

**MANAGEMENT OBJECTIVE(S)**

Buy the right quantity and the right quality at the right time at the right price from capable suppliers. [Return to Table of Contents](#)

**BACKGROUND**

Professional public purchasing and contracting is a complex process subject to governing laws, operating rules and regulations, court decisions, administrative law rulings, recommendations, recommended practices, designated procedures, specific conflict-of-interest provisions, and the overall proprieties that attach to public service. The fundamentals of successful public purchasing are competition, impartiality, conservation of funds, and openness.

Federal statutes and executive orders may require specific clauses in purchase orders involving federal grants. Federal agency regulations and OMB Circular A-102 (w/attachments) may contain relevant requirements for purchasing when federal funds are involved (i.e., adequate review procedures; assurance of competition; use of appropriate procurement methods; compliance with equal employment opportunity laws, anti-kickback and prevailing wage regulations, etc.). See "Common Rule for Uniform Administrative Requirements for Grants and Cooperative Agreements With State and Local Governments; Federal Agency Implementation of Common Rule" for definition of terms when purchases involve federal grants.

Purchasing activity within the state involves two levels of operation. At the statewide level, procurement is programmatic and based on strategic goals and objectives at the central purchasing organization, the General Services Commission (GSC). At the entity level, procurement is mission-oriented and based on operational goals and objectives. The degree of coordination and communication between these various levels of procurement management can have a material effect on the efficiency, economy, and effectiveness of individual entities and on the state as a whole.

Procurement is a part of the materials management process, which includes inventory, fixed assets, maintenance, and transportation as well. See the modules on [Inventory](#) and [Fixed Assets](#) for further information.

**DEFINITIONS (in alphabetical order)**

Pertinent definitions are provided in the statutes and rules listed below.

- Vernon's Texas Code Annotated (VTCA), §§ 1.101 - 36.26, Business and Commerce Code (Uniform Commercial Code)
- Vernon's Texas Code Forms Annotated (VTCFA), Uniform Commercial Code For
- Vernon's Texas Civil Statutes (VTCS), Title 20, Art. 601b, State Purchasing and General Services Act
- VTCS, Title 20, Article 664-4, Professional Services Procurement Act
- VTCS, Title 110A, Art. 6252-9b, Standards of Conduct of State Officers and Employees
- VTCS, Title 110A, Art. 6252-11c, Use of Private Consultants by State Agencies
- Texas Administrative Code (TAC), Title 1, Part V, Chapters 113, 115, and 117
- General Appropriations Act
- Information Resources Management Act

- Travel Regulations Act
- Prompt Payment Act
- Interagency Cooperation Act
- VTCS, Articles 601g, 6252-31, 6674h-2, and 6674i
- Texas Constitution, Art. III, §§ 49, 49a, 50, and 51; Art. VIII, § 3; and Art. XVI, §§ 6(a) and 21
- Attorney General Opinion H-1173: Art. 664-4 and Art. 6252-11c are not in conflict
- 48 Code of Federal Regulations (CFR), Federal Acquisition Regulations System
- Trade Laws effecting vendors conducting business with the State:
  - Sherman Anti-Trust Act (1890), no monopolies
  - Clayton Act (1914), no price-fixing
  - Federal Trade Commission Act (1914), no unfair competition
  - Robinson-Patman Act (1936), no regional price differences

- OVERVIEW OF THE PROCESS** The basic phases of a procurement process are:
- **Define and document the goals and objectives for the procurement process.**
  - **Determine the nature, scope, and location of the procurement process in the organization structure.**
  - **Identify, document, and implement the policies, procedures, and controls needed for the procurement process.**
  - **Plan and schedule procurement activities.**
  - **Receive requisitions and develop specifications.**
  - **Solicit bids from vendors.**
  - **Evaluate and award bids.**
  - **Receive, inspect, inventory, and store the items (see [Inventory](#) and [Fixed Asset](#) modules).**
  - **Monitor and evaluate the procurement process.**

## PROCEDURES

Suggested procedures, organized according to the elements of a finding, are listed below. They should be expanded or tailored to fit the specific entity being reviewed.

