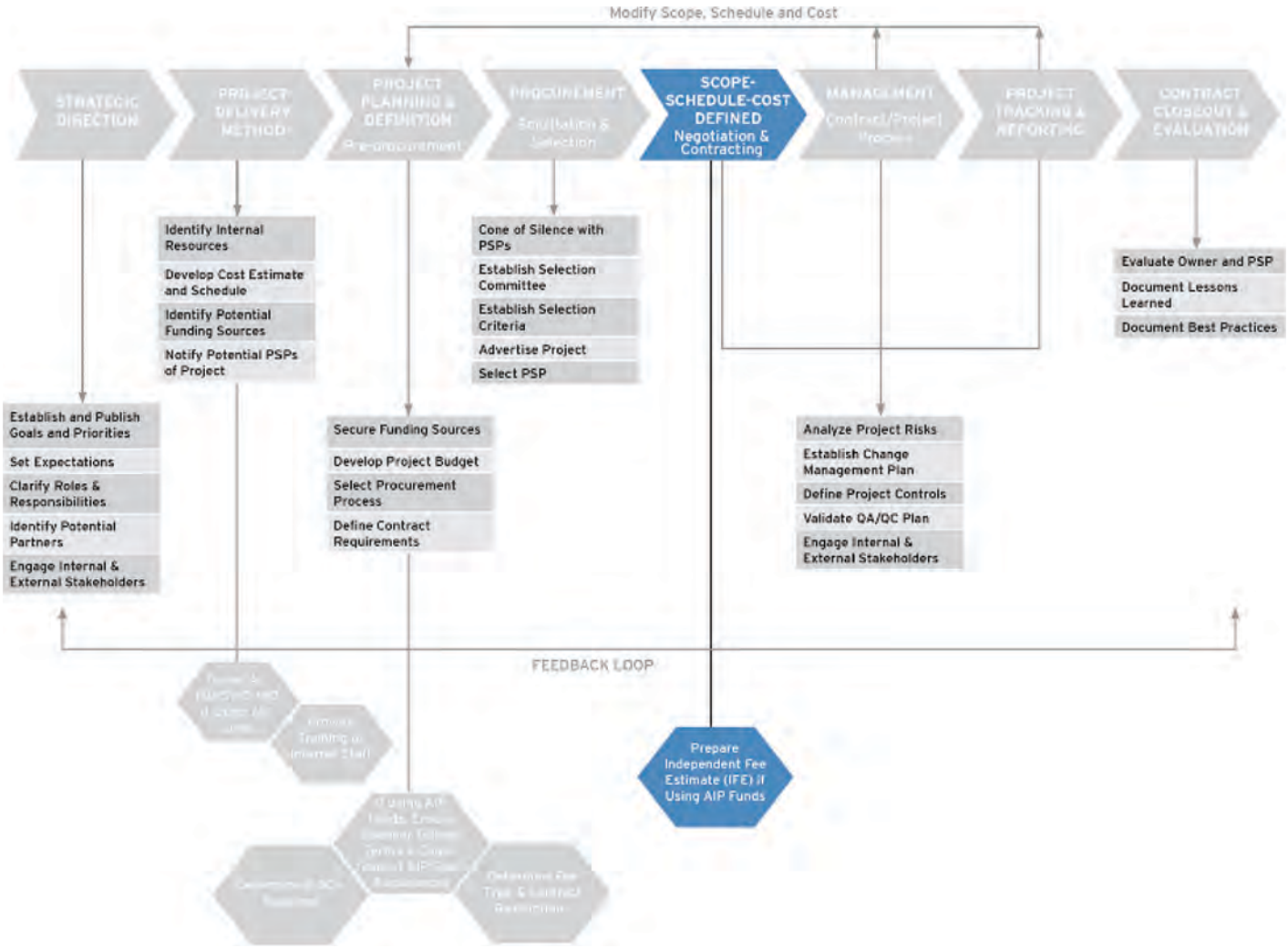


Figure 4-1. Critical path—negotiating and contracting.

desired end should be substantially the same. A good contract serves the interests of both parties in a manner that is fair and consistent with industry best practices and contains clear, fair, and reasonable terms. Universal attributes of honesty, clarity, and professionalism all contribute to a successful contract and successful effort.

Negotiation Team

The agency project manager should lead a team in preparing for negotiations with the PSP. The project manager should involve contract experts and be prepared with scope, proposed fee, IFE, and the schedule for the project before commencing negotiations. Negotiation is not a task that should be undertaken alone; the agency project manager should enlist assistance wherever possible, including legal and audit staff, both as witness and for perspective. Smaller airports may pool resources, hire an outside firm, or seek technical support from their state DOT, if such functions exist, to aid in the process. For projects funded by AIP grants or TSA agreements, the applicable reference documents (e.g., FAA Order 5100.38 and AC 150/5100-14) should be reviewed and the FAA Regional Office or TSA representative should be consulted for guidance and assistance. A successful negotiator has good listening and excellent verbal communication skills, maintains objectivity and stability under pressure, and is neither confrontational nor conflict-avoidant.

Controlling the Negotiations

Negotiation responsibilities should be assigned to individuals with the authority to fulfill them. An experienced contract specialist who can control the meeting should lead the negotiation team. Resource personnel (e.g., engineers, architects, lawyers, cost analysts, and auditors) are valuable to the contract specialist for advice, but these personnel should not be the ones making business decisions and committing the agency during the negotiations. Care must be taken that the PSP does not create a situation where the agency's contract specialists discuss alternatives or possible concessions to the contract during negotiations—the agency team should discuss such issues in private caucuses and not in the presence of the PSP. There should be one spokesperson for the agency—the contract specialist—and a lead negotiator for the PSP. These individuals should control the meeting and be authorized to make decisions on behalf of their respective organizations.

Scope and Schedule

The project scope of services and associated project schedule are where the mutual roles and responsibilities of the agency and PSP are enumerated in detail. The clarity and specificity of these elements, when associated with project budget, are the principal determinants of project success. Although many key assumptions may have been set out during the procurement phase, once a selection is made, it is always advisable to carefully review any scope that has been developed previously. All parties are placed in peril if a proposal-generated scope is incorporated into a contract by reference or as an exhibit without any intervening negotiation. No matter how clearly and thoroughly the intent may be stated in procurement phase documents by the PSP, any scope contained in a proposal remains essentially a sales document that has not had the benefit of agency feedback and discussion about how even minor modifications or clarifications could aid the subsequent process and product.

Depending on the exact scope and complexity of the project, worthwhile steps could include the following:

- Revisit the project solicitation and PSP proposal scope to discuss and resolve any ambiguities or areas of concern.
- Where appropriate, perform project site visits to enable participants to (1) gain a clearer understanding of particular issues, constraints, and stakeholder concerns, and (2) calibrate the appropriate response, level of effort, and allocation of responsibility between the contracting parties.

Generally, contract negotiations should be completed within a month after selection to allow the appropriate commitment and deployment of staff and resources by the agencies and PSP to be scheduled and delivered. A concise and clear process, well communicated in advance, has a positive effect on negotiations.

Pricing, Budget Assessment, Contingency

The pricing, budget assessment, and contingency for the project should have been established during the procurement phase. In addition, a sample contract, including the standard terms and conditions for the contract, should be provided to the PSP during the procurement phase to ensure that all PSPs are fully informed prior to proposing and to limit any issues during the negotiations. The standard terms and conditions should include any restrictions on overhead, profit, and/or fee, as well as the insurance requirements, at a minimum. During negotiations, the price, budget, and contingency should be constantly reviewed and revised in conjunction with the scope and schedule to ensure that the cost reflects any changes in the scope and schedule.

If the funding for the project includes an FAA AIP grant, the agency will need to have an independent third-party prepare an IFE of the project prior to beginning the negotiations. The requirement for an IFE may be waived at the discretion of the FAA if the project is below $100,000. It is suggested that the agency incorporate a requirement for an IFE in all negotiations so as to help negotiation teams with complex or unfamiliar projects.

Legal and Risk Management Considerations

It is best to clarify risks early and understand their sources to manage the process effectively. An assessment of project risk and understanding of vulnerabilities should be initially evaluated during the contracting phase and reviewed again at the beginning of the contract and at key milestones in the project schedule. Each agency will have a good sense of where risk is greater based on historical experience. For example, typical areas include

- Public expectations and activism;
- Funding sources, unavailability of FAA funding or state budgeting changes;
- Requirements of tenants and other internal stakeholders;
- Unforeseen site conditions or working in an area where no work has been done previously;
- Staging requirements for utilization of space; and
- Runway and taxiway requirements for possible night work and emergency operations.

Identify, assess, and determine how each risk will be managed and monitored prior to contract execution because this will affect compensation and contract terms and restrictions. The evaluation of each risk should be made and defined as follows:

- Avoidance–what is the plan to eliminate risk;
- Transference–what is the method to transfer the risk to another party—to whom and under what circumstances;
- Mitigation–early action, remediation and primary responsibility for the risk; and
- Acceptance–who is responsible for the risk and what are the contingency plans if the risk is not avoided or mitigated.

An example of a Risk Questionnaire and Risk Register are included in Appendix D, Sample Forms.

Compensation Fee Type

The fee type and method of payment should be defined and communicated to the PSP, including any contract restrictions. Agencies should choose the fee type that is most appropriate for the scope of work. The selection of a fee type—typically lump sum vs. cost-plus—should be determined based on the type of services to be performed. Although there is a natural tension and sometimes divergence between PSP and agency perspectives on optimal contract type, the contract should reflect the best sense of common ground. In general, where an assignment is well defined and sufficiently predictable to estimate with a high degree of certainty, a lump-sum contract can be desirable for all parties. In many cases, all-inclusive billing rates on a cost-plus basis can be appropriate where the tasks are more difficult to estimate with precision. Determination of fair and reasonable fees should be based on market research and historical data from past projects. Where the agency does not have a sound basis for these determinations, other knowledgeable and reliable sources should be consulted. Both parties should be open to discussing the compensation because all projects/services are not the same in degree of risk and complexity.

Contract Restrictions

Any contract restrictions (e.g., overhead limits, escalation, and salary caps) should be communicated to the PSP during the procurement phase of the project. During the negotiation

phase, both parties should acknowledge the restrictions and include them in the pricing of the services.

Quality Assurance/Quality Control

The requirements for QA/QC should be defined and the expectations of the agency communicated to the PSP. Project acceleration and contract restrictions will have a direct impact on the role, function, and method of providing QA/QC.

Adequate time and budget must be determined during negotiations for adequate senior-level QA/QC, proactive and periodic review, and project management oversight. In addition to internal checking and QC by the PSP, it is suggested that resources be set aside in the PSP budget for an independent QA/QC peer review from another office or service group of the firm on all significant projects. An example of a QA/QC review process is included in Appendix D, Sample Forms.

Communication Strategies

Every contract award process should be documented with a Memorandum of Negotiations. This memorandum must describe the most important aspects of the procurement history, which at minimum would include the following information:

- The purpose of the procurement;
- A history of the procurement, including references to important documents with their dates and identifying numbers (e.g., advertisements of the procurement, RFP, and technical evaluation of proposals);
- The names and roles of each person who participated in the negotiations;
- An explanation of how the final price was negotiated—this explanation needs to reference the Pre-Negotiation Plan price objective (if a Plan was developed), the independent cost estimate (which should always be developed), and any advisory audits that may have been conducted; and
- A discussion of important contract terms and conditions (e.g., insurance requirements, contract restrictions, DBE participation, and Buy America provisions).

Contracting

No matter the size of the contract or the level of contract support available to the contracting agency, attention to a few early actions will establish expectations and reporting requirements and ease overall administration. From the start, it is essential to document the administration of the contract and to identify what information should be maintained in the contract administration files.

Various staff involved in the project (e.g., QA/QC, engineers, inspectors, financial personnel, DBE officers, and safety staff) may possess files of their own as relevant to their involvement with the administration of the contract, but it is advisable for the procurement official (who may also be the contracting officer and agency project manager) to maintain the official contract file. The official contract file should include all official documents relating to the administration of the contract so that the PSP's adherence to the terms of the contract can be tracked and so that the agency can effectively handle any contractual or administrative issues that may arise throughout the life of the project.

Basic Contracting Principles

Before examining or discussing best practices and contracting principles for use by aviation agencies in retaining PSPs, it is necessary to establish a clear understanding of the basic

principles of contracting that frame such activities. For most public-sector organizations, the principles established in the Federal Acquisition Regulations (FAR) provide a sound foundation for this effort. Four basic principles underlie the contracting process detailed by the FAR:

1. Contracts are awarded competitively, whenever possible, to provide for reasonable prices. It is generally held that full and open competition results in fair and reasonable prices. Further, open competition avoids favoritism by assuring that all qualified suppliers can offer their goods and services.
2. Only contractors found to be "responsive" and "responsible" can be awarded contracts. Regardless of the procurement method, before a contract is awarded, the contracting officer should verify that the prospective contractor is "responsive" and "responsible." To be considered responsive, the contractor must submit a sealed bid or proposal in accordance with the terms and conditions of the quotation or solicitation. To be considered responsible, the contractor must meet the various conditions (e.g., possessing adequate financial resources, being able to meet the performance requirements, have an acceptable record of performance, demonstrate the necessary qualifications and skills, and comply with applicable regulations and laws).
3. An appropriate contract type must be associated with the particular procurement. The FAR allows the use of several different types of contracts and describes the circumstances appropriate for the use of each. The contract type used should be determined by the circumstances of the procurement and the degree of risk associated with performance of the contract.
4. Procurement programs are used to help implement national policies. Some of those policies are implemented by mandatory contract provisions (e.g., those requiring minimum standards for wages, hours, and working conditions in producing supplies or performing services). Other policies are furthered by laws requiring contracts to be awarded to certain contractors or prohibiting their award to others.

With this perspective, it is important to establish the elements that are essential to any contract: offer, acceptance, contract, and consideration:

1. **Offer.** There must be a definite, clearly stated offer to do or provide something. This could be a proposal to provide services or a quotation to provide specific goods or materials. An offer can lapse for various reasons (e.g., the time for acceptance expires or the offer is withdrawn before it is accepted).
2. **Acceptance.** Only that which is offered can be accepted. As such, the offer must be accepted exactly as offered without conditions. If new terms are suggested, this would be considered a counter offer, which can then be accepted or rejected. It is possible to have many offers and counter offers before there is an agreement. The acceptance of the offer brings negotiations to an end by establishing the contract terms and conditions.
3. **Contract.** A contract is established that serves to legally bind the parties to the terms of the agreement. The parties entering into the contract intend to create legal relations and must understand that the agreement can be enforced by law. Establishing a contract presumes the intent to create a legal relationship.
4. **Consideration.** Consideration that has tangible value must be exchanged between the parties in order for a contract to be binding. Consideration is what each party exchanges with the other as the agreed price for the promise made by the other. Usually consideration is the payment of money.

All of the various actions and strategies discussed and presented in this Handbook seek to use the best practices and lessons learned from the various research participants within the framework of the governmental contracting principles set forth in the FAR as well as the basic contract principles of offer, acceptance, contract, and consideration.

The Contracting Officer and the Project Manager: Navigating the "Constructive Tension"

A core principle of governmental contracting is the distinction between the procurement and project management functions. The procurement/contracting staff seek to obtain the best value, ensure compliance with regulations and procedures, and obtain an agreement which is in the best interests of the agency. Concurrently, the project staff seeks to obtain the "best" firm that meets their requirements both technically and financially. It is not uncommon for these objectives to appear to be in competition. Developing a cooperative relationship (using the FACTS guiding principles previously described) will serve to bridge these competing objectives and allow a collaborative working relationship that uses this constructive tension and advances the best interests of the agency.

Although a full examination of this working relationship is beyond the scope of this research effort, recognition and acknowledgment of the different roles required of each member of the project team throughout the life of the project are critical to establishing a collaborative and effective working relationship. These project team member roles are summarized in Figure 4-2:

The contract administrator leads the procurement phase of the process, assisted by the project manager as a Technical Representative. Once a contract is awarded, the lead shifts to the project manager who is responsible for delivery of the project or contract within the established scope, schedule, and budget. During this phase of the project, the contract administrator seeks to protect the agency's rights and proactively address any contract issues (e.g., changes) that may arise.

In smaller organizations, these roles may be fulfilled by a single individual. In such cases, this individual must recognize the dual responsibilities and expectations and work to fulfill these requirements.

General Contract Conditions

These conditions should be flexible to address the need and should be provided to the PSP in advance of response. Some typical terms to include

- Standard of care, correction of errors;
- Compensation, project financing;
- Warranties, insurance, legal liabilities;
- Dispute resolution;
- Documentation—ownership, exclusive property, confidentiality;

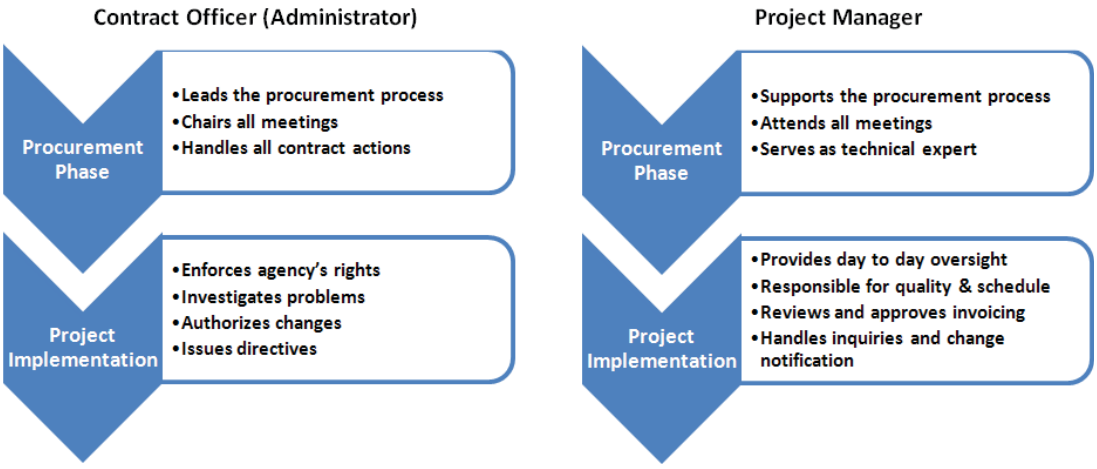


Figure 4-2. Team member roles.

- Termination—convenience, cause; and
- As-built drawings.

Contract Restrictions

The use of restrictions (e.g., salary caps, overhead caps, escalation, overtime limit, and set asides for local or DBE firms) should be applied mindful of funders' requirements and legal structures. Clarity and flexibility wherever possible will aid in encouraging a robust response from the PSP community and attract qualified DBE firms and quality submittals. At the same time, agencies should understand that contract restrictions can reduce the number of PSPs that will submit proposals and increase the amount of review required by the agency to enforce the restrictions.

Accountability Checks

Engage legal and audit departments/resources to guide the development and use of contract mechanism and language to better fit the need and resources available. Allow for adequate time for internal partners to review and modify.

Contracting Authority

Decisions regarding who should approve and manage a contract should be based on the value of the services and delegated appropriately, allowing for sufficient oversight and management. Less-expensive, less-complex services and non-controversial project delivery methods should be delegated to lower levels of authority and management for maximum efficiency and savings in time and cost.

Clarity

Terms of agreement should create and reinforce mutual and realistic expectations. Ambiguous contract language, however seemingly convenient and understood at the time, will ultimately lead to confusion or disappointment that will, over time, increase the risk of disputes or losses of time or money.

Contract Review Process

After the contract terms and conditions have been negotiated and finalized, both parties should have the contract reviewed and approved prior to signing.

Contracting Standard Operating Procedures

Staff Training

Any specific training necessary for the PSP to complete the project should be detailed, along with a timeframe for obtaining the training.

Contract Kick-off

A kick-off conference is always advisable prior to the start of work, to be chaired by the contracting officer. The agenda for such conferences may include the following:

- Introductions of key staff;
- Safety and security considerations, if relevant to scope of work;
- Schedule for key milestones;
- Payment procedures;
- DBE guidance, if applicable;
- Standards for drafting, specific software and so forth;

- Procedures for publicity releases, normally to be approved by the contracting officer prior to release; and
- Build-out procedures and restrictions, if appropriate, including inspection procedures and insurance issues.

Forms and Agreements

The agency should provide to the PSP all required forms and standard agreements to be used during the duration of the project. Some sample forms and agreements may include subcontract agreements, invoice cover sheets, DBE payment records, change order requests, schedule documentation, and cost estimates. Examples of an invoice summary form and cost estimating templates are included in Appendix D, Sample Forms.

Special Contract Considerations

Discussions and potential modifications to scope, schedule, or cost should always be considered in relation to one another. A change to one will affect the others—scope-schedule-cost should always be referenced as one word.

Ideally, an awarded contract is complete and comprehensive and its terms are adequate to define and specify the obligations and rights of the parties. Although modifications of a contract are not contemplated at the time that it is signed, as a practical matter, few contracts are completed without some modification.

Complex or alternate contracting methods need to be defined and expectations set during the negotiations. In addition, alternate methods will have specific contracting terms and conditions that should be incorporated into the contract. Examples of alternate contracting methods include DB and CM@R.

Contract Modifications

Modifications originate primarily from three sources: agency/stakeholder-initiated changes, PSP-requested changes, or unforeseen conditions. Whether initiated by the agency or PSP, a determination needs to be made by the agency's project manager as to whether or not the request falls within the general scope of the original agreement. Additional services not within the existing contract's general scope may need to be treated as a new procurement.

Examples of contract modifications within the general scope of the contract include

- Amplification or clarification of the PSP's privileges and responsibilities;
- Authorization of services contemplated or anticipated in the contract, but not included in the original agreement;
- Extension of the contract performance period within the contractual authority of the agency;
- Authorization of additional services not originally contemplated but now desired, and the nature of the services is such that they would be a logical extension of the existing contract; and
- Elimination or reduction in services that were in the contract but no longer required.

Constructive Changes

Although all contract changes should be negotiated in advance and put in writing by the agency's project manager, sometimes the agency's project manager or other agency employees may take certain actions, verbal or otherwise, which change the contract. Such changes are called "constructive changes." A constructive change occurs when the PSP acts in response to a directive with apparent authority to commit such actions. Although such changes are sometimes desirable

and necessary, only the contracting officer or his or her designee (agency's project manager) has the right to contractually commit the agency.

Performance Evaluation Reports

Most contracts of meaningful scale should be evaluated to provide feedback to the PSP on performance and enable the PSP to correct problems before contract completion. The frequency, content, and format of the reporting should be tailored to the size and complexity of the contract. At a minimum, a performance evaluation should be conducted for every project.

Agency project managers should arrange meetings with the PSP, publish minutes, and build a record of documentation. The records should be detailed and reflect ongoing communications with the PSP, both oral and written.

Other Provisions

Provisions need to be in place to address common circumstances such as

- **DBE Compliance.** Contracting officers are responsible for monitoring the PSP's DBE compliance by requesting evidence of DBE participation as specified by the contract.
- **Termination for Cause/Default or Termination for Convenience.** Default provisions establish the reasons and procedure under which a contract may be terminated for default or convenience, including recourse to performance bonds, ascertaining and collecting liquidated damages, and/or ownership of materials and final payment terms.
- **Contract Expiration.** Prior to the end of the contract, the agency's project manager should work with all relevant departments and managers to ensure that the PSP has complied with all contract requirements and that the contracting agency has fulfilled its obligations or will do so prior to the end of the contract.

Strategies to Encourage Change and Innovation

If an agency is seeking innovation, acceleration, or the use of alternative partnerships, then the contract needs to be carefully negotiated and agreed on with PSP and stakeholders.

Disputes

The first step in preventing disputes is to use clear, unambiguous contracting language and define all terminology in the contract. It can be costly to skip these items before work begins or to allow the urgency of an assignment and/or personal feelings to cloud due diligence.

Practical steps to avoid, minimize, or manage disputes are as follows:

- Develop a contract template and include it in solicitations to allow early dialog and review of any comments, questions, and potential exceptions to the form of agreement on the part of the PSP so that exceptions may be resolved and to prevent an untimely end to negotiations.
- Institute a thoughtful and fair change review process.
- Thoroughly document significant events as they occur. This can take the form of correspondence, daily diary entries, inspector's daily reports, photographs, memoranda of telephone conversations and meetings, and so forth. Such documentation establishes a project record that is absolutely essential in discouraging invalid claims and in properly evaluating claims reaching litigation.
- In general, negotiations regarding disputed items should be on an *item-by-item basis* with written arguments or basis for a specific line item or approach which is in dispute.

Broward County Aviation Department has developed a novel approach to preventing disputes by implementing a Dispute Avoidance Panel, which acts as an independent third party to help the Aviation Department resolve any disputes with PSPs, thereby precluding many issues from escalating to litigation.

Tools and Technology

Tools

Tools useful in preparing for negotiation and developing contracts include Standards of Performance internal to the agency to guide the process; a pre-negotiation plan along with relevant project documents such as scope-schedule-cost; risk questionnaires; historical data on similar projects undertaken by the agency and/or PSP; contract forms, agreements, and boiler-plate contract language; and plans for change management and QA/QC. IFEs are required if using FAA AIP funding, but are also recommended for most other procurements. Examples of a risk questionnaire and cost estimating templates are included in Appendix D, Sample Forms.

Technology

The optimal method for making mutual decisions and reaching consensus is face-to-face communication. Communication software (e.g., email and document sharing) can aid the transmittal of important documents; productivity software (e.g., word processing and spreadsheets) can assist in the pre- and post-negotiation preparation of contract documents; and financial and project management systems can be used to create schedules, milestones, and budgets.

Resources

Publications

- *ACRP Report 33: Guidebook for Developing and Managing Airport Contracts,* TRB
- *Airport Owner's Guide to Project Delivery Systems – 2nd Edition,* ACI-NA, ACC, Associated General Contractors of America (AGC)
- Federal Acquisition Regulation (FAR)
- FAA Advisory Circular (AC) 150/5100-14 Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects
- FAA Order 5100.38 Airport Improvement Program Handbook
- FTA "Best Practices Procurement Manual"

Sample Forms (Appendix D)

- Pre-Negotiation Checklist
- Risk Questionnaire
- Risk Register
- Cost Estimating Templates
- Quality Assurance/Quality Control Review Process
- Invoice Summary Form

FAA Forms (Available at the FAA Website)

- FAA Order 5100.38 Airport Improvement Program Handbook

CHAPTER 5

Managing Professional Services

The management of professional services requires the administration of a complex set of processes (i.e., policy, procedures, plans and guidelines), teams of people (i.e., agency, stakeholders, and PSP), tasks, tools and techniques for managing risk and change (i.e., methods), and tangible results (i.e., outcomes). Developing a carefully structured and integrated framework of management practices to guide and monitor interactions, communications, documentation, regular evaluation and reporting will allow for more effective control of and confidence in the delivery of the services.

Clearly delineated roles and responsibilities; transparent communications on pertinent information, expectations, and results; and accountability in documenting, reporting and close-out will increase trust and confidence and save time and money.

The following best practices and strategies for managing PSPs focus on team organization (e.g., roles and responsibilities, point of contact, and chain of command); key procedures to effectively manage PSP performance; and recommended practices for defining, monitoring, and delivering tangible results (see Figure 5-1).

Administration

The first step in managing professional services is the administration of the contract, which includes invoicing, progress reports, and contract oversight.

Invoicing

The agency must establish a process and timeframe for invoice review and payment. The agency should communicate any invoicing requirements to the PSP, including acknowledgment of reimbursable expenses, documentation required for inclusion with invoice submittals, and any time requirements for invoice submittal (e.g., periodically, by deliverable or other milestone event). In addition, any specific requirements for tracking payments to subconsultants or DBE firms should be included in the invoicing instructions and procedures. A sample invoice summary form is provided in Appendix D, Sample Forms.

Progress Reports

Progress for each individual project can be reported in several ways to the agency based on the task, the requirements stipulated in the contract, and the administrative requirements and expectations of the stakeholders or governing entity. In every case, a narrative progress report should be prepared, usually in conjunction with invoices, to document the specific activities

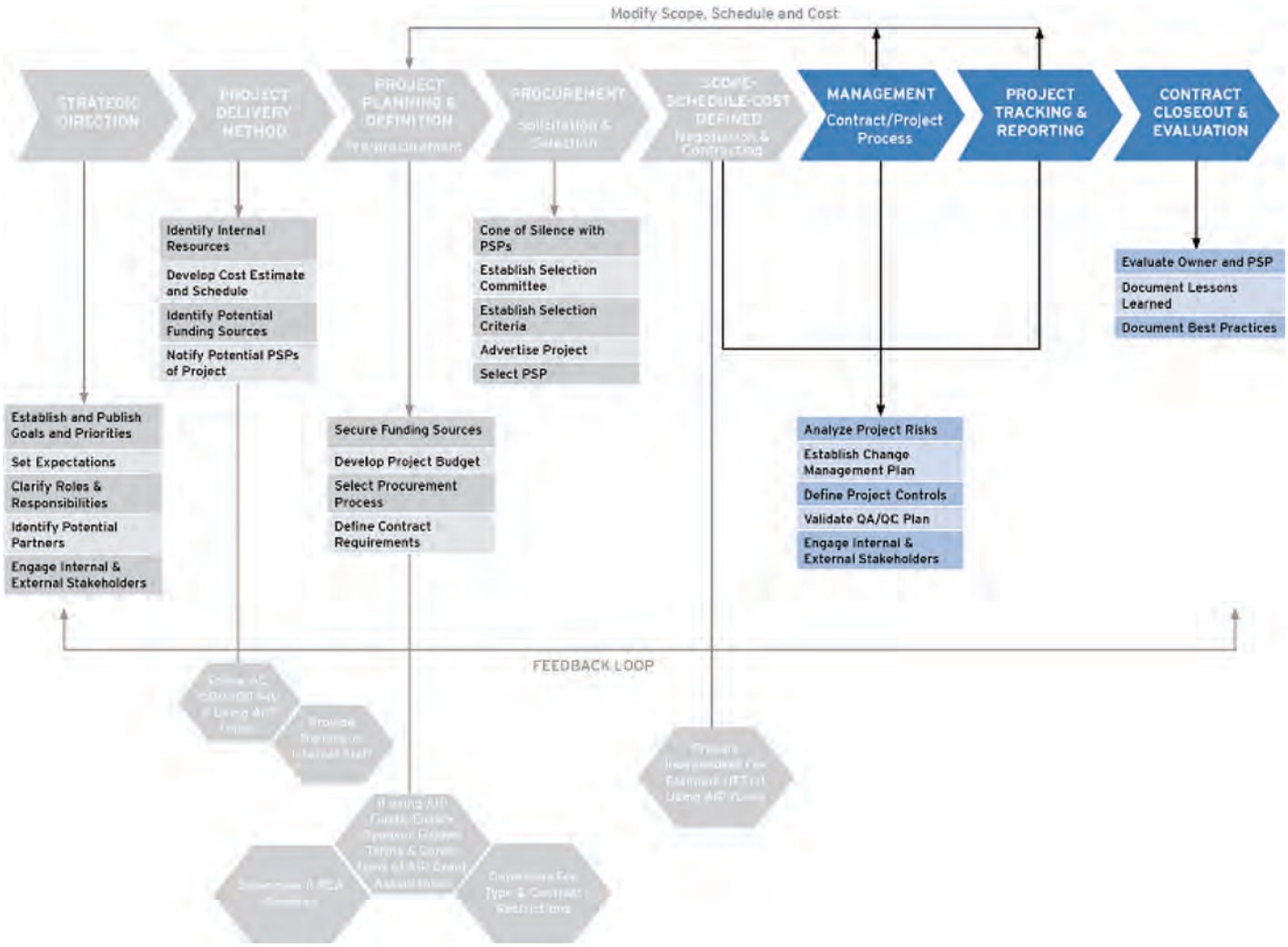


Figure 5-1. Critical path—managing PSP.

accomplished during the period, issues arising over the period, expected activities during the next reporting period, and statements regarding budget and schedule.

A detailed schedule should be developed, either in a simple format (e.g. Microsoft Office) or a more complex platform (e.g., Primavera), in concert with the agency project manager to facilitate the daily administration of the project. At minimum, these reports should document schedule, actual versus planned progress, budget and manpower expenditures by project element and task order contracts, cost and manpower projections, decisions and/or resolutions, contract modification summaries and cost accounting records pertaining to any work performed, critical issues that must be addressed, review status, changes from the previous month, and a listing of meeting minutes.

Progress reports should include the following:

- Submittal log listing a description of each submittal along with action dates and a schedule of responses due by each responsible party;
- Request for information (RFI) log;
- Correspondence log;
- Record of decision log, including sources, dates, and rationale of all decisions;

- Project schedule update, including milestones prepared with the baseline, actual progress, and critical path;
- Potential delays to scheduled activities along with potential methods to recover the original schedule;
- Activities performed during the month of the progress report; and
- Activities planned for the following month.

Reports should include emerging trends. Early identification of issues and variances allows the maximum amount of time to mitigate or correct the variance. If required, weekly review meetings should be established to deal with potentially critical issues. In addition, monthly project review meetings should be held between the agency and PSP to review project tasks status, budget, schedule, critical issues, and upcoming deliverables. Minutes of the meetings should be prepared by the PSP project manager and submitted for review and comment.

Beyond the formal report, other progress reporting methods can be used based on the nature of the project and stakeholders. For projects with external stakeholders (e.g., a project that will affect the community) one form of progress reporting would be a community/stakeholder meeting to discuss the current status and any upcoming work of the project every 6 months (or as appropriate). These community meetings could be supplemented with quarterly individual meetings with the agency to update the overall progress. For smaller projects with less stakeholder involvement, the agency could simply require a written monthly status report accompanying the invoice and a quarterly in-person meeting to review the progress. The research found that either of these approaches could work for an agency, but the agency has to be clear in communicating the requirements and consistent in administration with the PSP *prior to starting the project.* Meeting minutes should generally be prepared and provided to the agency project manager within 1 week.

Contract Oversight

The research indicated that contract oversight varied depending on the size of the agency and the size of the project. Several large-hub airports and several smaller airports with large programs used a third-party program manager to provide contractual oversight, while airports with smaller programs performed contractual oversight with internal staff. Either method can be successful, but the overall success depends on the proper training of staff in contract management and procurement requirements and regulations.

The administration requirements for invoicing, progress reporting, and contract oversight along with the responsibility for these items should be formally communicated to the PSP prior to the start of the contract, so that any requirements can be factored into the cost estimate for the project. These requirements are part and parcel of the contract requirements enumerated in Chapter 4.

Scope-Schedule-Cost Management

Project Planning and Definition

Scope, schedule, and cost must be clearly linked, well defined, and precisely understood by managers and stakeholders. Project planning and definition activities will set the expectations for the project and should be established early in the procurement process. As the project proceeds, the scope-schedule-cost should be regularly reviewed by the Project Manager to ensure that expectations are being met. Scope-schedule-cost must be constantly reviewed, evaluated, and verified during the process.

Project Controls

Project controls, an important tool for managers, are defined as a method for planning, monitoring, adjusting, and controlling a series of interrelated activities to achieve a defined objective, while dealing with budget and schedule constraints. Managers at both the agency and PSP should have a system to account for and manage the delivery of the contracted service. The general requirements of the PSP system should be included in the contract, such as the ability to integrate the selected system with the agency's current system or software and the requirements for updating the data (e.g., monthly and weekly).