Note: The following procedures and the process described above are normative, rather than prescriptive. That is, they represent "average" or baseline thinking since they assemble information which repeatedly appeared in the various resources used to prepare this module. Do not be too hasty or literal in applying a given criterion or procedural step to a specific entity. While omissions or variations may be obvious, judgment must still be used to determine whether such omissions or variations are material.

### Review criteria: Specific criteria

The criteria related to these specific phases of the procurement process are as follows:

**Define and document the goals and objectives for the procurement process**  
The State's procurement statute should link to statewide strategies, goals, and objectives. The planning process should specify performance measures related to the

State's strategies and goals. If there is a centralized procurement function, it should develop a master plan for acquisitions within the State.

Identify any statewide strategies, goals, and objectives that are directly or indirectly related to entity procurement management. An example of an indirect statewide strategy related to inventory might be a requirement, intended to reduce harm to the environment, that state agencies purchase only recycled paper. Link the entity's procurement goals to these statewide strategy, goals, and objectives.

Goals for the procurement process should link to the entity's other strategies, goals, and objectives.

Procurement goals and objectives should be documented and address planning, acquisition, standards and quality assurance, contract administration, and disposition programs. The entity should publish and maintain a current procurement user's manual which contains applicable central procurement agency guidelines.

#### **Determine the nature, scope, and location of the procurement process in the organization structure**

The policy-making authority should adopt rules to implement the law that are consistent with the State's statute.

When centralized procurement is appropriate, the entity should:

- Establish a central procurement office responsible for management of all procurement activities.
- Define the organizational placement of the central purchasing function at a management level to ensure that sufficient authority, independence, and safeguards are provided to foster the goals and objectives of the procurement program.
- Define the accountability, responsibility, and authority of central procurement.
  
- Authorize central procurement to have responsibility for the content and correctness of solicitations, contracts, specifications, and terms and conditions.
- Exclude blanket exemption for any entity.
- Establish an office of a chief procurement official. Good management practices dictate the appointment of an official with procurement experience. Certification as a Certified Professional Public Buyer (CPPB) and/or Certified Public Purchasing Officer (CPPO) is desirable.

#### **Identify, document, and implement the policies, procedures, and controls needed for the procurement process**

Document all procurement processes, rules, and regulations in manuals which are regularly reviewed and updated.

The entity should also:

- Document the relationship of the statewide procurement process to procurement process delegated to other entities.
- Require entities with delegated purchasing authority to adhere to procurement law and to central procurement rules, policies, and procedures.
- Direct central procurement to monitor all delegated procurement activities.

The entity should establish criteria which prevent abuse of authorized procurement thresholds and restrictions. Lines of authority and separation of duties must be established.

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The controls needed to manage the remainder of the procurement process will vary according to the nature of the item to be acquired. Rather than provide an exhaustive list of criteria and controls sorted by the different types of items, each process step has general criteria and then a list of possible controls and data, organized by the control objectives of economy, efficiency, and effectiveness.

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### **Plan and schedule procurement activities**

The basic phases of the planning and scheduling process are as follows:

- Forecast requirements.
- Assess time required to complete procurement action.
- Assess lead time and seasonal variations that affect when procurement should be initiated.
- Determine assignment of procurement officials needed.
- Determine cost of procurement action and analyze resources for adequacy to accomplish anticipated work load.

Control Objective: Economy of resource management and use by placing orders that represent the best or economic order quantity and ensuring timely receipt, consistency with customer demands, and availability of funds.

*Controls:*

- Authorize any type of contract except the cost-plus-a-percentage-of-cost contract.
- Authorize multi-year contracts, subject to availability of funds, specifying that the term of the contract must appear in the solicitation for bids or proposals.
- Require contracts for rental, leases, and lease/purchase be subject to the regular requirements for competition.
- Require mandatory use of the central procurement office contracts and methods of monitoring compliance.
- Require application of life cycle cost principles under certain types of contracts.

*Data:*

- evidence of purchases during peak demand/season (e.g., rock salt for roads)

bought in January versus June, etc.)

Control Objective: Efficient maintenance and analysis of the procurement management information system.

*Controls:*

- Require client entities to submit demand data to central purchasing and grant specific authority to central purchasing to require justification of purchase requests.
- Require central purchasing to establish and maintain an ongoing program of consolidation of demands wherever practical and to use scheduled purchasing and term contracting techniques as appropriate.