Effective project controls include accurate monitoring of project progress and implementation of procedures for managing changes and risks to the project. Project controls ensure that all requirements and expectations are met and that the project is on time and within budget. In addition, project contracts are useful in identifying potential changes early in the project. By identifying changes early, delays and disputes can be mitigated and avoided. At a minimum, effective project controls should include the following:

- Project schedule, including milestones prepared with the baseline, actual progress, and critical path;
- RFI log and tracking;
- Meeting minutes log;
- Correspondence log;
- Project funding requirements such as current payments, current budget, and grant reimbursements (e.g., AIP, state, and TSA);
- Compliance with local and/or DBE requirements and/or goals; and
- Change order log.

Effective project controls can also provide the basis for future project planning and estimating. In addition, project controls are useful in documenting and avoiding disputes during the project.

For smaller agencies without internal resources to manage project controls, some PSPs are equipped to provide agencies with project controls on an as-needed basis. Memphis-Shelby County Airport Authority and Metropolitan Washington Airports Authority (MWAA) have had successful experience with use of third-party firms to provide independent project controls during the management of professional service contracts.

Risk Assessment and Management Plan

During a project, issues often arise that can impede the successful completion of the project's scope-schedule-cost and, therefore, delivery of service. These risk areas need to be managed and should be identified and placed on a risk questionnaire with any plans for mitigation or avoidance prior to the start of the project. The risks to the project will change and additional risks will become apparent throughout the duration of the project. The agency and PSP should review the risk questionnaire and identify any new risks while also ensuring that the current risks are being mitigated or avoided. A sample risk questionnaire is provided in Appendix D, Sample Forms.

Change Management Plan

Develop a clear and transparent process for managing change. Identify change early in the project and resolve any changes as soon as possible to avoid potential disputes. Figure 5-2 shows a typical change management process. The change management process should be tailored to local requirements, because the environment and policies at each agency are different. Ideally, the process should be formalized and communicated to internal and external stakeholders prior to the contract's start date.

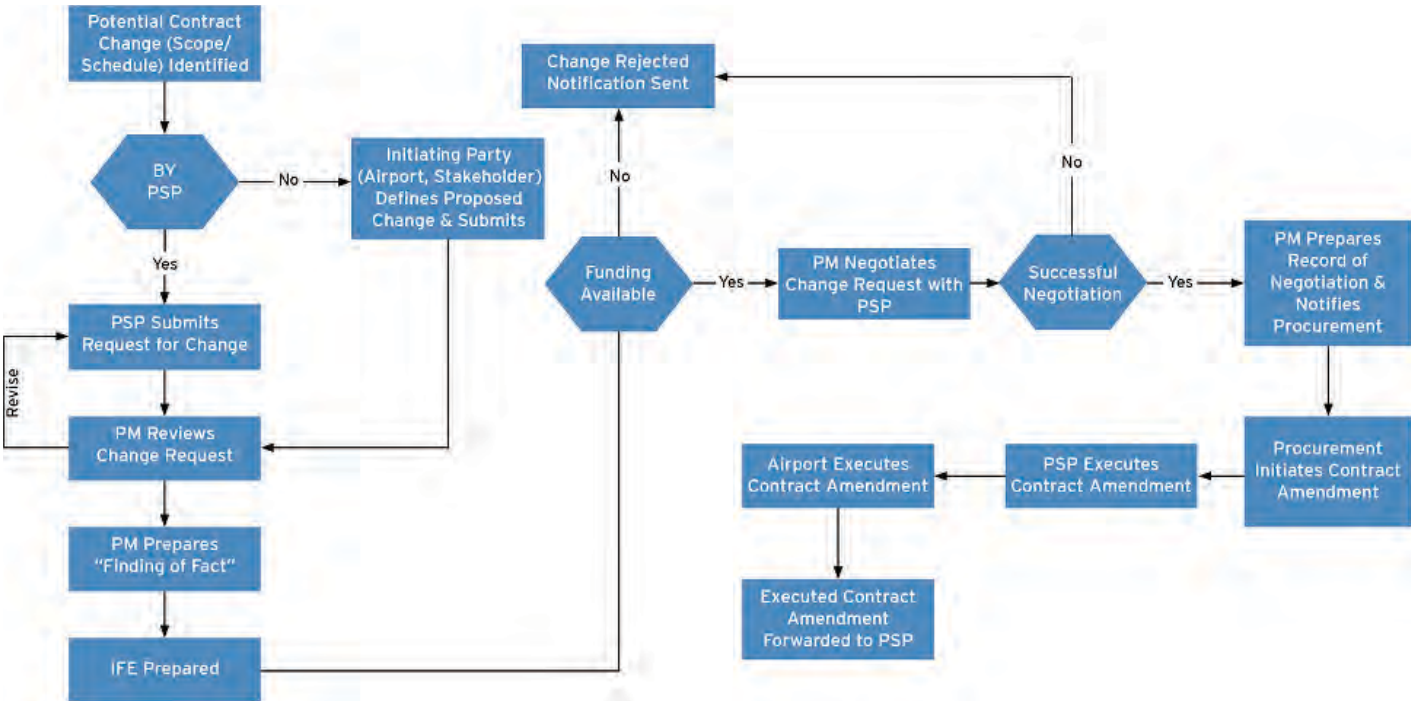


Figure 5-2. Change management process.

Broward County Aviation Department has created a Change Review Committee to perform independent, rigorous review of all contract changes and close-outs for their Airport Expansion Program, which has precluded some disputes and has fostered an environment of transparency and communication.

Quality Assurance and Quality Control (QA/QC)

Depending on the size and capacity of the agency, the QA/QC process must, at minimum, include agency validation of the PSP services and deliverables. Agencies may decide to retain a third party to perform peer review or establish a set of procedures required of the PSP on submittals. Procedures and expectations (e.g., payment rules for revisions and resubmittals) must be clear so that both parties can agree and accept the consequences. Depending on the assignment, the PSP should be expected to prepare and submit a QA/QC plan for agency approval.

The QA/QC process should be equivalent to the ISO 9000 quality standards, where all documents, graphics, and deliverables undergo a basic three-step quality process that includes documentation of dates and staff who performed Preparation, Check, and Back Check.

The quality plan should be documented at the outset of the project. Quality audits and lessons learned should be part of internal and external quality procedures. The PSP should require that all subconsultants comply with the established QC program. An example of a quality assurance/quality control review process is provided in Appendix D, Sample Forms.

Performance Management

The expectations of the PSP are developed early in the procurement process to demonstrate the performance requirements for both the PSP and the project. Agencies should manage the

PSP with these expectations as a baseline. At a minimum, expectations should be reviewed during face-to-face progress review meetings between the PSP and the agency, and the PSP should be notified of the current performance in meeting the expectations. The research showed that this process is helpful in ensuring that the PSP is aware of current performance and enables the PSP to improve prior to the completion of the project.

Auditing Oversight

Based on the funding sources used for the project, a financial audit may be required. Although the audit will not be required until completion of the project, ideally, the agency will partner with the audit team at the beginning of the project and have periodic reviews of the required information throughout the process. In addition, some funding sources have limitations on the items eligible for reimbursement. By handling the audit oversight during the project, the agency will be proactive in discovering potential issues and will allow sufficient time to correct any issues prior to the completion of the project.

Several of the agencies interviewed for this research stated that they used a proactive method of handling auditing oversight during projects. Based on the successful results of these agencies, developing a partnership with PSPs and holding periodic audit reviews during projects is considered a best practice.

Project Close-out and Evaluation

Formalized Close-out Process

Establish a formal procedure to financially close out a project on completion of project deliverables. The close-out should be accomplished within a reasonable amount of time after the acceptance of the final deliverable for the project. It was apparent during the research that several agencies did not close out contracts in case they needed other work performed at the facility. This practice should be avoided by agencies for several reasons, including that the current PSP may not be best qualified or experienced to perform the new work and the new work may not be eligible for reimbursement under the current funding (e.g., AIP grants and TSA agreements). If an agency foresees emergency tasks, it is recommended that the agency procure and contract with several firms to perform tasks on an as-needed or on-call basis. This will ensure that the PSP performing the work is experienced and qualified for the task requested.

An example close-out checklist is provided in Appendix D, Sample Forms. This checklist shows a baseline of information necessary to be completed prior to close-out of the project in the agency's procurement system. The checklist can be expanded to satisfy the requirements of each individual agency. The FAA's Contract Close-out Checklist is available at the FAA website.

Evaluation

Establish and formalize an evaluation process for the PSP. The evaluation process should allow for in-person reviews and the results should be discussed openly and freely between the agency and the PSP. In addition to a final performance evaluation at close-out, annual evaluations should also be conducted for extended-term contracts. The evaluation should be used to establish lessons learned from the project which should be incorporated into future procurements. An excellent example of PSP evaluation is the Contractor Performance Evaluation form developed by the Metropolitan Washington Airports Authority (MWAA) included in Appendix C, Model Documents. Periodically, the agency should also evaluate the performance of internal staff and the process itself.

Tools and Technology

Tools

In addition to regular meetings, progress reports, and reviews of scope-schedule-cost, tools for managing PSPs include project implementation manuals and written plans for managing change, risk, QA/QC, PSP performance, and project close-out. Tracking logs are useful for chronicling RFIs, change orders, meeting minutes, and correspondence.

Technology

Technology used in managing PSPs can range from simple spreadsheets for maintaining estimates, budgets, and schedules to comprehensive web-based project management systems; the specific tools required will depend on the complexity of the project and the needs of the user.

Resources

Publications

- *Effectively Managing Professional Services Contracts: 12 Best Practices,* GSA
- FAA Advisory Circular (AC) 150/5100-14 Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects
- *FTA Best Practices Procurement Manual*
- *General Services Administration (GSA) Acquisition Manual*
- *Improving the Quality of Airport Projects: Best Practices,* ACC/FAA
- ISO 9000-Quality Management, ANSI
- NCHRP 20-07: Best Practices in the Management of Design Errors and Omissions, TRB

Model Documents (Appendix C)

- Contractor Performance Evaluation Form, Metropolitan Washington Airports Authority (MWAA)

Sample Forms (Appendix D)

- Risk Questionnaire
- Quality Assurance/Quality Control Review Process
- Invoice Summary Form
- Close-out Checklist

FAA Forms (Available at the FAA website)

- FAA Contract Close-out Checklist

APPENDIX A

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APPENDIX B

Glossary

Accelerated Project Delivery: project delivery approach that reduces the overall time from conception to completion.

Accountability: the process of demonstrating progress on tasks, actions, and performance metrics against stated targets, goals, and objectives established to fulfill the mission of the organization. Accountability is the responsibility of each individual assigned to tasks to monitor and report on what and how progress has been achieved or fallen short.

Actual Cost: actual hourly rate for each person performing services multiplied by the actual hours worked. Also known as *direct cost* or *direct labor*.

Adjusted Bid: the process whereby an evaluation process assigns point values according to a rating system and the qualitative aspects of proposals are scored on a scale of 0 to 100 points and price is then divided by that score to yield an adjusted bid.

Advisory Circular (AC): a document published and issued by the FAA that provides guidance to airports on the implementation of FAA regulations, policies, and procedures.

After Action Review: examination of lessons learned from completed projects and contracts that can be documented and applied to improve future endeavors.

Agency: any formalized unit of government having administrative, programmatic, legal, fiduciary, and/or regulatory functions granted to it through legislation, governmental mandate, or other means and for which it receives or generates revenue.

Agreement: a formal document that states a shared understanding of roles and responsibilities, expectations, and obligations between two or more parties. It can range from a written agreement among and between internal departments to an executive order signed by an elected official that requires coordination, communication, and collaboration of defined parties to deliver a specific product. It can take the form of a Memorandum of Agreement signed by participating entities, a Memorandum of Understanding that binds parties to a specified outcome, or a Charter or Covenant that defines a process and its targeted outcomes.

Airport Agency: includes both Airport Government Agencies (AGA) and Authorities (quasi-government).

Airport Capital Plan (ACP): the document that defines the financial and programmatic expenditures for the capital programs and projects proposed to meet facility needs as well as agency mission and goals for a multi-year period. The ACP includes the scope, cost, and schedule data for the programs and projects.

Airport Government Agency (AGA): includes all airports under the management of a city, county, or state government entity.

Airport Improvement Program (AIP): grant program administered by the FAA to fund improvements related to airport safety, capacity, security, and environmental concerns. Funds can be used on eligible projects for professional services such as planning, surveying, and design.

Alternative Dispute Resolution: process of forging an agreement between conflicting parties without litigation, often with the assistance of a third party.

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Alternative Project Delivery Methods: methods of designing and constructing a project other than the traditional Design-Bid-Build.

Architectural and Engineering (A&E) Professional Services: professional services provided by a registered architect or professional engineer to support the design or construction of a horizontal or vertical infrastructure project, including pre-design and design for horizontal and vertical infrastructure, landscape architecture and urban design, cost estimating and scheduling, construction administration and management, resident inspection, survey, geotechnical investigative services, and wind/shadow/solar analysis.

Authority: quasi-government agency.

Benchmarking: the process of comparing an agency's or individual's performance metrics to best practices from similar industries. Dimensions typically measured are quality, time, and cost. Improvements from learning mean doing things better, faster, and cheaper.

Benefit-Cost Analyses (BCA): assists the FAA in identifying proposed projects that will provide a net benefit to the aviation community. The FAA requires BCAs for all capacity projects that require more than $10 million in AIP discretionary funds; however, BCAs can also be requested for less costly projects at the discretion of the local FAA district office.

Best Value Bid: weighting of qualifications criteria with total cost for the selection of professional services.

Best Value Selection: selecting the most advantageous offer by evaluating and comparing all relevant factors in addition to cost or price.

Brooks Act of 1972: sets forth a "Qualifications-Based Selection (QBS)" process requiring architectural and engineering firms to compete for government contracts on the basis of experience and technical expertise, rather than simply on cost.

Budget: a detailed outline of cost to perform and deliver the service outlined in the contract scope, by task and by person hours. The budget must coincide with the fee type and include rates, overhead, and escalation factors.

Capital Improvement Plan (CIP): a plan that guides capital investment of funds in airport infrastructure, usually over a 5-year period.

Capital Project: a group of activities from planning through construction uniquely identifying a constructed or modified fixed asset.

Change Order: a written amendment executed by an authorizing agent covering modifications to the scope, cost, or schedule associated with a contract.

Collaboration: a dynamic real-time interaction that is iterative and evolutionary where people come to a shared understanding about a process, product, or event.

Communication: an action to dispense and/or exchange information from one person to another that can take place either through in-person meetings or by electronic or hard copy reports.

Cone of Silence: the prohibition of oral communications between the agency and potential PSPs from the time that a solicitation is advertised until contract award.

Conflict of Interest: a situation when an individual or organization has interests, or may appear to have interests, on both sides of a decision where one interest could affect their ability to be objective in exercising official duties.

Construction Manager At Risk (CM@R): replaces the general contractor (and/or is qualified under a general contractors license) and bids the work out to local trade contractors and is compensated to work cooperatively through the design phase to a guaranteed maximum project budget and schedule.

Construction Manager: responsible for overseeing the construction of a project.

Contract: a mutually binding legal document that sets forward the terms, conditions, and services between the agency and the PSP.

Contract Fee Type: see Fee Type.

Contract Restrictions: constraints that may include salary rates, overhead rates, fee types, or overtime limits.

Contracting: an agreement, between two or more parties, that is written and enforceable by law.

Cost Estimate (Fee Estimate): an approximation of the probable cost of a project computed on the basis of available information.

Criteria: a rule or principle by which something can be measured or evaluated.

Debriefing: a meeting with the selecting agency to exchange information and determine how the PSP can improve the proposal for the next solicitation.

Deliverables: the product of the services rendered. This can include design plans, technical memoranda, reports, and any other physical and tangible product required to fulfill the assignment.

Design-Build (DB): alternate project delivery method where one entity is in charge of the design and construction of a public construction project. Typically, the entity is a team consisting of at least one PSP and one construction firm.

Design-Bid-Build (DBB): the traditional form of project delivery for public agencies in which there are three distinct and separate project phases—design, bidding, and construction.

Design-Build-Operate-Maintain: a public agency contracts with an entity to design, construct, operate, and maintain a facility for a defined period of time. Payment beyond construction completion is contingent on meeting performance criteria (relating to the function of the facility) that are defined before the contract begins. This method creates an incentive for the contractor to build a higher quality facility because the contractor will have to operate and maintain it for the defined period of time.

Design Criteria: includes concise, performance-oriented drawings and/or specifications of a public construction project. Examples include site plans, survey information, cost and budget estimates, schematic drawings, site development requirements, provisions for utilities, stormwater, parking, software requirements, manuals referenced, and policies and procedures necessary to develop and deliver plans.

Design Professional: any licensed professional in the fields of architecture, engineering, or land surveying.

Design Services: refers to architecture, engineering, environmental, and planning; may include site analysis, programming, schedule, cost estimating, BIM, LEED certification, and commissioning in addition to pre-design services.

Direct Cost: the actual hourly rate for each person performing services multiplied by the actual hours worked. Also known as direct labor or actual cost.

Direct Labor: actual hourly rate for each person performing services multiplied by the actual hours worked. Also known as direct cost or actual cost.

Earnings Ratio: gross revenue minus expenses divided by direct payroll.

eProcurement: refers to software systems, typically web-based, that automate, standardize, and streamline the procurement process, including vendor management and advertisement of solicitations.

Escalation Factor: rates to perform contracted services that include increases in billing rates, labor estimates, and expense estimates beyond the current salary year, as well as any anticipated overhead percentage if deemed appropriate.

Executive Leader: the individual at an airport responsible for determining the strategic direction of the airport, managing all operations, and accountable to regulatory and approving authorities for the financial integrity of all operations, programs, and services, including the delivery of projects. The Executive Leader can be the Executive Director or President and CEO of the airport or the Director of the airport facility of a multi-purpose authority, depending on the size, governmental structure, and complexity of the airport.