*Data:*

- demand history

Control Objective: Effective attainment of customer requirements without excessive costs.

*Controls:*

- Support data requirements of central purchasing (i.e. the data needs from using entities, the scheduling and timing of activities, and the respective areas of authority, responsibility, and liaison).
- Require incorporation of data from budget documents, surveys of vendors, and agency requirements.
- Require cost-effectiveness analyses to determine where volume buying is appropriate.

*Data:*

- evidence of over stockage (e.g., truckload of copy paper sent to disposal due to excess moisture content for equipment in use, etc.)

### **Receive requisitions and develop specifications**

The basic phases of the specification development process are as follows:

- Identify minimum requirements (design, performance, or both).
- Develop requisition.
- Send requisition to purchasing function.
- Purchasing reviews requisition for accuracy and completeness.
- Purchasing checks to see if item(s) are available from on-hand or excess; if not, purchasing determines methods of purchase.

Control Objective: Economy of purchase through use of precise technical and legal descriptions that clearly communicate entity needs to potential suppliers without undue expense.

*Controls:*

- Specifications should provide for full competition.
- Include performance specifications that promote ingenuity, innovation, and cost reduction.
- Encourage competition when brand-name-or-equal is used.

- Establish the dollar amount above which competitive sealed bidding, including multi-step bidding, or competitive negotiations is required.

*Data:*

- precise legal and technical descriptions
- evidence of purchases that exceed established thresholds for competitive sealed bids without adequate competition

Control Objective: Efficient access to a sufficiently large data base of descriptive data that is capable of specifying entity needs.

*Controls:*

- Require that central purchasing establish and maintain a specification and standardization program with written policies and procedures.
- The program should be prepared, reviewed, modified, approved, and enforced by central purchasing; and delegated to entities for utilization as appropriate.
- The program should not be written too restrictively except under conditions prescribed by rules.

*Data:*

- evidence of accurate bids by bidders
- evidence of catalogued up-to-date specifications for recurring demands

Control Objective: Effective technical and descriptive identification of needed materials by users, purchasers, and suppliers.

*Controls:*

- Utilize specifications published by federal or commercial sources (i.e. Department of Defense, Federal Supply Service, National Institute of Governmental Purchasing, American Society for Testing and Materials, etc.).
- Prohibit material furnishers and prospective suppliers from bidding on requirements if they prepare or assist in preparing the specifications

*Data:*

- number of challenges by bidders

**Solicit bids from vendors**

The basic phases of the solicitation process are as follows:

- Seek sources of supply through use of trade directories, yellow pages, Chamber of Commerce directories, professional organizations, etc.
- Develop the bidders list using pre-qualification procedures to avoid unnecessary disqualifications and protests.
- Publish requirements in the *Texas Register* and other public advertising.
- Develop standard formats and clauses for contract administration and monitoring.
- Develop instructions for the preparation and submission of proposals.
- Distribute Invitations for Bids (IFBs) or Requests for Proposals (RFPs).

Control Objective: Economy through the creation of purchasing conditions that foster competition among a sufficient number of firms where factors other than price are (or

could be) as critical or more critical than price alone.

*Controls:*

- Authorize acquisition of goods and services by use of competitive sealed bidding (including multi-step bidding), competitive negotiation, and procedures for making small purchases, emergency purchases, and sole-source procurement.
- Authorize progress payments and installment payments.
- Define "emergency" for purchasing purposes and establish rules, including determination of circumstances and obtaining competition, to the extent feasible.

*Data:*

- evidence of fair competition
- absence of rules which foster competition
- deviations to specifications
- changes to specifications
- waiver of technicalities in specifications
- variance in delivery and Freight on Board (FOB) point
- variance in labor, wages, and work schedule

Control Objective: Efficiency through pre-qualification of bidders and maintenance of a master bidders list.

*Controls:*

- Require maintenance of a master bidders list by the central procurement agency and/or the sub-entity.
- Require that a public record be kept of vendors solicited and responses received on competitive quotations.
- Require execution of solicitations in standard formats.
- Provide procedures for effecting modification and termination of contracts.
- Provide that any written summaries of bidders' conferences be sent to all prospective bidders, and designate conditions under which site visits or attendance at a bidders' conference may be made a pre-requisite to consideration of bids or offers.
- Utilize the Thomas' Register (a listing of everything that is made and where to get it) for determining sources of supply.
- Authorize pre-qualification of bidders and require rules for documentation, suspension, and debarment.