External Forces: entities that can affect performance or project delivery (e.g., federal and state prevailing laws, legislation, regulations; funding sources and budgetary obligations; rules and limitations; agency departments and funders, airlines, tenants, and the traveling public).

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External Stakeholders: individuals, groups, or organizations that exist and operate outside of the airport organization that may include financial, regulatory, and approving agencies (e.g., FAA; TSA; outside boards and commissions; and federal, state, and local governmental agencies); tenants (e.g., airlines, concessions, car rental agencies); and the general public (e.g., neighbors, advocacy groups, and the traveling public).

Facility Performance Evaluation (FPE): a continuous process of systematically evaluating the performance and/or effectiveness of one or more aspects of buildings in relation to issues such as accessibility, aesthetics, cost-effectiveness, functionality, productivity, safety and security, and sustainability.

Flexibility, Accountability, Communication, Transparency, Strategic Direction (FACTS):

- Flexibility. The ability to adjust to change, work in dynamic political and economic environments, and collaborate with changing partners.
- Accountability. Implementation of a clear, concise, cost-conscious, and effective process to validate spending, manage performance, and mitigate conflicts.
- Communication. The exchange of information among people, either in person, through electronic means, or by hard copy documentation.
- Transparency. Open and clear communication on how, why, when, and with whom processes and procedures are developed; information and expectations conveyed to stakeholders.
- Strategic Direction. The agency's current mission and future goals aligned with procurement practices to define expectations and effectively manage resources and staff.

Federal Acquisition Regulations (FAR): the primary regulation for use by all federal agencies in their acquisition of supplies and services with appropriated funds.

Federal Property and Administration Services Act of 1949: the law that established the General Services Administration (GSA), it includes the Brooks Act, which states that qualifications-based selection procedures must be used in the selection and engagement of consultants.

Fee: a factor that provides for the financial gain a PSP is permitted to make while providing services. The total labor costs are multiplied by this numerical factor to calculate the profit a PSP makes on services provided. It can be fixed or vary depending on the fee type. Also known as profit.

Fee Type: the compensation mechanism that describes how a firm will be paid for delivering the scope of services. Each contract Fee Type has the following three components:

1. The direct cost/direct labor/actual cost, which is the actual hourly rate for each person performing services multiplied by the actual hours worked.
2. The indirect cost/overhead/multiplier, which is a factor that covers overhead expenses of running an office (e.g., utilities and rent) as well as employee benefits (e.g., health care and retirement). The actual hours worked are multiplied by this numerical factor to calculate the total labor cost/loaded costs.
3. The fee/profit, which is a factor that provides for the financial gain a PSP is permitted to make while providing services. The total labor costs are multiplied by this numerical factor to calculate the profit a PSP makes on services provided. It can be fixed or vary, depending on the fee type.

Each contract fee type allows a different combination of these three components as described below:

- **Cost Plus-Fixed Fee:** the PSP is compensated for the actual hours worked multiplied by the overhead, plus a fee representing their profit that varies based on the actual compensation. The overhead and profit factor values are typically specified in the contract.
- **Cost Plus-Incentive Fee:** the PSP is compensated for the actual hours worked multiplied by the overhead, plus a fee representing their profit. The PSP earns the profit when defined performance criteria are met. The performance criteria are typically defined in the contract.

- **Cost Plus-To-Maximum:** the PSP is compensated for the actual hours worked multiplied by the overhead, plus a fee representing their profit that varies based on the actual compensation. The overhead and profit factor values are typically specified in the contract.
- **Cost-Reimbursement:** the PSP is compensated for actual costs (labor and materials) plus a fee representing their profit.
- **Lump Sum:** the PSP agrees to provide the defined scope of services for an agreed-on price/fixed fee that includes direct cost, indirect cost, and fixed fee.
- **Indefinite Delivery:** compensation is provided for supplies and services when exact times and quantities are not known when the contract is executed.
- **Time and Materials:** compensation is provided for direct labor hours at a specified fixed hourly rate and materials at cost.

Financial Professional Service: includes bond underwriting, debt management, investment services, financial planning, financial negotiations, capital planning, budgeting, and financial audits.

Flexibility: willingness to adapt processes based on performance metrics and feedback received from stakeholders and openness to change in response to shifting political priorities and funding that can be expected during any business cycle.

Full and Open Competition: all qualified vendors are permitted to compete for award of a contract, often through either a sealed bid or competitive proposal.

Goal: the result or achievement toward which an organization's efforts are directed.

Government Performance and Results Act of 1993: provides for the establishment of strategic planning and performance measurement in the federal government. This act directed federal agencies to develop policies regarding strategic plans and annual performance reports and managerial accountability and flexibility.

Gross Margin: net earnings from operations (gross margin divided by revenue equals profit).

Guaranteed Maximum Price (GMP): when the builder and owner agree on a target or maximum price for the construction.

Guideline: a practice that is not mandatory and suggests a future course of action.

Human Resources (HR) Professional Service: includes development and training, employee benefits, recruitment, retention, retirement, collective bargaining, licensing and certifications, organizational structure, and administration (e.g. audits).

Incentives: provides financial benefits for exceeding goals such as accelerated schedule, under budget, and innovation. Most commonly applied to construction projects.

Independent Fee Estimate (IFE): cost estimate performed by independent third party to determine fair and reasonable fee; should include direct labor, work hours, rates, overhead, non-salary expenses, and profit (fee).

Indirect Cost: a factor that covers overhead expenses of running an office (e.g., utilities and rent) as well as employee benefits (e.g., health care and retirement). The actual hours worked are multiplied by this numerical factor to calculate the total labor cost/loaded costs/overhead/the multiplier.

Information Technology (IT) Professional Service: includes computer hardware and software development, deployment, operation and maintenance, telecommunications, email, internet access and management, help desk, network development, management, and security.

Integrated Project Team: a multi-disciplinary team responsible and accountable for planning, budgeting, procurement, and management of a project in order to best achieve its cost, schedule, and performance goals.

Internal Stakeholders: individuals, groups, or departments internal to the airport organization that may include the executive administration, operations and maintenance, administrative, and technical departments, and any board of directors internal to the airport.

Leadership Team: composed of senior managers responsible for accomplishing the mission and overall operations of the airport and for overseeing the financial, engineering, planning, operating, administration, and information technology departments.

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Legal Professional Service: includes contract development and negotiations, lease negotiations, bond counsel, real estate negotiations, human resource issues, employee benefits, litigation assistance, and regulatory and compliance assistance.

Lessons Learned: documented past experiences used to change future actions and to refine performance metrics and targets in an agency.

Life-Cycle Costing: the practice of accounting for the costs and revenues that will be generated in the phases of a product life cycle that typically include development costs, the revenues from a mature market, and disposal costs.

Local Business: business located within a fixed distance of the agency; certain agencies may provide an advantage or have a minimum goal for use of local businesses.

Management Team: composed of senior managers from those departments responsible and accountable to develop, implement and oversee the strategic direction of the agency. The composition of the management team will depend on the size, governmental structure and complexity of the airport.

Minority/Women/Disadvantaged Business Enterprises (M/W/D BE): for-profit small business concerns where socially or economically disadvantaged individuals own at least 51% interest and control the management and daily business operations.

Modification: a written amendment executed by an agency covering modifications to an agreement.

Multiplier: a factor that covers overhead expenses of running an office like utilities and rent as well as employee benefits like health care and retirement. The actual hours worked are multiplied by this numerical factor to calculate the total labor cost/loaded costs/indirect cost/overhead.

Negotiating: interactive procedure for establishing expectations between the agency and PSP, framing the terms of engagement and expressing the desired outcomes of professional services.

Non-Disclosure Form: standard agreement between two parties that all employees of both parties will maintain confidentiality of sensitive information.

Notice to Proceed: a formal written document issued by an agency authorizing a consultant to formally begin work on a contract. The notice should state the amount of the contract and the beginning and end dates of the assignment in the contract.

Notification: a formal announcement by the agency of the award information for a project.

Overhead: a factor that covers overhead expenses of running an office like utilities and rent as well as employee benefits like health care and retirement. The actual hours worked are multiplied by this numerical factor to calculate the "total labor cost" (a.k.a. "loaded costs"). Also known as "indirect cost" or "multiplier."

Partnership: an arrangement where parties agree to cooperate to advance their mutual interest

Penalties: contract provisions that impose financial or other consequences for non-performance or late delivery, most commonly applied to Construction contracts.

Performance-Based Acquisition (PBA): contracting approach focused on results in which performance is assessed against outcome rather than level of effort performed.

Performance-Based Selection: the use of metrics tied to a strategic plan that identifies organizational goals and measures performance against those goals then applied to the selection of professional services. These can be both qualitative and quantitative but must be tied to a measurable performance criteria.

Performance Management: the process of maintaining performance based management and creating a results-driven environment to maximize the performance of airport organizations, processes and systems.

Performance Measures: a quantitative or qualitative measure of an agency's performance that supports a range of stakeholder needs from customers to employees. Traditionally, many metrics are financed-based, focused on the performance of the organization, linked with

the agency's business strategy, and derived to measure critically defined success factors and demonstrate value. Developing performance metrics follows three basic steps: establish business framework (goals and objectives, process, products/outputs), develop measures and establish targets against which the results can be quantified.

Performance Monitoring: the analysis and reporting status of project cost, schedule and performance on a regularly scheduled basis through the life of the project.

Planning/Environmental Professional Service: includes feasibility studies, capacity modeling and evaluations, environmental assessment documents, environmental permitting, asbestos or lead inspections, subsurface investigations, hazardous waste site cleanup, wetlands delineation, environmental audits, spill prevention plans, storm water management plans, land acquisition, right-of-way, noise and/or air quality monitoring, historic/archeological/cultural resources, sustainability, etc.

Power of Attorney: the person within an organization with the legal and/or administrative authority as bestowed by the organization (agency or PSP) to sign a contract.

Pre-Bid Conference: a meeting with contractors in which the agency discusses a proposed project and shares technical and procedural information with prospective PSP.

Pre-Design Services: may include site selection, project definition, existing facilities' surveys, geotechnical investigations, environmental studies and reports, feasibility reports and programming studies.

Pre-Negotiation Plan: a plan to set the objectives and goals of the negotiations for the agency and/or the PSP.

Pre-Qualification Certification: the annual certification process conducted by or on behalf of an agency that may include technical certification, affirmative action plan verification, vendor registration, and supplemental information.

Procurement: includes all stages of the process to obtain professional services, beginning with the determination of need, description of requirements, selection and solicitation, contract award, contract administration and contract close-out.

Procurement Team: comprised of procurement and project managers that implement the individual projects under the strategic plan of the airport, are responsible for delivering the projects on-time and on-schedule, and are accountable to the project's internal and external stakeholders.

Professional Service Providers (PSP): includes all design consultants and providers of legal, financial, human resources (HR), and information technology (IT) services.

- **Architectural and Engineering** (**A&E**) includes pre-design and design for horizontal and vertical infrastructure, landscape architecture and urban design, cost estimating and scheduling, construction administration and management, resident inspection, survey, geotechnical investigative services, wind/shadow/solar analysis, etc.
- **Financial** includes bond underwriting, debt management, investment services, financial planning, financial negotiations, capital planning, budgeting, financial audits, etc.
- **HR** includes development and training, employee benefits, recruitment, retention, retirement, collective bargaining, licensing and certifications, organizational structure and administration (e.g., audits), etc.
- **IT** includes computer hardware and software development, deployment, operation and maintenance, telecommunications, email, internet access and management, help desk, network development, management and security, etc.
- **Legal** includes contract development and negotiations, lease negotiations, bond counsel, real estate negotiations, human resource issues, employee benefits, litigation assistance, regulatory and compliance assistance, etc.
- **Planning/Environmental** includes feasibility studies, capacity modeling and evaluations, environmental assessment documents, environmental permitting, asbestos or lead inspections, subsurface investigations, hazardous waste site cleanup, wetlands delineation,

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environmental audits, spill prevention plans, storm water management plans, land acquisition, right-of-way, noise and/or air quality monitoring, historic/archeological/cultural resources, sustainability, etc.

Professional Services: includes services such as planning for a study, design of a facility, construction oversight and counsel or advice on political, legal and financial matters. Professional service disciplines include planning, environmental, architectural and engineering, information technology, construction administration and management, financial planning and analysis, legal counsel and other key disciplines (e.g., human resources, government or public relations, or communications).

Profit: gross revenue minus overhead minus payroll minus expenses.

Program Manager: the person responsible for plans, funding, schedules, and timely completion within cost limitations of a program comprised of two or more projects. Planning responsibilities include developing acquisition strategies and promoting full and open competition and can typically involve multiple projects or all phases of one project (real estate, financing, design, construction and occupancy).

Project Charter: a document that formally authorizes a project that links the project to ongoing work in the organization and gives the Project Manager the authority to allocate resources to execute the project. The key components of a project charter may include a business needs statement, purpose, scope, authority and dispute resolution language as well as detailed membership, roles and responsibilities, meeting format and rules for quorum, operating guidelines and key milestones. Some charters may reference the agency's mission, goals and strategic plan as well as organizational factors and constraints.

Project Close-Out: the completion and settlement of the project, including addressing all issues from turning the facility over to the Operations & Management Department (O&M) and wrapping up contract issues with the consultant and the contractor to finalizing the financial information to confirm the total final project cost. These issues may include obtaining the O&M and training manuals, certificate of substantial completion, certificate of occupancy, as well as addressing punch list items, contractual issues, functional issues, and guarantee and warranty issues.

Project Contingency/Reserve: a dollar amount set aside on a project to fund risk associated with the uncertainty in the project scope, cost, or schedule.

Project Controls: the features of a project that must be managed and controlled in order to deliver a project successfully. They include scope, cost, funding, schedule, quality, resources (labor and materials), communication and correspondence, risk, and procurement.

Project Definition: a statement of the business need that the project seeks to address and the description of the product, service or deliverable business objectives that will be its output.

Project Delivery: the method for assigning responsibility to an organization or an individual for providing design and construction services.

Project Description: an overview of the scope of a project including the goals and objectives of the assignment. This may include a map defining the limits of the improvements and the assumptions of the assignment by providers.

Project Evaluation: the method for collecting, analyzing, and using information to determine the manner and extent to which a program or a project achieves its intended objectives. The assessment process integrates lessons learned and suggestions that are documented so that knowledge is captured and organized in a way that will benefit future projects.

Project Management: the means for coordinating the process of design and construction of a project (planning, staffing, organizing, budgeting, scheduling, and monitoring).

Project Manager: a person who coordinates the planning, execution and/or closeout of a project.

Project Request List: a comprehensive, draft list of all potential projects including scope, order and total cost of projects and proposed funding sources by fiscal year.

Public-Private Partnerships (PPPs or P3s): refer to contractual agreements formed between public agencies and private entities to allow for greater private sector participation in the delivery of projects.

Purchase: the acquisition of goods and services, the purchase or lease of personal property, or the lease of real property.

Purchase-to-Pay: a system that automates the process of procurement from the first steps of needs identification to actual procurement of goods and services to invoicing and payment.

Quality Assurance/Quality Control (QA/QC): quality control is the process to review all factors involved in quality work; quality assurance is the process of creating a plan to ensure that quality control procedures are implemented.

Qualifications-Based Selection (QBS) Process: an equitable, rational, objective process that enables a client to obtain highly qualified professional services at a fair and reasonable cost.

Qualitative Selection: use of low, medium or high ratings for ranking.

Quantitative Selection: use of numerical ratings for ranking, such as "100, 50, 30" or "1 to 10."

Reimbursable Expenses: agreed upon compensation for additional labor, overhead, expenses or subconsultant services.

Reporting: the process of demonstrating progress in achieving targets, goals and results, which can be done formally through documentation and reports or in meetings where information is exchanged and adjustments are made collaboratively, if necessary.

Request for Information (RFI): a formal, properly advertised solicitation in accordance with governing laws through which an owner collects data from potential providers for a specific service. RFIs are often used prior to and with RFQs and RFPs.

Request for Proposals (RFP): a formal, properly advertised solicitation in accordance with governing laws through which an owner details the scope of services required and requests representative project experience, staff profiles and other legal registration and licensing documents upon which an owner selects a PSP.

Request for Qualifications (RFQ): a formal, properly advertised solicitation in accordance with governing laws through which an owner requests data on the qualifications of a company, its staff and representative project experience upon which an owner develops a list of qualified professional services provider to select from to perform specific services.

Respondent: a firm or a team of firms in a prime/sub relationship submitting a proposal in response to a properly advertised solicitation for professional services, such as an RFI, RFQ, or RFP.

Retainage: a percentage of a progress payment withheld from each invoice by the owner until the contract is complete. This is a tool used by owners to ensure that performance of the full contract is met.

Retainer: a fee paid upfront on a periodic basis for a client to have access to an expert on a particular topic when needed. This is a common method of payment for legal and financial services.

Risk: the possibility that an uncertain event could cause an impact to a project.

Risk Analysis: the process of assessing the consequences and likelihood of risk.

Risk Management: the process of identifying risks and prioritizing them, then creating and implementing a plan to mitigate those risks.

Risk Register: a record maintained as part of a project file, most often a spreadsheet, that contains details related to project risks including causes, probability, impact and response.

Salary Caps: a policy that defines the upper limit of a rate for labor.

Schedule: a detailed account of tasks to be performed by duration, dates of deliverables, anticipated milestones and expected meeting requirements. Every schedule should include a start date and completion date.

Scope: a definition of the limits of work, specific tasks and deliverables, type of services, schedule of deliverables, and associated budget to complete the assignment.

Scope-Schedule-Cost: scope, schedule and cost impact each other throughout the duration of a project and therefore are referenced as one term.