*Data:*

- evidence of excessive disqualification of bidders and protests

Control Objective: Effectiveness by obtaining responsive bidders.

*Controls:*

- Grant broad administrative discretion as to when bid and performance surety will be required and what constitutes acceptable surety.
- Require rules for determining responsibility of bidders.
- Authorize rejection of any and all bids, in whole or in part, or accept a single-bid response.
- Prohibit the issuance of letters-of-intent-to-purchase in advance of

- soliciting competitive bids or proposals.
- Require purchasing officials to challenge representation of sole source.

*Data:*

- awards to firms too small to deliver requirements
- past performance with a firm
- financial status of a firm
- labor relations in a firm
- service-after-sale experience with a firm
- bonding capacity

**Evaluate and award bids**

The basic criteria for bid evaluations should be:

- Equitable evaluation requirements to include:
  - IFBs/RFPs must set forth any factors, other than initial price, that will be used in evaluating the bids or proposals.
  - If award is made for other than the low initial price, the reasons must be documented as a public record.
- Provide for an equitable award at the lowest possible cost.
- Adherence to legal criteria.
- Ability of vendor to perform satisfactorily.

Control Objective: Economy and fairness, the principal aims of public contracting.

*Controls:*

- Require that awards under competitive sealed bids and competitive sealed proposals be made to the responsible and responsive bidder or offeror whose bid or proposal is most economical for the purpose intended according to the criteria set forth in the solicitation.
- Require rules governing the handling of unsolicited offers, including approval of central purchasing prior to any evaluation or acceptance of such an offer.

*Data:*

- evidence of changes in bid prices or conditions after bid opening
- bid prices subject to unlimited escalation
- bids awarded to vendors that were received after bid opening
- evidence of not giving consideration to discounts or energy efficiency

Control Objective: Efficiency through use of purchasing criteria and specific evaluation factors unique to the purchase.

*Controls:*

- Require that each solicitation set forth the factors to be considered in evaluating responses for award and that no factor can be considered that is not included in the solicitation.
- Require suitability and economy to be interrelated in terms of price and performance (i.e. life cycle costing criteria, etc.).

*Data:*

- evidence of arbitrary or capricious awards

- evidence of noncompliance with the provisions of the solicitation, including specifications, and contractual terms and conditions
- evidence of untimely evaluation of bids and slow awards which could discourage competition

Control Objective: Effectiveness by requiring competition among bidders.

*Controls:*

- Require rules that limit the use and number of multiple awards.
- Require that any extension or renewal of contracts, except under emergency conditions, be provided for in the original solicitation of each action.
- Require bidders to certify non-collusion. Consider pursuing criminal penalties for collusive bidding.
- Require a bid/award history file for analysis of data and detection of suspected or apparent collusive bidding.
- Require training of purchasing officials on collusive bidding and other procurement related antitrust matters.
- Allow vendors to administratively appeal specifications and award decisions that appear to violate purchasing rules and statutes.
  
- Require that employees disclose any interest in ownership of bidding firms.
- Require that information conveyed by public reading, tabulating, or abstracting of bids at public opening be a public record at the time of bid opening. Bid documents and remainder of file must be made publicly available following award of contract, subject to provision for confidentiality of proprietary and similar data, as defined by rules and regulations.
- Stipulate that ideas or information submitted in a technical proposal under multi-step bidding and competitive negotiation cannot be used in negotiating with another bidder or proposer.

*Data:*

- evidence of favoritism, corruption, and fraud
- waivers from competition
- clauses in contracts (i.e. non-collusion, laws, appeals, etc.)
- employee disclosures on interests and ownerships
- evidence of insufficient acceptable bids
- training records

**Receive, inspect, inventory, and store the items (see [Inventory](#) and [Fixed Asset modules](#))**

The basic criteria for inspection and testing should include:

- identification of the types of knowledge, skills, and abilities which quality assurance staff require for their tasks
- identification of the types of testing available and when each should be used
- identification of the basic sampling methods and how they are applied
- provisions for describing the different types of documentation and reporting procedures which should be used and why, what each report should contain, and how the information should be used

- procedures for handling supplier nonperformance and complaints

Control Objective: Economy through assurance that quality and quantity conform with contractual requirements and specifications without impeding or obstructing the ordinary flow of merchandise.

*Controls:*

- Require that central purchasing establish and administer a formal inspection and testing program.

*Data:*

- evidence that responsible suppliers are being harassed by inspectors
- indications that excessive losses are being experienced due to a lack of inspections and testing

Control Objective: Efficiency is achieved through appropriate statistical sampling methods.

*Controls:*

- Provide that central purchasing may use laboratories and testing facilities of any other entity and may contract for testing services with outside sources.

*Data:*

- evidence that 100 percent inspections are being conducted by internal entity personnel

Control Objective: Effectiveness through knowledge that a delivery may be inspected and its acceptance or rejection based solely upon complying with specifications as ways to discourage suppliers who otherwise might resort to unethical practices.

*Controls:*

- Designate actions that may be taken when contractors fail to perform satisfactorily.

*Data:*

- evidence that the buyer is exercising his right to inspect before payment

See the [Inventory](#) module for criteria for the supply management process.

**Monitor and evaluate the procurement process**

At least annually, the entity should evaluate the various procurement processes for effectiveness and efficiency. This information should be used to enhance or modify current processes.

Performance Measures

Input indicators:

- the number of requisitions received

Output indicators:

- the number of contracts completed

- the percentage of business from historically underutilized businesses (i.e. 30% or more to comply with Art. 601b)
- the number of requisitions filled
- the number of new annual contracts developed
- the number of annual contracts revised
- special savings achieved
- number of purchase orders issued
- number of single-bids received

Outcome indicators:

- amount of backlog
- number of awards challenged
- number of specifications challenged by vendors

**Assess Condition:**

**Determine the actual process used**

Conduct interviews, observe operations, and identify and collect available documentation in order to gain an understanding of the entity's actual procurement process and controls. Included in the actual process are both official/unofficial and formal/informal processes and controls. An official process may exist even if it is not documented. Possible procedures include, but are not limited to:

- Determine where the procurement process resides in the entity, who participates in the process, and how the participants are selected.
- Obtain and review any manuals, policies, and forms that could document any phase of the procurement process, including its relationship to entity goals, objectives, strategies, and plans.
- Determine if and how management consciously selects and employs the assumptions, criteria, methods, processes, and techniques used in the procurement process. Obtain and review available documentation on the assessment of risks, costs, and benefits.
- Determine the sequence of work flow in each process.
- Determine what assets or data the entity handles.
- Determine if activities exist which involve or depend upon other entities. Identify mechanisms for linking activities across departments -- regular meetings, standard reports, committees, project teams, quality circles, task forces, user groups, etc.
- Obtain information on the process the entity uses to review and evaluate its procurement system.

NOTE: Sources of information include; source documents (such as requisitions, purchase orders, and contracts), interviews, complete organization chart or charts, Comptroller's staffing report, employee position specifications and descriptions, entity LAR, statutes, briefing books, and ABEST reports on programs and activities. A client survey may help in addressing criteria that are difficult to test directly.

In addition to gaining an understanding of the actual process, you should also try to find out:

- how the participants view the actual process
- what parts of the process they see as successful or unsuccessful, and why

**Determine the strengths and weaknesses of the actual process**

- what they think is important about the process and why  
This information may help identify causes and barriers.

Using the tailored criteria, the understanding of the entity's process gained above, and the procedures in this section, analyze the actual process to determine if it:

- is designed to accomplish the management objective (this module, page 1)
- has controls that provide reasonable assurance that the process will work as intended
- is implemented and functioning as designed
- is actually achieving the desired management objective(s)

Suggested procedures for each of these four analysis steps are detailed below. In executing these procedures, remember to identify and analyze both strengths and weaknesses.