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Selection Committee: members of an agency which may include staff from within different departments identified for their technical expertise convened to develop criteria, evaluate and select a PSP; depending on the project, external experts or community representatives may also be brought into the committee either for the selection phase or throughout the duration of the contract.

Selection Criteria: categories of qualifications, capabilities, and/or experience that provide the basis for screening and scoring the qualifications submitted for specific projects.

Sensitivity Analysis: a technique of conducting "what if?" scenarios by adjusting specific variables in order to isolate their effect on profits or cash flows.

Short List: a list of firms that have been selected for final consideration and/or interview in awarding a contract.

Small Disadvantaged Business (SDB): a program administered by the Small Business Administration designed to assist socially and economically disadvantaged businesses to compete in the federal procurement market.

Solicitation: a formal document sent to prospective professional service providers by an owner requesting submission of an offer, quote, statement or other information necessary to perform the scope or service.

Stakeholders: individuals who have an active interest in the procurement and management of PSP. External stakeholders include financial, regulatory and approving authorities (e.g., FAA, TSA, municipal governments, outside boards and commissions), governmental agencies (i.e., federal, state and local), tenants (e.g., airlines, concessions, rental cars), and the general public (e.g., neighbors, advocacy groups, and the traveling public). Internal stakeholders include the executive administration, operating and maintenance, administrative, and technical departments, and any board of directors internal to the airport.

Subconsultant: a firm, or individual, has significant input and responsibility for certain aspects of a project and provides services under the guidance of a prime consultant.

Suspension: an administrative action less severe than a debarment taken by a client to exclude a consultant and/or contractor on a temporary basis from participating in contracts.

Tracking: a process using established mechanisms to follow a process and performance against agreed upon targets and measures.

Transparency: a managing principle where processes are clearly defined, decisions are well-documented and information is easily available to all participants.

Value Engineering: the analysis of the functions of systems, equipment, facilities, services, and supplies for the purpose of achieving the essential functions at the lowest life cycle cost consistent with required performance, reliability, quality, and safety, performed by qualified professional service provider or contractor personnel, directed at improving performance, reliability, quality, safety, and life-cycle costs.

Warranty: a promise or written affirmation given by a goods or service provider to an owner regarding the nature, usefulness, or condition of the supplies or performance of services furnished under the contract.

Acronyms

A/E	Architectural and Engineering
AAAE	American Association of Airport Executives
AC	Advisory Circular
ACC	Airport Consultants Council
ACE	Acquisition Center of Excellence
ACEC	American Council of Engineering Companies
ACI-NA	Airports Council International – North America
ACIP	Airport Capital Improvement Plan

ACRP	Airport Cooperative Research Program
AGA	Advancing Government Accountability
AGA	Association of Government Accountants
AGC	Associated General Contractors
AIA	American Institute of Architects
AIP	Airport Improvement Program
AKDOT	Alaska Department of Transportation
ALP	Airport Layout Plan
ANC	Ted Stevens International Airport (Alaska)
AOPA	Aircraft Owners and Pilots Association
APG	Airport Purchasing Group
APTAC	Association of Procurement Technical Assistance Centers
APWA	American Public Works Association
AQL	Acceptable Quality Level
AR	Accounts Receivable
ATA	Air Transport Association
BCA	Benefit-Cost Analysis
BCAD	Broward County Aviation Department (Florida)
BIM	Building Information Modeling
BPA	Blanket Purchase Agreement
CAD	Computer Aided Design
CAGE	Commercial and Government Entity
CCR	Central Contractor Registration
CE	Categorical Exclusion
CEQ	Council on Environmental Quality
CFDA	Catalogue of Federal Domestic Assistance
CICA	Competition in Contracting Act of 1984
CIP	Capital Improvement Plan
CM	Construction Manager
CM@R	Construction Management at Risk
CMAR	Construction Management at Risk
CMR	Construction Management at Risk
COTR	Contracting Officer's Technical Representative
COTS	Commercial-off-the-shelf (software)
CP	Cost Plus
CPDA	City of Philadelphia Department of Aviation
DB	Design-Build
DBB	Design-Bid-Build
DBE	Disadvantaged Business Enterprise
DFW	Dallas-Fort Worth International Airport (Texas)
DOT	Department of Transportation
DQ	Documented Quotes
DSBS	Dynamic Small Business Search
DUNS	Data Universal Number System
EA	Environmental Assessment
e-Business	Electronic Business
EDI	Electronic Data Interchange
EIS	Environmental Impact Statement
EJCDC	Engineers Joint Contract Documents Committee
EPEAT	Electronic Product Environmental Assessment Tool
EPLS	Excluded Parties List System

eProcurement	Electronic Procurement
ER	Earnings Ratio
ERP	Enterprise Resource Planning
eSRS	electronic Subcontracting Reporting System
EVM	Earned Value Management
FAA	Federal Aviation Administration
FACTS	Flexible, Accountable, Communicative, Transparent, and Strategic
FAI	Federal Acquisition Institute
FAR	Federal Acquisition Regulation
FARA	Federal Acquisition Reform Act of 1996
FASA	Federal Acquisition Streamlining Act of 1994
FBO	Federal Business Opportunities (FedBizOpps)
FFATA	Federal Funding Accountability and Transparency Act of 2006
FFP	Firm Fixed Price
FHWA	Federal Highway Administration
FPDS-NG	Federal Procurement Data System - Next Generation
FPE	Facility Performance Evaluation
FSS	Federal Supply Schedule
FTA	Federal Transit Administration
GA	General Aviation
GAO	Government Accountability Office
GEC	General Engineering Contract
GFOA	Government Finance Officers Association
GIS	Geographical Information System
GM	Gross Margin
GMP	Guaranteed Maximum Price
GPO	United States Government Printing Office
GPRA	Government Performance and Results Act
GSA IAE	General Services Administration Integrated Acquisition Environment
GSA	General Services Administration
GWAC	Government-Wide Acquisition Contract
HR	Human Resources
IAA	Indianapolis International Airport (Indiana)
ICD	Interagency Contract Directory
ICE	Independent Cost Estimate
ICMA	International City/County Management Association
IDV	Indefinite Delivery Vehicles
IFB	Invitations for Bids
IFE	Independent Fee Estimate
IPT	Integrated Project Team
IT	Information Technology
ITMRA	Information Technology Management Reform Act
JTD	Job to Date
LCPA	Lee County Port Authority (Florida)
LOC	Library of Congress
LOI	Letter of Interest
LS	Lump Sum
MAA	Maryland Aviation Administration
MAC	Multiple-Award Contract
MAS	Multiple-Award Schedule
Massport	Massachusetts Port Authority

MBE	Minority Business Enterprise
MDE	Maryland Department of the Environment
MPIN	Marketing Partner Identification Number
MSCAA	Memphis-Shelby County Airport Authority (Tennessee)
MTD	Month to Date
MWAA	Metropolitan Washington Airports Authority (District of Columbia)
NACo	National Association of Counties
NAICS	North American Industry Classification System
NASACT	National Association of State Auditors, Comptrollers and Treasurers
NASAO	National Association of State Aviation Officials
NASCIO	National Association of State Chief Information Officers
NASPO	National Association of State Procurement Officers
NBAA	National Business Aviation Association
NCFRP	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NCMA	National Contract Management Association
NEPA	National Environmental Policy Act
NIGP	National Institute of Government Purchasing
NLC	National League of Cities
NPI	National Purchasing Institute
NTIS	National Technical Information Service
NTP	Notice to Proceed
O&M	Operations and Maintenance
OFPP	Office of Federal Procurement Policy
OH	Overhead
OMB	Office of Management and Budget
ORCA	Online Representations and Certifications Application
PAD	City of Phoenix Aviation Department (Arizona)
PANYNJ	Port Authority of New York and New Jersey Aviation Department
PBA	Performance-Based Acquisition
PBSA	Performance-Based Services Acquisition
PCA	Packaged Composite Applications
PDS	Project Delivery Systems
PDX	Portland International Airport (Oregon)
PFC	Passenger Facility Charge
PHL	City of Philadelphia Department of Aviation (Pennsylvania)
PM	Program Manager
PM	Project Manager
PMC	Project Monitoring and Control
PMO	Project Management Oversight
POA	Power of Attorney
PPIRS	Past Performance Information Retrieval System
PPP (3Ps)	Public Private Partnerships
PPPP	Principles and Practices of Public Procurement
PSA	Professional Service Agreement
PSC	Professional Services Council
PSP	Professional Services Provider
PTAC	Procurement Technical Assistance Center
PWS	Performance Work Statement
QA	Quality Assurance
QAP	Quality Assurance Plan

QBS	Qualifications-Based Selection
QC	Quality Control
RFI	Request for Information
RFP	Request for Proposals
RFQ	Request for Qualifications
RIAC	Rhode Island Airport Corporation
RITA	Research and Innovative Technology Administration
RLDA	Richland-Lexington Airport District (South Carolina)
SaaS	Software as a Service
SAM	Supplier Agreement Management
SAM	System for Award Management
SARA	Services Acquisition Reform Act of 2003
SBA	Small Business Administration
SDB	Small Disadvantaged Business
SFO	San Francisco International Airport (California)
SLA	Service Level Agreements
SMAA	Sarasota Manatee Airport Authority (Florida)
SOO	Statement of Objectives
SOP	Standard of Practice
SOQ	Statement of Qualifications
SOW	Statement of Work
SSI	Sensitive Security Information
TCRP	Transit Cooperative Research Program
TLCat	Transportation Libraries Catalog
TRB RiP	Research in Progress
TRID	Transportation Research Integrated Database
TRIS	Transportation Research Information Services
TRR	Transportation Research Record
USDOT	United States Department of Transportation
VBS	Value-Based Selection
VE	Value Engineering
VGP	Values and Guiding Principles
WBE	Women Business Enterprise
WBS	Work Breakdown Structure
WDOL	Wage Determination Online
YTD	Year to Date

APPENDIX C

Model Documents

REQUEST FOR QUALIFICATIONS (RFQ)
PROFESSIONAL ON-CALL AIRPORT ARCHITECTURAL, ENGINEERING, AND PLANNING CONSULTANT SERVICES
FOR _____ (AIRPORT, CITY, STATE)

The _____ (owner) is requesting Statements of Qualifications from interested and qualified Aviation Consultants for Professional On-Call Airport Architectural, Engineering, and Planning Consultant Services at _____ (Airport) for the next five (5) years. Professional, technical and advisory services are needed for projects identified in the Airport's capital improvement program.

FAA Advisory Circular (AC) 150/5100-14D, *Architectural, Engineering, and Planning Consultant Services for Airport Grant Projects* should also be referenced. This AC provides guidance for airport sponsors in the selection and engagement of architectural, engineering, and planning consultants. It also discusses services that normally would be included in an airport grant project, types of contracts for these services, contract format and provisions, and guidelines for determining the reasonableness of consultant fees.

SCOPE OF WORK

Projects may include airside/landside design, drainage and lighting, planning and environmental services, and construction related services. A copy of the airport's current capital improvement program can be requested from _____ (contact) at _____ (phone/email). Consultants should be familiar with Federal Aviation Administration (FAA) and State aviation funding programs and requirements.

PROPOSAL FORMAT

To facilitate review, submissions should conform to the following format:

1. **Experience of the Firm:** Provide a description of your firm's prior experience and qualifications in airport architectural, engineering, planning and environmental analysis. Also, please reference the experience of the firm in working with the State and FAA regulations and procedures.

2. **Project Team (Key Staff):** Identify the proposed Project Manager and key project team members and responsibilities. Provide a brief resume for each person outlining their credentials and experience.

3. **References:** Provide the name and contact information for at least three (3) references familiar with the quality of work by your firm of similar nature as contained in the above Scope of Work.

4. **Project Understanding:** Provide your general understanding of the airport, project and issues regarding the identified project(s). Identify any potential challenges or special concerns that may be encountered.

5. **Other Supporting Data:** Include any other information you feel to be relevant to the selection of your firm or the makeup of the project team including sub-consultants.

The entire Statement of Qualifications shall not exceed thirty (30) pages; excluding the front and back covers, dividers, cover sheet, table of contents, and letter of introduction (maximum two pages).

CRITERIA FOR REVIEW OF STATEMENT OF QUALIFICATIONS

The following criteria will be used in screening, ranking and selection of the successful firm:

1. **Qualifications of the Firm (20-30%):** Preference shall be given to those firms with experience in airport architectural, engineering, planning and environmental analysis related to the scope of services.

2. **Qualifications of the Project Team (Key Staff) (30-40%):** Preference shall be given to those with key staff experience in items listed in the above scope of services and any familiarity with the region.

3. **Experience in Working with State and FAA Regulations and Procedures (10%):** Preference shall be given to project teams whose personnel have a demonstrated working relationship with the State and FAA, and possess a thorough understanding of FAA rules and regulations regarding design and development of airports similar to the _____ (Airport).

4. **Project Understanding (25-35%):** Preference shall be given to those firms which have a comprehensive understanding of the project requirements and environment.

SELECTION OF THE CONSULTANT

It is the intent of the _____ (owner) to appoint a committee to review the Statements of Qualifications submitted and rank the qualified firms.

The _____ (owner) may choose to interview a shortlist of consultants before making the selection. The shortlisted consultants shall be notified at least 14 days prior to the interview date.

All unsuccessful firms will be notified in writing no later than 10 days after selection of the Consultant and may contact the _____ (owner) for debriefing.

_____ (owner) reserves the right to reject any and all submissions to this RFQ, request clarification, or waive informalities/technicalities, if it is deemed in the best interest of the _____(owner). The _____ (owner) assumes no responsibility for costs incurred in responding to this RFQ.

In accordance with FAA selection procedures, all selections should be qualification based. No overhead rate, fees, or any cost information should be identified as part of this submission.

CONTRACT

The top ranked firm will be invited to negotiate a contract with the _____ (owner). A detailed scope of work will be developed and agreed to by the selected consultant and the _____ (owner). This detailed scope of work and associated fee will be incorporated as part of the contract.

The consultant shall not discriminate on the basis of race, color, national origin, or sex in the performance of this contract. Disadvantaged Business Enterprise (DBE) utilization is strongly encouraged.

SUBMISSION OF QUALIFICATIONS STATEMENT AND CONTACT PERSON

___ copies of the Qualifications Statement must be submitted no later than _____ p.m. on _____ (month, date, year) to:

Name / Title
Physical Address (for overnight delivery)
Phone

All questions regarding this RFQ should be directed to:

Name / Title
Address
Phone / Email

Metropolitan Washington Airports Authority

CONTRACTOR PERFORMANCE EVALUATION

TO BE COMPLETED BY THE CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE AT KEY MILESTONES OR EVERY SIX MONTHS

PROJECT OVERVIEW

CONTRACT NUMBER	PROJECT NAME	LOCATION
		(Select One)

CONTRACTING OFFICER	CONTRACTING OFFICER'S TECHNICAL REPRESENTATIVE

PROJECT TYPE	PROJECT DATES	CONTRACT VALUE
(Select One)	Start Date: Current Completion Date:	

CONTRACTOR INFORMATION

CONTRACTOR NAME

CONTRACTOR ADDRESS

PRIMARY CONTACT	PROJECT SUPERINTENDENT

CONTRACTOR PERFORMANCE EVALUATION

DATE OF EVALUATION	EVALUATION NUMBER	IS CONTRACT COMPLETE?
		☐ YES ☐ NO

A. QUALITY OF WORK

Rating: ☐ 4 – Excellent ☐ 3 – Good ☐ 2 – Fair ☐ 1 – Poor

Remarks:

B. MINIMIZATION OF IMPACTS ON CUSTOMERS / O&M DELIVERABLES / WARRANTY SUPPORT

Rating: ☐ 4 – Excellent ☐ 3 – Good ☐ 2 – Fair ☐ 1 – Poor

Remarks:

C. SCHEDULE ADHERENCE

Rating: ☐ 4 – Excellent ☐ 3 – Good ☐ 2 – Fair ☐ 1 – Poor

Remarks:

D. COST CONTROL / CHANGE NEGOTIATIONS / CLAIMS AVOIDANCE

Rating: ☐ 4 – Excellent ☐ 3 – Good ☐ 2 – Fair ☐ 1 – Poor

Remarks:

E. SAFETY AND SECURITY COMPLIANCE

Rating: ☐ 4 – Excellent ☐ 3 – Good ☐ 2 – Fair ☐ 1 – Poor

Remarks:

F. MANPOWER AND EQUIPMENT ADEQUACY

Rating: ☐ 4 – Excellent ☐ 3 – Good ☐ 2 – Fair ☐ 1 – Poor

Remarks:

G. CALIBER OF SUPERVISION

Rating: ☐ 4 – Excellent ☐ 3 – Good ☐ 2 – Fair ☐ 1 – Poor

Remarks:

H. OVERALL PERFORMANCE RATING

☐ 4 – Excellent ☐ 3 – Good ☐ 2 – Fair ☐ 1 – Poor

RECOMMENDATION FOR FUTURE WORK

IS THIS CONTRACTOR RECOMMENDED FOR FUTURE WORK?