Identify and review the steps in the actual process. Possible procedures include, but are not limited to:

- Determine if all major steps included in the criteria are included in the actual process. If steps are missing, determine if their absence is likely to have a materially negative effect on the procurement process at the entity you are reviewing.
- Determine if all the steps in the process appear to add value. If there are steps that do not appear to add value, try to get additional information on why they are included in the process.
- Review the order of the steps to determine if it promotes productivity.
- Review the level of technology used in the process to determine if it is up-to-date and appropriate to the task. Besides computer, electronic, communications, and other mechanical technology, you should also consider what kinds of management technology are used (Gantt charts, process maps, decision matrices, etc.). See the [appendix](#) to the module on problem-solving and decision-making for more information.

Identify the controls over the process and determine if they provide reasonable assurance that the process will work as intended. These controls should be appropriate, placed at the right point(s) in the process, and cost effective. Possible procedures include, but are not limited to:

- Draw a picture of the process, the controls, and the control objectives (see the graphic of the procurement process in the [Introduction](#) for an example). Flowcharts of the procurement process can help identify inputs, processes, and outputs.
- Determine if the control objectives are in alignment with the overall management objective(s) (this module, page 1).
- Identify the critical points of the process (i.e., those parts of the process most likely to determine its success or failure or expose the entity to high levels of risk) and the controls related to them. Consider whether the controls are:
  - in the right location within the process (input, operations, output)
  - timely (real time, same day, weekly, etc.)

- Compare the cost of the control(s) to the risk being controlled to determine if the cost is worth the benefit.
- Determine what controls are in place for monitoring and evaluating the overall effectiveness of the procurement process and making sure that changes are made in the process if it does not yield the desired results.
- Identify, describe, and assess the process used to gather input from employees who might reasonably discover flaws in the process.
- Determine whether team buying (i.e., multiple buyers assigned to a commodity or classification of supplies) is encouraged as an effective technique to provide commodity specialization, experienced backup, and group decision-making.
- Determine if the purchasing, receiving, and recording functions are clearly separated and reside in separate departments.
- Review purchase orders to determine if prenumbered, serialized purchase orders are prepared for all purchases.
- Review presentation and disclosure of purchases and disclosure of classification of purchases and accounting methods to determine adequacy.
- Establish clerical accuracy of records and authorization for all schedules of requirements.
- Determine the process management uses to ensure that the competitive procurement and bid evaluation processes are done in a timely manner. (If the control is only at the end of the process, it won't be as effective in ensuring timely evaluations.)
- Review how the procurement system uses inspection and testing information to improve the procurement process, including controls.
- Determine the process management uses to ensure the integrity of any process that handles cash or checks, or approves applications, licenses, or permits.

Review observations, interviews, documentation and other evidence and design specific audit procedures to determine if the process and/or the controls are functioning as designed. Depending upon the objectives of the project, these procedures may include both tests of controls and substantive tests, more information on which is found in *The Hub*, p. 2-B-8, et. seq.. Possible procedures include, but are not limited to:

- Determine if any evidence of management override exists.
- Walk through the actual process, i.e., follow a transaction through the people and documents involved, and compare to the official process.
- Select a sample of competitively bid contract responses. Evaluate bids to determine if the contract accepted conformed to standards documented in the competitive procurement process.
- Select a sample of goods to test the inspection and testing process. Evaluate the capability of testing staff and the sampling methods they use. Evaluate the procedures used by testers to handle supplier nonperformance.

Review and analyze any reports used by the entity to monitor the outcome(s) of the procurement process and/or any other information available to determine if the process is actually achieving the desired management objective(s) (this module, page 1).

Possible procedures include, but are not limited to:

- Analyze these process reports over time for trends.
- Discuss any apparently material negative or positive trends with management.
- Determine if and how management acts upon these trend reports and what changes, if any, were made in the process or controls as a result. Some process refinements, especially those affecting entity mission, goals, and outcome measures, may need to wait until the next appropriation cycle.
- Review results of the inspection and testing process to determine if these results are used to modify this process.
- Review results of the evaluation of the bid evaluation and award process to determine if the information is fed back to modify or enhance the current system.

### Determine causes

Determine what circumstances, if any, caused the identified variations or weaknesses in the procurement process. Possible procedures include, but are not limited to:

- Determine if the participants in the procurement process understand the entity's mission, goals, and values and support them through their management of the procurement process.
- Determine if the participants understand both the purpose of and their role in the procurement process.
- If the process occurs at multiple locations, determine if there is adequate communication and coordination between them.
- Determine whether the relationships between the various procurement processes and other entity processes are clear.
- Determine if the procurement process has adequate human, dollar, time, and asset resources. If they appear inadequate, determine if entity resources have been allocated according to the materiality of the procurement process relative to other entity processes.
- Determine if the entity has considered using alternative resources such as industry associations, non-profit organizations, academic institutions, or other governmental entities to meet its resource needs.
- Determine if resources available to the procurement process have been allocated and used in a manner consistent with the importance of that resource to the procurement process.
- If there are negative trends in the reports used to monitor the outcome(s) of the procurement process, determine if these reports are communicated to and used by the appropriate parties to modify the process.

Determine what internal or external constraints or barriers, if any, must be removed in order to overcome these weaknesses. Possible procedures include, but are not limited to:

- Determine if any key employees are unwilling to change the process and why they are unwilling.
- Review the applicable entity, state, or federal laws or regulations to determine if any of them prevent the necessary changes from being made in the procurement process.

**Determine effect**

Compare the actual entity process to a recommended alternative process(es) and determine if each weakness in the entity process is material. Alternatives can be developed by using the criteria contained in this module, applying general management principles to the process, using the processes at comparable entities, etc. Materiality can be measured by comparing the dollar cost, impact on services (either quantity or quality), impact on citizens, impact on the economy, risks, etc., of the actual process to the recommended alternative process(es). Measurements can be quantitative, qualitative, or both. Possible procedures include, but are not limited to:

- Identify performance benchmarks (industry standards, historical internal data, other comparable entities, etc.) for process in question and compare to actual performance. Measure the difference, if possible. Include the cost of the additional controls or changes in the process.
- Estimate the cost of the actual process and the alternative process(es) and compare.
- Estimate the quantity and/or quality of services provided by the actual process and by the alternative process(es) and compare.
- Identify the risks associated with the actual process and with the alternative process(es). Measure and compare the risks.

**Develop recommendations**

Develop specific recommendations to correct the weaknesses identified as material in the previous section. In developing these recommendations, consider the tailored criteria, kind of process and control weaknesses identified, causes and barriers, effects, and additional resources listed at the end of this module. Possible procedures include, but are not limited to:

- Identify alternative solutions used by other entities.
- Identify solutions for removing barriers.
- Provide general guidelines as to the objectives the solution should meet so the entity can tailor it to its specific situation.
- Provide specific information, if available, on how the recommendation can be implemented.

**RESOURCES****Articles**

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## Data Bases

### **ABEST (Agency Budgets & Strategic Plans)**

ABEST data are compiled by the Legislative Budget Office and include information on the following:

- budget requests
- input, output, and efficiency measures
- capital expenditures
- budget recommendations
- quarterly and year-to-date performance measures
- classified positions
- entity strategic plans
- statewide strategic plan

ABEST information is maintained dating from 1992 and projecting forward to 1994 and 1995. In-house contacts on ABEST are Dean Duan (4829), Tom Tharp (4912), and Sherry Varnado (4716).

### **UTCAT (On-Line Catalog of the General Libraries of UT-Austin)**

Search parameters used to identify holdings include:

- S (subject) for books
- S (subject) and SK (subject keyword) for periodicals
- T (title) and TK (title keyword) for books and periodicals
- PT (periodical title) and PK (periodical title keyword) for periodicals

Searches using "government contracts," "government purchasing," "materials management," "purchasing," "procurement," and "public contracts" revealed a

substantial number of books and periodicals related to the procurement process.

An S (subject) search in the books data base or an SK (subject keyword) search in the periodicals data bases lets you scan all subjects related to purchasing or procurement, such as "purchasing--handbooks" or "procurement--decision models." This lets you focus the subject of your search.

Regardless of subsidiary data base, a TK (title keyword) search lets you scan bibliographic entries for all books or articles which have the words "strategic planning" in their titles.

Note: Books, academic periodicals, and business periodicals are accessed in different subsidiary data bases in UTCAT. While all SAO employees can access the main UTCAT data base, access to the periodicals data bases is limited to holders of current identification cards from either UT-Austin, UT-Dallas, or UT-Pan American.

**Human Resources**

The following SAO staff members have specialized training or an ongoing interest in the procurement process.