☐ YES ☐ NO

MISCELLANEOUS REMARKS

(06/2010)

APPENDIX D

Sample Forms

PROJECT PRIORITY RANKING

Project: *Runway 9R/27L Safety Area*
Date: *January 31, 2013*
Reveiwer: *John Smith*

Relative Weight of Criteria (Sum to total 100%)	**Prioritization Criteria**	**Ranking Methodology/Details**	**SCORE** (1 - 10)	**Rationale**	**Relative Score** (Weight *x* Score)
30%	**Mandate** (code compliance/TSA requirement/FAA requirement)	Airport will have negative federal/state/local impact if the project is not implemented within the upcoming fiscal year. Potential for funding from mandating agency.	10	FAA mandated installation of runway safety areas. Current Runway 9R/27L safety area does not meet FAA guidelines. AIP grant funding of 75% of the project costs is available.	3.0
25%	**Life Safety/Security**	Project will improve/maintain existing security standards. Project will reduce high risk of life safety issues.	10	Installation of Runway 9R/27L safety area will improve the life safety standards of the airport.	2.5
15%	**Asset Preservation/ Maintain Existing Facilities**	Project addresses existing need identified in airport's asset management plan. If the project is not implemented, the life of the asset will be impacted.	7	Without the installation of the runway safety area, the usefulness of Runway 9R/27L for operations might be limited or stopped until the FAA mandate is implemented.	1.1
15%	**Revenue Generation/Cost Reduction**	Economically viable to implement and maintain. What is the return on investment (ROI) for the project? Is grant funding or other financial leverage available and likely to be used for this project which would reduce the Airport's total cost.	6	Economically viable to implement and maintain. AIP grant funding will be used for 75% of project cost.	0.9
15%	**Level of Service** (project's impact to operations/customer service)	Operational necessity to maintain existing level of service with no reasonable alternatives and unacceptable risk and/or unacceptable consequences of deferral.	10	Project is mandated by the FAA and is a requirement for continued safe operation of Runway 9R/27L. If not implemented by the FAA deadline, operations on Runway 9R/27L may cease until the project is completed.	1.5
100%				**TOTAL WEIGHTED AVERAGE SCORE --->**	9.0

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Sample Risk Register

5 = Very High 4 = High 3 = Moderate 2 = Low 1 = Very Low 0 = none

Risk Types	Risk Number	Date Identified	Risk Description	Probability	Risk Score	Control Measures	Risk Owner
Technical (1)	1.1	2/1/2013	Responses from the client are not timely	4	3		
Technical (1)	1.2	2/1/2013	Unexpected geotechnical issues	3	3		
Technical (1)	1.3	2/2/2013	Incomplete Design	2	2		
Technical (1)	1.4	2/21/2013	Change requests because of design errors	2	2		
Technical (1)	1.5	2/3/2013	Inaccurate assumptions on technical issues in planning stage	2	2		
External (2)	2.1	2/3/2013	Threat of lawsuits	4	4		
External (2)	2.2	2/6/2013	Political factors change	3	3		
External (2)	2.3	2/8/2013	Funding changes for future fiscal years	3	3		
External (2)	2.4	2/8/2013	Local communities pose objections	3	2		
External (2)	2.5	2/10/2013	New stakeholders change the work plan	3	2		
External (2)	2.6	2/14/2013	Influential stakeholders request additional work	3	2		
External (2)	2.7	2/18/2013	Priorities change on existing program	2	2		
External (2)	2.8	2/21/2013	Inconsistent cost, time and scope	2	2		
Environmental (3)	3.1	2/4/2013	Permits or agency actions take longer than expected or are delayed.	4	4		
Organizational (4)	4.1	2/2/2013	Internal "red tape" causes delay getting approvals/decisions	4	4		
Organizational (4)	4.2	2/4/2013	New priority project inserted into program	3	3		
Organizational (4)	4.3	2/5/2013	Priorities change on existing program	3	2		
Organizational (4)	4.4	2/8/2013	Lack of understanding of complex internal funding procedures	3	2		
Organizational (4)	4.5	2/10/2013	Functional units not available/overloaded	2	2		
Organizational (4)	4.6	2/20/2013	Loss of critical staff during the project	2	2		
Project Management (5)	5.1	2/9/2013	Pressure to deliver project on accerated schedule	4	3		
Project Management (5)	5.2	2/15/2013	Consultant or contractor delays	4	3		
Project Management (5)	5.3	2/18/2013	No control over staff priorities	3	3		
Project Management (5)	5.4	2/19/2013	Lack of coordination/communication	3	2		
Project Management (5)	5.5	2/19/2013	Local agency issues	3	2		
Project Management (5)	5.6	2/21/2013	Estimating and/or scheduling errors	2	2		
Construction (6)	6.1	2/20/2013	Pilot program (by others) not being completed as scheduled	4	3		
Construction (6)	6.2	2/21/2013	Inaccurate contract time estimates	2	2		

Sample Quality Assurance / Quality Control Procedures by Project Value

Design Stage	Documentation	Review & Approval Actions Required					
		Project or Contract Scope					
		under $1,000,000		$1,000,000 to $10,000,000		over $10,000,000	
		Review / Action	Formal Approval	Review / Action	Formal Approval	Review / Action	Formal Approval
Project Definition	Project Definition Memo or Report: • problem / solution • alternatives & sketch plan • materials, staging • operating impacts • costs & schedule • external issues & permits • safety • Value Engineering Plan • TAC Members	Proj Mgr Const Mgmt Interested Depts	Supervisor Dir of Const Mgmt Mgr of Env Svcs Using Depts	Proj Mgr TAC Const Mgmt Interested Depts	Using Depts Supervisor SMAC Chief Engineer	Proj Mgr TAC Const Mgmt Interested Depts	Using Depts SMAC Chief Engineer Exec Dir
30 % Complete	Design Memo / Report: • changes from Project Definition Documents • updated schedule / costs • permits • funding • operating impacts	N/A	N/A	Proj Mgr TAC Const Mgmt Interested Depts.	Supervisor Using Depts SMAC Chief Engineer	Proj Mgr TAC Const Mgmt Experts * *(Appointed by Dept. Director)	Using Depts SMAC Chief Engineer Exec Dir
30% Complete	Report & Response to VE Reccommendations	N/A	N/A			Proj Mgr TAC Interested Depts SMAC Chief Engineer Exec Dir	Chief Engineer
RFP's (Design / CM)	Final Draft Request for Proposal	Const Mgr Proj Mgr Interested Depts	Supervisor Dir of Const Mgmt Mgr of Env Svcs Using Depts	Proj Mgr TAC Const Mgmt Interested Depts	Supervisor SMAC Chief Engineer Using Departments	Proj Mgr TAC Const Mgmt Interested Depts	Using Departments SMAC Chief Engineer Exec Dir
50% / 60% Complete	Plans & Specifications* plus updated Project Definition Report and Memo noting major changes to 30% Plans	Proj Mgr Const Mgr Interested Depts	Supervisor Dir of Const Mgmt Mgr of Env Svcs Using Depts	Proj Mgr TAC Const Mgmt Interested Depts SMAC	Supervisor Using Depts	Proj Mgr TAC Const Mgmt Experts* Interested Depts SMAC Ch Engineer Exec Dir	Director Using Depts

Sample Quality Assurance / Quality Control Procedures by Project Value (cont)

Design Stage	Documentation	Review & Approval Actions Required					
		Project or Contract Scope					
		under $ 1,000,000		$1,000,000 to $10,000,000		over $ 10,000,000	
		Review / Action	Formal Approval	Review / Action	Formal Approval	Review / Action	Formal Approval
90% Complete	Plans & Specifications* plus updated Project Definition Report and Memo noting major changes to 60% Plans	Construction Mgmt Project Manager Mgr of Env Svcs Const Mgmt	Supervisor Dir of Const Mgmt Mgr of Env Svcs Interested Depts	Proj Mgr TAC Const Mgmt Interested Depts SMAC	Supervisor Using Depts	Proj Mgr TAC Const Mgmt Experts* Interested Depts SMAC Chief Engineer Exec Dir	Director Using Depts
100 % Complete	Plans & Specifications* plus updated Project Definition Report and Memo noting major changes to 90% Plans	Interested Depts	Supervisor Dir of Const Mgmt Mgr of Env Svcs Using Depts	Project Manager Const Mgmt	Supervisor Using Depts	Project Mgr Const Mgmt	Supervisor Using Depts
RFP/Bid Package	Complete Package	Project Manager	Chief Engineer	Project Manager	Chief Engineer	Project Manager	Chief Engineer
Construction Complete	Report: • Document lessons learned • issues • problems & effectiveness • schedule/budget adherance	Proj Manager Dir of Const Mgmt Mgr of Env Svcs Interested Depts	Supervisor Using Depts	TAC Proj Manager Interested Depts SMAC Chief Engineer	Supervisor Using Depts	TAC Proj Manager Interested Depts SMAC Chief Engineer Exec Dir	Director Using Depts
270 Days after Project Completion	Report: • Document lessons learned • issues • problems & effectiveness • schedule/budget adherance	Proj Manager Dir of Const Mgmt Mgr of Env Svcs Interested Depts	Supervisor Using Depts	TAC Proj Manager Interested Depts SMAC Chief Engineer	Supervisor Using Depts	TAC Proj Manager Interested Depts SMAC Chief Engineer Exec Dir	Director Using Depts

Abbreviations / Notes:
TAC - Technical Advisory Committee
SMAC - Senior Management Advisory Committee
Exec Dir - Executive Director of Agency
Const Mgmt - Construction Management Department
Experts - In house individuals chosen by the Department Director
* for large plan sets, selected drawings/specifications can be forwarded. Reviewers can meet with the Pm if they wish to review all drawings and specs.

SAMPLE INVOICE SUMMARY FORM

Name of Professional Service Provider _____ **Contract #** _____
Type of Contract Services _____ **Payments Received** _____ (If applicable)
Original Contract Amount _____ **Date Submitted** _____
Current Contract Amount _____
Invoice Period **From** _____ **Through** _____

#	NAME OF SUBCONSULTANT	BUSINESS ADDRESS (CITY, STATE, ZIP)	DESCRIPTION OF WORK	% Committed per Contract (for DBE or M/W/ DSBE only)	Place 'X' in each Category that qualifies				MONTHLY CONTRACT INFORMATION			% COMPLETE
					* DBE	MBE	WBE	DSBE	TOTAL CURRENT SUBCONTRACT AMOUNT	TOTAL PAYMENTS TO DATE	AMOUNT THIS INVOICE	
1									$ -	$ -	$ -	#####
2									$ -	$ -	$ -	#####
3									$ -	$ -	$ -	#####
4									$ -	$ -	$ -	#####
5									$ -	$ -	$ -	#####
6									$ -	$ -	$ -	#####
7									$ -	$ -	$ -	#####
8									$ -	$ -	$ -	#####
9									$ -	$ -	$ -	#####
10									$ -	$ -	$ -	#####
SUBCONSULTANT TOTALS				0.00%					$ -	$ -	$ -	
PROFESSIONAL SERVICE PROVIDER TOTAL									$ -	$ -	$ -	
TOTAL THIS INVOICE											$ -	

* PUT AN "X" IN THIS COLUMN ONLY IF SUBCONSULTANT IS A FEDERALLY CERTIFIED DBE.

I certify that the information furnished above is correct to the best of my knowledge and represents the current status of the firm's (Professional Service Provider) subcontract(s) with the listed firms (Subconsultants) for the designated period covered by this report.

Signed: _____ Title: _____ Date: _____

This form must be attached to all invoices submitted by the Professional Service Provider.

SAMPLE CLOSE-OUT CHECKLIST

CONTRACT NUMBER:
Project No:

Project Title:		
Professional Services Provider:		
Prepared by:		Phone #:

After final acceptance of all services under a Professional Services Contract, print the above information and assemble documents in the order listed below with this checklist on top. Enter a check mark "√" for each item attached or mark "X" over item numbers that are not applicable.

Documents will be retained in the "official" contract records maintained by the agency.

_____ 1. Contract Release executed by the professional service provider.

_____ 2. If no release provided, a Letter for Closeout from the agency.

_____ 3. Final Performance Evaluation and any responses from the professional service provider.

_____ 4. Provide a copy of the DBE participation payments, if required by contract.

_____ 5. Note the effective date of close-out in the official contract record.

PROJECT DEFINITION FORM

PROJECT: _____
PROJECT MANAGER: _____ **DATE:** _____
LEAD DESIGNER/FIRM: _____ **FILE:** _____

Attached please find a report outlining the proposed design concept for the above referenced project. Please review this document to ensure it addresses operational needs, is cost effective, and meets time frame requirements. All comments and approvals (if required) must be returned to the project manager along **with this sheet** by _____ to maintain the current project schedule.

REVIEW AND APPROVAL REQUIRED:

☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization

☐ Approved ☐ Rejected Comments? ☐Attached ☐ None X_____
Signature

REVIEW ONLY REQUESTED:

☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization

If your name is listed below, please indicate whether or not you need to review design documents beyond this level, along with any comments you might have. Otherwise, no further documents for this project will be sent for your review. Failure to return this sheet will be assumed to mean that you have no further interest in this project.

☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization
☐ Name Organization

Send Future Design Review Packages for this project: ☐ Yes ☐ No

☐ Reviewed Comments? ☐ Attached ☐ None X_____
Signature

IDENTIFICATION OF USER REQUIREMENTS:

Discussions were held with the following personnel to define the work scope and user requirements:

1.
2.
3.

Based on these discussions, the following issues (s) need (s) to be addressed by this project:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

PROPOSED PROJECT SCOPE:

To address the above issues, the following scope of work is proposed:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

ALTERNATIVES ANALYSIS:

The following alternatives (were) (will be) considered in developing the scope of work:

_____
_____
_____
_____
_____
_____
_____
_____
_____

OPERATIONAL/SAFETY IMPACTS:

Construction of this project will have the following operational and safety impacts, which will be addressed as indicated:

_____
_____
_____
_____
_____
_____
_____
_____
_____

EXTERNAL ISSUES:

Design and/or construction of this project will have the following impacts on (the facility) (and) (other agencies/entities), which will be addressed as indicated:

_____
_____
_____
_____
_____
_____
_____
_____
_____

ENVIRONMENTAL ISSUES:

Design and/or construction of this project will be impacted by the following environmental issues, which will be addressed as indicated:

_____
_____
_____
_____
_____
_____
_____
_____
_____
_____

PERMITTING AND APPROVALS:

The following permits or approvals are expected to be required for this project:

☐	Construction	☐	Soil Erosion/Sediment Control
☐	Environmental	☐	State Review
☐	FAA	☐	Historic Preservation
☐	City	☐	_____
☐	Other	☐	_____

PROJECTED COSTS/SCHEDULE

Estimated Design Cost: $_____
Estimated Construction Cost: $_____
Estimated Force Account Cost: $_____
Current Available Budget: $_____

PROJECTED DESIGN COMPLETION DATES:

30%	_____	60%	_____
VE	_____	90%	_____
50%	_____	100%	_____

c: others as necessary

Sample Cost Estimating Template - version 1

Date: _____

Period of Performance: _____

Position	Jan (4)	Feb (4)	Mar (5)	Apr (4)	May (4)	June (5)	July (4)	Aug (4)	Sept (5)	Oct (4)	Nov (4)	Dec (5)	Total Hours	Hr. Wage	Dir Labor	Overhead (0.00%)	Sub-tot	Fee (10%)	Total
Task 1 - XXX																			
Prime Firm																			
Project Manager																			
Senior Designer (Civil)																			
Jr. Designer (Mech)																			
Total Prime Firm																			
Sub-Consultant 1																			
Project Manager																			
Senior Designer (Elec)																			
Jr. Designer (Civil)																			
CADD Support																			
Total Sub-Consultant 1																			
Total Task 1																			
Task 2 - XXX																			
Prime Firm																			
Project Manager																			
Total Prime Firm																			
Sub-Consultant 2																			
Project Manager																			
Senior Designer (Mech)																			
Jr. Designer (Elec)																			
Total Sub-Consultant 2																			
Total Task 2																			
Expenses																			
Copies ($0.00 per sheet)																			
Travel																			
Total Expenses																			
Total Costs																			

Sample Cost Estimating Template – Version 2, Part A

Total Estimated Costs By Phase	
Phase Description	**Cost Per Phase**
A. Design	**$**
1 Review Existing Information	$
2 Field Survey	$
3 Schematic Plans	$
4 Phasing Plans	$
5 Periodic Submissions	$
6 Final Plans	$
7 Agency, Utility and Environmental Coordination	$
8 Presentation	$
9 As-Builts	$
B. Design Services Not In Contract _____	**$0**
C. Project Schedule	**$**
D. Construction Cost Estimates	**$**
1 Cost Estimate	$
2 Budget	$
3 Final Estimate	$
4 Possible Redesign	$
E. Coordination	**$**
F. Procurement	**$**
1 Bid Documents	$
2 Assist Aviation	$
3 Review	$
G. Construction Administration	**$**
1 Provide Construction Administration Services	$
2 Design Revisions	$
Total Estimated Professional Services Cost:	**$**
Projected Construction Cost:	**$**

Total Estimated Percentages	
Phase Description	**Percent by Phase**
A. Design	**___%**
1 Existing Plans	___ %
2 Field Survey	___ %
3 Schematic Plans	___ %
4 Phasing Plans	___ %
5 Periodic Submissions	___ %
6 Final Plans	___ %
7 Agency, Utility and Environmental Coordination	___ %
8 Presentation	___ %
9 As-Builts	___ %
B. Design Services Not In Contract	---
C. Project Schedule	**___ %**
D. Construction Cost Estimates	**___ %**
1 Cost Estimate	___ %
2 Budget	___ %
3 Final Estimate	___ %
4 Possible Redesign	___ %
E. Coordination	**___ %**
F. Procurement	**___ %**
1 Bid Documents	___ %
2 Assist Aviation	___ %
3 Review	___ %
G. Construction Administration	**___ %**
1 Provide Construction Administration Services	___ %
2 Design Revisions	
Total Estimated Professional Services vs. Projected Construction Costs as a Percentage:	**_____%**

Assumptions	**# Units**
Total Duration of Runway Project	___ Months
Design Duration of Runway Project	___ Months
Construction Duration of Runway Project	___ Months
Main A/E %	___ %
DBE %	___ %

	Civil	**___ Sheets**
General Sheets		___ Sheets
Geotech		___ Sheets
Existing Condition/Demo		___ Sheets
Construction plans/Sections/Details		___ Sheets
Erosion and Sedimentation		___ Sheets
Grading		___ Sheets
Profiles		___ Sheets
Pavement marking		___ Sheets
	Electrical	**___ Sheets**
General Sheets		___ Sheets
Existing Demo		___ Sheets
Construction plans/Sections/Details		___ Sheets
Schedules/Sections/Details		___ Sheets
Signage/Sensors/Details		___ Sheets
TOTAL NUMBER OF SHEETS:		**___ Sheets**

CADD Techs	___ %	___ Hours
Civil/Electrical Engineers	___ %	___ Hours
Specifications for Spec Writers	___ %	___ Hours
Specifications for Tech Writers	___ %	___ Hours
Project Manager	___ %	___ Hours
Principal in Charge	___ %	___ Hours
Administrative	___ %	___ Hours

Hours for Drawings	___ Hours
Hours for spec	___ Hours
TOTAL HOURS PER SHEET	**___ Hours**

# of Hours per sheet is projected average across all drawing sheets.

Percentage for Drawings	___ %
Percentage for Spec	___ %
% of hours for Schematic	___ %
% of hours for Design Package	___ %

TOTAL COST OF ESTIMATE **$_____**

Sample Cost Estimating Template - Version 2, Part B

Phase Activity	Days Duration by Schedule	Hours Duration	Total Cost for Individual Activity	A/E Consultant (Prime)										A/E Consultant (Sub-Consultants as Necessary)									
				CADD Technician	Civil Engineers	Contract Administrators	Electrical Engineers	Specification Writers	Technical Writers	Principal-in-Charge	Project Managers	Administrative	Cost Subtotal	CADD Technician	Civil Engineers	Contract Administrators	Electrical Engineers	Specification Writers	Technical Writers	Principal-in-Charge	Project Managers	Administrative	Cost Subtotal
A. Design Services - Runway																							
1. Existing Plans	**22**	**636**	**$88,377.28**	**HOURS**										**HOURS**									
Review existing plans in custody of agency	7	254	$35,325.13		40	72	40			2	8	2	$24,183.39		40	30						20	$11,141.73
Review existing studies in custody of agency	8	190	$26,406.88		40		40			2	8	2	$13,849.32		50	32						16	$12,557.56
Review recommendations in custody of agency	7	192	$26,645.28		40		40			2	8	2	$13,849.32		60	24						16	$12,795.96
2. Field Survey	**126**	**747**	**$111,036.59**	**HOURS**										**HOURS**									
Field survey of exisiting facilities	22	55	$8,290.62		20					2	8	1	$4,881.20		20					1	2	1	$3,409.42
Pavement analysis	22	45	$6,903.98		20					2	8	1	$4,881.20		10					1	2	1	$2,022.78
Electrical inspection and evaluation	22	155	$23,130.04				80		40	2	8	1	$19,526.00				20			1	2	1	$3,604.03
Infield/safety area review	10	31	$4,881.20		20					2	8	1	$4,881.20										$0.00
Review of runway/taxiway lighting	10	65	$9,969.17				40			2	8	1	$7,849.08				10			1	2	1	$2,120.09
Review of NAVAIDS	10	65	$9,969.17				40			2	8	1	$7,849.08				10			1	2	1	$2,120.09
Review of taxi guidance and associated infrastructure	10	105	$15,710.33				40		40	2	8	1	$13,590.24				10			1	2	1	$2,120.09
Prepare Geotechnical Boring Plans	10	123	$17,952.05		20					2	8	1	$4,881.20		80					2	8	2	$13,070.86
Geotechnical Report	10	103	$14,230.03		20					2	8	1	$4,881.20		40				20	2	8	2	$9,348.84
3. Schematic Plans	**88**	**4163**	**$484,150.77**	**HOURS**										**HOURS**									
Prepare 30% Design Package - Drawings																							
Civil																							
General Sheets	3	270	$27,586.73	180	90								$27,586.73										$0.00
Geotechnical Report	4	168	$23,047.33	16	8								$2,452.15		120					4	16	4	$20,595.17
Existing Conditions/Demo	3	184	$18,984.73	120	64								$18,984.73										$0.00
Construction plans/Sections/Details	12	280	$29,070.67	180	100								$29,070.67										$0.00
Erosion and Sedimentation	5	24	$2,452.15	16	8								$2,452.15										$0.00
Grading	5	368	$42,742.40	160	64								$22,147.23		120					4	16	4	$20,595.17
Profiles	6	250	$24,618.85	180	70								$24,618.85										$0.00
Pavement marking	6	222	$23,791.73	132	90								$23,791.73										$0.00
Electrical																							
General Sheets	11	270	$27,586.73	180			90						$27,586.73										$0.00

Sample Cost Estimating Template - Version 2, Part B

Phase Activity	Days Duration by Schedule	Hours Duration	Total Cost for Individual Activity	A/E Consultant (Prime)										A/E Consultant (Sub-Consultants as Necessary)									
				CADD Technician	Civil Engineers	Contract Administrators	Electrical Engineers	Specification Writers	Technical Writers	Principal-in-Charge	Project Managers	Administrative	Cost Subtotal	CADD Technician	Civil Engineers	Contract Administrators	Electrical Engineers	Specification Writers	Technical Writers	Principal-in-Charge	Project Managers	Administrative	Cost Subtotal
Existing Demo	4	196	$20,765.46	120			76						$20,765.46										$0.00
Construction plans/Sections/Details	10	304	$31,245.50	200			104						$31,245.50										$0.00
Schedules/Sections/Details	10	342	$35,220.52	224			118						$35,220.52										$0.00
Signage/Sensors/Details	9	302	$31,087.38	198			104						$31,087.38										$0.00
Prepare 30% Design Package - Specifications		740	$106,211.35					740					$106,211.35										$0.00
Create Construction Cost Estimate		63	$10,977.52							2	8	1	$1,913.31							8	40	4	$9,064.21
Create Construction Schedule		73	$12,741.23							2	8	1	$1,913.31							8	50	4	$10,827.91
Quality Assurance Review		91	$13,590.24		20		20		40	2	8	1	$13,590.24										$0.00
Submit plans for agency approval		16	$2,430.26		5		5				5	1	$2,430.26										$0.00
4. Phasing Plans	**60**	**126**	**$17,264.82**	**HOURS**										**HOURS**									
Prepare & submit phasing plan	20	58	$7,707.99	16	16		16			1	8	1	$7,707.99										$0.00
Agency review & approval	20	10	$1,848.85							2	8		$1,848.85										$0.00
Revise phasing plan, as necessary	20	58	$7,707.99	16	16		16			1	8	1	$7,707.99										$0.00
5. Periodic Submissions	**60**	**408**	**$61,442.51**	**HOURS**										**HOURS**									
Prepare & submit 1st periodic submission of plans, specs & costs estimate	20	136	$20,480.84		20		20	20		4	16	4	$12,761.90		20		20			2	8	2	$7,718.93
Prepare & submit 2nd periodic submission of plans, specs & costs estimate	20	136	$20,519.76		20		20	20		4	16	4	$12,761.90		16		24			2	8	2	$7,757.86
Prepare & submit 3rd periodic submission of plans, specs & costs estimate	20	136	$20,441.91		20		20	20		4	16	4	$12,761.90		24		16			2	8	2	$7,680.01
6. Final Plans	**88**	**8938**	**$1,041,305.43**	**HOURS**										**HOURS**									
Prepare Final Design Package - Drawings																							
Civil																							
General Sheets	3	562	$59,525.55	350	188					4	16	4	$59,525.55										$0.00
Geotechnical Report	4	44	$4,907.96	24	16					1	2	1	$4,907.96										$0.00
Existing Conditions/Demo	3	382	$40,342.55	240	124					3	12	3	$40,342.55										$0.00
Construction Plans/Sections/Details	12	685	$73,457.58	380	200					5	19	5	$64,490.67	40	20					4	8	4	$8,966.90
Erosion and Sedimentation	5	452	$57,045.42	24	16					1	2	1	$4,907.96	120	240					8	32	8	$52,137.46
Grading	5	378	$39,748.98	240	120					3	12	3	$39,748.98										$0.00
Profiles	6	429	$45,347.82	268	140					3	14	4	$45,347.82										$0.00
Pavement Marking	6	554	$58,533.01	348	180					4	18	4	$58,533.01										$0.00

Sample Cost Estimating Template - Version 2, Part B

Phase Activity	Days Duration by Schedule	Hours Duration	Total Cost for Individual Activity	A/E Consultant (Prime)										A/E Consultant (Sub-Consultants as Necessary)									
				CADD Technician	Civil Engineers	Contract Administrators	Electrical Engineers	Specification Writers	Technical Writers	Principal-in-Charge	Project Managers	Administrative	Cost Subtotal	CADD Technician	Civil Engineers	Contract Administrators	Electrical Engineers	Specification Writers	Technical Writers	Principal-in-Charge	Project Managers	Administrative	Cost Subtotal
Electrical													$0.00										$0.00
General Sheets	11	557	$58,978.19	348			183			4	18	4	$58,978.19										$0.00
Existing Demo	4	472	$50,024.67	294			155			4	15	4	$50,024.67										$0.00
Construction Plans/Sections/Details	10	719	$77,200.27	402			211			5	20	5	$68,038.75	40			20			4	8	4	$9,161.52
Schedules/Sections/Details	10	730	$77,345.02	455			240			6	23	6	$77,345.02										$0.00
Signage/Sensors/Details	9	643	$68,038.75	402			211			5	20	5	$68,038.75										$0.00
Prepare Final Design Package - Specifications		1721	$245,930.60					1512		1	4	4	$218,197.90					200					$27,732.69
Update Construction Cost Estimate		71	$11,099.16		20		20			2	4	1	$7,143.60							4	16	4	$3,955.56
Update Construction Schedule		91	$13,969.74		20		20		20	2	4	1	$10,014.18							4	16	4	$3,955.56
Quality Assurance Review		232	$31,474.17		20		20	20	20	4	16	16	$16,406.08	20	20		20	20		4	16	16	$15,068.10
Submit final design package		216	$28,336.00	16	16		16	16	16	4	16	16	$15,335.69	16	16		16	16		4	16	16	$13,000.31
7. Agency, Utility and Environmental Coordination	**240**	**640**	**$96,541.39**	**HOURS**										**HOURS**									
Utility and environmental coordination, approvals and permits																							
Utility Coordination	60	149	$22,436.72		40					2	16	1	$9,260.04		40		40			1	8	1	$13,176.68
Environmental Assessment	30	117	$17,259.95						8	2	16	1	$4,472.50		80					1	8	1	$12,787.45
FAA Air Space Review	60	18	$3,259.81							2	16		$3,259.81										$0.00
National Pollutant Discharge Elimination System (NPDES) Coordination	30	133	$20,344.61							2	40	1	$7,557.16		80					1	8	1	$12,787.45
Preliminary Stormwater Submission	30	97	$14,486.68						8	2	16	1	$4,472.50		60					1	8	1	$10,014.18
Address Stormwater Review Comments	30	126	$18,753.63		40				40	2	16	1	$15,001.20		8				8	2	8	1	$3,752.43
8. Presentation	**132**	**341**	**$47,351.14**	**HOURS**										**HOURS**									
Prepare presentation for FAA	124	252	$33,897.13		40		40		40	4	16	40	$23,889.04		16		16		16	4	16	4	$10,008.10
Make presentation to FAA	8	89	$13,454.00		8		8		8	8	8	8	$7,200.77		8		8		8	8	8	1	$6,253.24
9. As-Builts	**0**	**401**	**$46,746.62**	**HOURS**										**HOURS**									
Prepare As-Built drawings		369	$42,612.25	120	60		60			2	16	40	$33,133.27	20	20		20			2	8	1	$9,478.99
Submit As-Built drawings		32	$4,134.36	4	4		4				2	2	$1,985.08	4	4		4			1	2	1	$2,149.28
B. Design Services - Taxiway	**0**	**0**	**$0.00**	**HOURS**										**HOURS**									
Not in Contract		0	$0.00										$0.00										$0.00

Sample Cost Estimating Template - Version 2, Part B

Phase Activity	Days Duration by Schedule	Hours Duration	Total Cost for Individual Activity	A/E Consultant (Prime)										A/E Consultant (Sub-Consultants as Necessary)									
				CADD Technician	Civil Engineers	Contract Administrators	Electrical Engineers	Specification Writers	Technical Writers	Principal-in-Charge	Project Managers	Administrative	Cost Subtotal	CADD Technician	Civil Engineers	Contract Administrators	Electrical Engineers	Specification Writers	Technical Writers	Principal-in-Charge	Project Managers	Administrative	Cost Subtotal
C. Project Schedule	**620**	**954**	**$158,874.27**	**HOURS**										**HOURS**									
Prepare and update monthly a master schedule	20	845	$142,059.50							1	32		$5,862.79							56	672	84	$136,196.71
Issue schedule updates	600	109	$16,814.77							1	8		$1,629.90							16	56	28	$15,184.87
D. Construction Cost Estimates																							
1. Cost Estimate	**85**	**553**	**$96,097.43**	**HOURS**										**HOURS**									
Prepare construction cost estimate	20	194	$33,746.31							2	16	2	$3,388.74							8	160	6	$30,357.57
Obtain agency approval	20	30	$5,083.11							2	16	2	$3,388.74							1	8	1	$1,694.37
Prepare a refined cost estimate	20	254	$44,328.52							2	16	2	$3,388.74							8	220	6	$40,939.78
Submit revised budget to agency	20	30	$5,083.11							2	16	2	$3,388.74							1	8	1	$1,694.37
Establish a not-to-exceed cost of construction	5	45	$7,856.38							2	16	2	$3,388.74							4	20	1	$4,467.64
2. Budget	**484**	**284**	**$52,025.56**	**HOURS**										**HOURS**									
Monitor the Budget	484	142	$26,012.78							28	112	2	$26,012.78										$0.00
Submit monthly Budget Report		142	$26,012.78							28	112	2	$26,012.78										$0.00
3. Final Estimate	**22**	**262**	**$45,941.39**	**HOURS**										**HOURS**									
Prepare Final Estimate prior to bid	22	262	$45,941.39							4	32	2	$6,648.55							16	200	8	$39,292.85
E. Coordination	**484**	**1086**	**$168,690.18**	**HOURS**										**HOURS**									
Organize Meetings	484	58	$10,005.66								56	2	$10,005.66										$0.00
Conduct Meetings		580	$98,558.10		112		112			112	224	20	$98,558.10										$0.00
Compile and prepare meeting minutes		392	$56,516.31							40	224	128	$56,516.31										$0.00
Distribute meeting minutes		56	$3,610.12									56	$3,610.12										$0.00
F. Procurement																							
1. Bid Documents	**20**	**164**	**$22,091.28**	**HOURS**										**HOURS**									
Provide the bid documents to the Procurement Department	20	164	$22,091.28	40	20		20	20	20	8	16	4	$19,670.75		4		4			2	4	2	$2,420.53
2. Assist the Agency	**44**	**596**	**$83,558.12**	**HOURS**										**HOURS**									
Assist in preparing construction contracts	44	228	$36,227.65			120				20	80	8	$36,227.65										$0.00
Attend pre-bid meetings		48	$7,833.27		8		8	8	8	8	8		$7,833.27										$0.00
Prepare pre-bid meeting minutes		14	$2,106.71							2	8	4	$2,106.71										$0.00
Review bidder questions		268	$31,761.23	120	40		40	40		4	20	4	$31,761.23										$0.00
Issue Addenda, as necessary		38	$5,629.25		8		8	8		2	8	4	$5,629.25										$0.00

Sample Cost Estimating Template - Version 2, Part B

Phase Activity	Days Duration by Schedule	Hours Duration	Total Cost for Individual Activity	A/E Consultant (Prime)										A/E Consultant (Sub-Consultants as Necessary)									
				CADD Technician	Civil Engineers	Contract Administrators	Electrical Engineers	Specification Writers	Technical Writers	Principal-in-Charge	Project Managers	Administrative	Cost Subtotal	CADD Technician	Civil Engineers	Contract Administrators	Electrical Engineers	Specification Writers	Technical Writers	Principal-in-Charge	Project Managers	Administrative	Cost Subtotal
3. Review	**22**	**268**	**$42,606.17**	**HOURS**										**HOURS**									
Provide review and analysis of bids	22	0	$0.00										$0.00										$0.00
Attend Bid Opening		24	$4,403.17							4	20		$4,403.17										$0.00
Review of Bids/Analysis		202	$31,389.03		40		40	40		4	40	4	$25,801.13		8		8			8	8	2	$5,587.89
Provide recommendation of award/ranking		42	$6,813.97		8		8	8		8	8	2	$6,813.97										$0.00
G. Construction Administration																							
1. Provide construction administration services	**484**	**1190**	**$183,407.97**	**HOURS**										**HOURS**									
Shop Drawing review	484	328	$48,118.65		80		200			8	20	20	$48,118.65										$0.00
Request for Information (RFI) review		328	$48,118.65		80		200			8	20	20	$48,118.65										$0.00
Attendance at Construction Meetings		266	$47,924.04		20		20			50	176		$47,924.04										$0.00
Consultation		268	$39,246.63		40		80			8	20	20	$24,375.58		40		40			2	16	2	$14,871.05
2. Design Revisions	**88**	**982**	**$140,483.12**	**HOURS**										**HOURS**									
Prepare design revisions	88	266	$32,456.98	100	40		100			2	16	8	$32,456.98										$0.00
Issue design revisions		266	$32,456.98	100	40		100			2	16	8	$32,456.98										$0.00
Provide Cost Estimates for design revisions		274	$48,323.00							2	16	8	$3,775.54							40	200	8	$44,547.46
Assist Agency with negotiation for design revisions		108	$17,150.48							8	80	20	$17,150.48										$0.00
Assist Agency with preparation of change orders		68	$10,095.67							8	40	20	$10,095.67										$0.00
TOTALS	**3169**	**22739**	**$2,987,992.03**	**6213**	**2619**	**192**	**3053**	**2472**	**308**	**513**	**2086**	**591**	**$2,277,800.36**	**260**	**1264**	**86**	**306**	**236**	**52**	**255**	**1932**	**301**	**$710,191.68**

Rates

Yearly Salary			65,000	122,000	118,000	122,000	118,000	118,000	180,000	145,000	53,000		75,000	114,000	118,000	122,000	114,000	75,000	180,000	145,000	53,000
Annual Work Hours	2080	Base Hourly Rate (Salary / Work Hours)	31.25	58.65	56.73	58.65	56.73	56.73	86.54	69.71	25.48		36.06	54.81	56.73	58.65	54.81	36.06	86.54	69.71	25.48
Multiplier	1.3	Overhead Rate (Base Rate * Multiplier)	40.63	76.25	73.75	76.25	73.75	73.75	112.50	90.63	33.13		46.88	71.25	73.75	76.25	71.25	46.88	112.50	90.63	33.13
Profit (percentage)	10%	Profit (Base Rate + OH) * Profit %	7.19	13.49	13.05	13.49	13.05	13.05	19.90	16.03	5.86		8.29	12.61	13.05	13.49	12.61	8.29	19.90	16.03	5.86
		Total Cost per Hour	79.06	148.39	143.53	148.39	143.53	143.53	218.94	176.37	64.47		91.23	138.66	143.53	148.39	138.66	91.23	218.94	176.37	64.47

Note: enter data in cells that are highlighted yellow. All other cells are automatically calculated.

COMMITTEE SCORING SHEET

Before the Committee meets, prepare this form by entering: Project Title, Evaluators' Names, and Weights for each Professional Service Provider. You will total Ratings, Criteria Scores and Total Score after Committee deliberations with Evaluators ratings. Please note any significant comments regarding the Professional Service Provider during the Committee Meeting.

Professional Service Provider:								
PROJECT TITLE:								
Selection Criteria	Evaluator's Name and Ratings (Circled) "3" = Exceeds Expectations; "2" = Meets Expectations; "1" = Does Not Meet Expectations					Total Rating	Weight	Criteria Score (Product)
1. Objectives & Services	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
2. Work Plan/Methods	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
3. Management	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
4. Project Staff	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
5. Work Load & Resources	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
6. Experience of Team	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
7. DBE Participation	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
8. Geographical Location	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
9. Previous Performance Evaluations	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
The following criteria should be evaluated if the proposal includes price as an evaluation factor. (Please check funding source requirements.)								
10. Billing Rates	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
11. Price	1 2 3	1 2 3	1 2 3	1 2 3	1 2 3			
Evaluators' comments regarding final ratings and scores:						**Total Score:**		

Project Title / Project Number:
Evaluator's Name / Phone Number:
Evaluator's Signature / Date:

EVALUATOR RATING SHEET
version 1

PROPOSERS>>		PROFESSIONAL SERVICE PROVIDER 1	PROFESSIONAL SERVICE PROVIDER 2	PROFESSIONAL SERVICE PROVIDER 3	PROFESSIONAL SERVICE PROVIDER 4	PROFESSIONAL SERVICE PROVIDER 5	PROFESSIONAL SERVICE PROVIDER 6	PROFESSIONAL SERVICE PROVIDER 7	PROFESSIONAL SERVICE PROVIDER 8	PROFESSIONAL SERVICE PROVIDER 9	PROFESSIONAL SERVICE PROVIDER 10
CRITERIA	WGT	Evaluators must independently Rate Criterion #1-9: "3" = Exceeds Expectations; "2" = Meets Expectations; "1" = Does not Meet Expectations									
1. Objectives & Services											
2. Work Plan/Methods											
3. Management											
4. Project Staff											
5. Work Load & Resources											
6. Experience of Team											
7. DBE Participation											
8. Geographical Location											
9. Previous Performance Evaluations											

The following criteria should be evaluated if the proposal includes price as an evaluation factor. (Please check funding source requirements.)

10. Billing Rates											
11. Price											

Evaluator Rating Sheet – version 2 **RFP No. yy-###**

Architectural/Engineering Services for: _____

Firm: _____ **Evaluator:** _____

Rating Factors:

(Note: Comments are required for all scores)

10	**Outstanding**	Significantly Exceeds the Contract requirements in all respects; high probability of success; no significant weaknesses
8	**Excellent**	Substantial response which meets in all aspects and in some cases exceeds the critical requirements; no significant weaknesses
5	**Good**	Generally meets the minimum requirements; good probability of success; some weaknesses which can be readily corrected
2	**Poor**	Lacks essential information; low probability of success; significant weaknesses
0	**Non Responsive**	Fails to meet minimum requirements; major revisions required to make it acceptable

Evaluation Criteria	Weight	Rating	Score
1. Does the firm and proposed key staff members (Project Coordinator, Key Discipline leaders) have the appropriate: background, skills, experience (supported by references) to successfully carry out the contract? Have they successfully done "this type of project" before for other organizations or this agency? (RFP Section xx and xx)	**30**		
Comments: _____ _____ _____ _____ _____ _____			
2. Do the firms have adequate resources and demonstrated technical expertise to sustain the contract?	**20**		
Comments: _____ _____ _____ _____ _____ _____			
3. Does the management / control structure convincingly show that the	**20**		

Evaluator Rating Sheet – version 2 **RFP No. yy-###**

Architectural/Engineering Services for: _____

Evaluation Criteria	Weight	Rating	Score
team can deliver projects on time, in budget and with high quality? Has the firm established a reasonable internal structure for management of the work, including billing and progress reporting?			
Comments:			
4. Did the proposal adhere to the requested requirements and present a credible and professional sample of work?	**10**		
Comments:			
5. As appropriate to the Technical Requirements of the RFP, are DBE or SBE firms effectively employed in the technical work and have goals been met?	**10**		
Comments:			

Evaluator Rating Sheet – version 2 **RFP No. yy-###**

Architectural/Engineering Services for: _____

Evaluation Criteria	Weight	Rating	Score
6. Are key support staff readily available without significant travel?	**10**		

Comments:

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General Comments:

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Evaluator Rating Sheet – version 2 **RFP No. yy-###**

Architectural/Engineering Services for: _____

Technical Proposal Scoring Summary			
Criteria	**Weight**	**Rating**	**Score**
1	**30**		
2	**20**		
3	**20**		
4	**10**		
5	**10**		
6	**10**		
Total	**100**	**n/a**	

Overall Reference Evaluation for Firm (Team)		
○	**Outstanding (10 Points)**	Significantly exceeded client expectations. Client seeks to use firm whenever possible.
○	**Excellent (8 Points)**	Exceeded client expectations. Client would use firm again without reservation.
○	**Good (5 Points)**	Met expectations of client. Client would be willing to use firm again.
○	**Poor (2 Points)**	Did not meet expectations of client. Client would prefer not to use firm again.
○	**Non Responsive (0 Points)**	Firm was unable to complete assignment. Client will not use firm again.

Evaluator **Date**

Firm: _____

108 Procuring and Managing Professional Services for Airports

Pre-Negotiation Checklist

In advance of meeting with a potential vendor to discuss/negotiate a contract for professional services, the following are items that should be established internally by the Agency. Some may already be in place based upon the standard contracting forms of your Agency. Others may be areas for negotiation with the vendor to establish the best terms and structure for the services which will be provided.

1. Are you properly prepared and organized for this negotiation session?
2. Is an agenda prepared to guide discussions during the negotiating sessions?
3. What areas of the Vendors proposal do you wish to review in detail? Have you prepared and reviewed your questions in advance?
4. Who will represent your Agency during the negotiations? Are you properly organizing your negotiations team when compared to who will represent the Vendor?
5. Can you communicate your expectations of the proposed vendor?
6. Are the Project Goals, Expectations and Deliverables clearly articulated and understood?
7. Do you have an established position on the following contract elements:
    - Schedule and timing of any follow up Negotiations meetings
    - The proposed Contract Language (also see No. 19)
    - Insurance Requirements
    - Allowable Profit Percentage
    - What will be considered as an allowable Overhead Rate
    - Will you allow any "mark-up" on Sub-consultants or an allowance for their management?
    - Will you allow Salary Escalation over multiple contract years
    - How will payments be handled? Is there a payment for "mobilization"? Will there be Retainage? How frequently will invoices be submitted? Can electronic Invoicing and Payments be considered?
    - How will Quality Assurance/Quality Control be compensated? Is it "integrated" throughout all Tasks or itemized as a separate Task/Activity?
8. Is the proper contract form being used? Is this contract better delivered as a "Lump sum" or "Cost Plus"?
9. Are there opportunities to include any forms of fee-incentives?
10. Will you be receptive to value-engineering opportunities?
11. How much work are you requiring the "Lead" firm to perform? Is there a limit on how much work is performed by sub-consultants/vendors?
12. How comfortable are you with your estimate of the anticipated fee for this work? What is the basis of your estimate?
13. Do you have a detailed spreadsheet or other documents depicting your estimate of the effort and costs for this project?
14. Are adequate provisions included in the proposed contract to allow any potential negotiation of delay costs you may encounter? How will you handle any "Restart" costs?
15. What project issues are you as the Client most concerned with? Have those been clearly communicated to the Vendor?
16. Have you identified any elements of this project that are unusual or complex?
17. What is your "walk-away" limit for negotiations with this vendor?
18. What will be allowable as appropriate reimbursable expenses? Will a "mark up" on expenses be allowed?
19. Do you have a Standard Contract form you will be using? Are there terms and conditions you will be willing to negotiate?
20. Can you detail the outcome of these negotiations that would be considered a "success"?

Sample Risk Questionnaire

5 = Very High 4 = High 3 = Moderate 2 = Low 1 = Very Low 0 = none

NO.		Phase Impacted	Opportunity/ Threat	Probability	Cost Impact (CI)	Schedule Impact (SI)	Rank	NOTES/Description
1.0	**Technical Risks**							
1.01	Design incomplete						0.0	
1.02	Right of Way analysis in error						0.0	
1.03	Environmental analysis incomplete or in error						0.0	
1.04	Unexpected geotechnical issues						0.0	
1.05	Change requests because of errors						0.0	
1.06	Inaccurate assumptions on technical issues in planning stage						0.0	
1.07	Surveys late and/or surveys in error						0.0	
1.08	Materials/geotechnical/foundation in error						0.0	
1.09	Structural designs incomplete or in error						0.0	
1.10	Hazardous waste site analysis incomplete or in error						0.0	
1.11	Need for design exceptions						0.0	
1.12	Consultant design not up to Department standards						0.0	
1.13	Context sensitive solutions						0.0	
1.14	Fact sheet requirements (exceptions to standards)						0.0	
1.15	Metro Subway Clearance						0.0	
1.16	Tunnel Depth						0.0	
1.17	Alignment						0.0	
1.18	Rock Quality						0.0	
1.19	Hardness						0.0	
1.20	Settlement						0.0	
1.21	Muck Removal						0.0	
1.22	Connecting New Tunnel To NEC						0.0	
1.23	*user added*						0.0	
1.24	*user added*						0.0	
1.25	Others						0.0	
2.0	**External Risks**							
2.01	Landowners unwilling to sell						0.0	
2.02	Priorities change on existing program						0.0	
2.03	Inconsistent cost, time, scope, and quality objectives						0.0	
2.04	Local communities pose objections						0.0	
2.05	Funding changes for fiscal year						0.0	
2.06	Political factors change						0.0	
2.07	Stakeholders request late changes						0.0	
2.08	New stakeholders emerge and demand new work						0.0	
2.09	Influential stakeholders request additional needs to serve their own commercial purposes						0.0	
2.10	Threat of lawsuits						0.0	
2.11	Stakeholders choose time and/or cost over quality						0.0	
2.12	*user added*						0.0	
2.13	*user added*						0.0	
2.14	Others						0.0	
3.0	**Environmental Risks**							
3.01	Permits or agency actions delayed or take longer than expected						0.0	
3.02	New information required for permits						0.0	
3.03	Environmental regulations change						0.0	
3.04	Water quality regulation changes						0.0	
3.05	Reviewing agency requires higher-level review than assumed						0.0	
3.06	Lack of specialized staff (biology, anthropology, archeology, etc.)						0.0	
3.07	Historic site, endangered species, wetlands present						0.0	
3.08	EIS required						0.0	
3.09	Controversy on environmental grounds expected						0.0	
3.10	Environmental analysis on new alignments is required						0.0	
3.11	Formal NEPA/404 consultation is required						0.0	
3.12	Formal consultation is required						0.0	
3.13	Issues expected						0.0	
3.14	Project in an area of high sensitivity for paleontology						0.0	
3.15	Resources affected						0.0	
3.16	Project in the Coastal Zone						0.0	
3.17	Project on a Scenic Highway						0.0	
3.18	Project near a Wild and Scenic River						0.0	
3.19	Project in a floodplain or a regulatory floodway						0.0	
3.20	Project does not conform to the state implementation plan for air quality at the program and plan level						0.0	

Sample Risk Questionnaire

5 = Very High 4 = High 3 = Moderate 2 = Low 1 = Very Low 0 = none

NO.		Phase Impacted	Opportunity/ Threat	Probability	Cost Impact (CI)	Schedule Impact (SI)	Rank	NOTES/Description
3.21	Water quality issues						0.0	
3.22	Negative community impacts expected						0.0	
3.23	Hazardous waste preliminary site investigation required						0.0	
3.24	Growth inducement issues						0.0	
3.25	Cumulative impact issues						0.0	
3.26	Pressure to compress the environmental schedule						0.0	
3.27	*user added*						0.0	
3.28	*user added*						0.0	
3.29	Others						0.0	
4.0	**Organizational Risks**							
4.01	Inexperienced staff assigned						0.0	
4.02	Losing critical staff at crucial point of the project						0.0	
4.03	Insufficient time to plan						0.0	
4.04	Unanticipated project manager workload						0.0	
4.05	Internal "red tape" causes delay getting approvals, decisions						0.0	
4.06	Functional units not available, overloaded						0.0	
4.07	Lack of understanding of complex internal funding procedures						0.0	
4.08	Not enough time to plan						0.0	
4.09	Priorities change on existing program						0.0	
4.10	New priority project inserted into program						0.0	
4.11	Inconsistent cost, time, scope and quality objectives						0.0	
4.12	*user added*						0.0	
4.13	*user added*						0.0	
4.14	Others						0.0	
5.0	**Project Management Risks**							
5.01	Project purpose and need is poorly defined						0.0	
5.02	Project scope definition is poor or incomplete						0.0	
5.03	Project scope, schedule, objectives, cost, and deliverables are not clearly defined or understood						0.0	
5.04	No control over staff priorities						0.0	
5.05	Too many projects						0.0	
5.06	Consultant or contractor delays						0.0	
5.07	Estimating and/or scheduling errors						0.0	
5.08	Unplanned work that must be accommodated						0.0	
5.09	Communication breakdown with project team						0.0	
5.10	Pressure to deliver project on an accelerated schedule						0.0	
5.11	Lack of coordination/communication						0.0	
5.12	Lack of upper management support						0.0	
5.13	Change in key staffing throughout the project						0.0	
5.14	Inexperienced workforce/inadequate staff/resource availability						0.0	
5.15	Local agency issues						0.0	
5.16	Public awareness/support						0.0	
5.17	Agreements						0.0	
5.18	*user added*						0.0	
5.19	*user added*						0.0	
5.20	Others						0.0	
6.0	**Right of Way Risks**							
6.01	Utility relocation may not happen in time						0.0	
6.02	Freeway agreements						0.0	
6.03	Railroad involvement						0.0	
6.04	Objections to Right of Way appraisal takes more time and/or money						0.0	
6.05	*user added*						0.0	
6.06	*user added*						0.0	
6.07	Others						0.0	
7.0	**Construction Risks**							
7.01	Inaccurate contract time estimates						0.0	
7.02	Permit work windows						0.0	
7.03	Utility						0.0	
7.04	Surveys						0.0	
7.05	Buried man-made objects/unidentified hazardous waste						0.0	
7.06	*user added*						0.0	
7.07	*user added*						0.0	
7.08	Others						0.0	

Abbreviations and acronyms used without definitions in TRB publications:

A4A	Airlines for America
AAAE	American Association of Airport Executives
AASHO	American Association of State Highway Officials
AASHTO	American Association of State Highway and Transportation Officials
ACI–NA	Airports Council International–North America
ACRP	Airport Cooperative Research Program
ADA	Americans with Disabilities Act
APTA	American Public Transportation Association
ASCE	American Society of Civil Engineers
ASME	American Society of Mechanical Engineers
ASTM	American Society for Testing and Materials
ATA	American Trucking Associations
CTAA	Community Transportation Association of America
CTBSSP	Commercial Truck and Bus Safety Synthesis Program
DHS	Department of Homeland Security
DOE	Department of Energy
EPA	Environmental Protection Agency
FAA	Federal Aviation Administration
FHWA	Federal Highway Administration
FMCSA	Federal Motor Carrier Safety Administration
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
HMCRP	Hazardous Materials Cooperative Research Program
IEEE	Institute of Electrical and Electronics Engineers
ISTEA	Intermodal Surface Transportation Efficiency Act of 1991
ITE	Institute of Transportation Engineers
MAP-21	Moving Ahead for Progress in the 21st Century Act (2012)
NASA	National Aeronautics and Space Administration
NASAO	National Association of State Aviation Officials
NCFRP	National Cooperative Freight Research Program
NCHRP	National Cooperative Highway Research Program
NHTSA	National Highway Traffic Safety Administration
NTSB	National Transportation Safety Board
PHMSA	Pipeline and Hazardous Materials Safety Administration
RITA	Research and Innovative Technology Administration
SAE	Society of Automotive Engineers
SAFETEA-LU	Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (2005)
TCRP	Transit Cooperative Research Program
TEA-21	Transportation Equity Act for the 21st Century (1998)
TRB	Transportation Research Board
TSA	Transportation Security Administration
U.S.DOT	United States Department of Transportation