Employee	Title
Bill Addison	CPPB (Certified Professional Public Buyer)
Joe Molina	Subject Coordinator for Privatization and Contracting
Bill Addison Amy Graves Babette Laibovitz Linda Lansdowne Bruce Truitt	Module Writers/Editors
Barbara Hankins, CPA Jeannie Henderson, CPA Randy Townsend, CPA	Reviewers

**Periodicals**

Note: Indexes and abstracts of periodicals in bold-faced type are available in the SAO Library via ABI/INFORM.

*Accountant's Magazine*

Published monthly by the Accountants' Publishing Company (Scotland)  
Location: The University of Texas, Perry-Castañeda Library (HF 5601 A22)

*Accounting and Finance*

Published monthly by the Accounting Association of Australia and New Zealand  
Location: The University of Texas, Perry-Castañeda Library (HF 5601 A254)

*Accounting Review*

Published monthly by the American Accounting Association  
Location: The University of Texas, Perry-Castañeda Library (HF 5601 A6)

*Accounting Today*

Published biweekly by Lebhar Friedman, Incorporated  
Location: SAO Library

*Advances in Business Marketing and Purchasing*

Published monthly by JAI Press, Incorporated  
Location: The University of Texas, Perry-Castañeda Library (HF 5410 A263)

*APICS: The Performance Advantage*

Published monthly by the American Production and Inventory Control Society  
Location: The University of Texas, Perry-Castañeda Library (HD 69 P7 A642)

*CMA: The Management Accounting Magazine*

Published bimonthly by the Society of Management Accountants of Canada  
Location: The University of Texas, Perry-Castañeda Library (H 1 C647)

*CPA Journal*

Published monthly by the New York Society of Certified Public Accountants  
Location: The University of Texas, Perry-Castañeda Library (HF 5601 N54)

*CPA Letter*

Published monthly by the American Institute of Certified Public Accountants  
Location: SAO Library

***Credit and Financial Management***

Published monthly by the National Association of Credit Management  
Location: The University of Texas, Perry-Castañeda Library (HF 5565 N3)

*Decision Sciences*

Published bimonthly by the American Institute for Decision Sciences  
Location: The University of Texas, Perry-Castañeda Library (HD 69 D4 D3248)

*FASAB News*

Published monthly by the Financial Accounting Standards Advisory Board  
Location: SAO Library

*GAAFR Review*

Published monthly by the Government Finance Officers Association  
Location: SAO Library

*GAO Journal*

Published quarterly by the United States General Accounting Office  
Location: SAO Library

*Government Accountant's Journal*

Published quarterly by the Association of Government Accountants  
Location: SAO Library

*Harvard Business Review*

Published bimonthly by the Harvard Business School  
Location: SAO Library

*IBM Journal of Research and Development*

Published annually by International Business Machines, Incorporated  
Location: The University of Texas, Engineering Library (621.305 IN8)

*IIE Transactions*

Published monthly by the American Institute of Industrial Engineers  
Location: The University of Texas, Engineering Library (T 55.4 A5)

*Industrial Engineering*

Published monthly by the Institute of Industrial Engineers  
Location: The University of Texas, Perry-Castañeda Library (658.505 IN22)

*Industrial Marketing Management*

Published monthly by Elsevier North-Holland Publishing Company  
Location: The University of Texas, Perry-Castañeda Library (HF 5415.12 E8)

*Internal Auditor*

Published monthly by the Institute of Internal Auditors  
Location: SAO Library

*Internal Auditing*

Published quarterly by Warren, Gorham, and Lamont  
Location: SAO Library

*International Economic Review*

Published monthly by the Wharton School of Finance and Commerce, University of Pennsylvania  
Location: The University of Texas, Perry-Castañeda Library (330.5 IN8)

*International Journal of Operations and Production Management*

Published monthly by MCB-University Press, Limited (UK)  
Location: The University of Texas, (Call Inter-Library Loan Office, 495-4134)

*International Journal of Physical Distribution and Materials Management*

Published monthly by MCB-University Press, Limited (UK)  
Location: The University of Texas, Perry-Castañeda Library (HF 5415.7 I55)

*International Journal of Production Economics*

Published monthly by Elsevier  
Location: The University of Texas, Engineering Library (TA 177.4 E53)

***International Journal of Purchasing and Materials Management***

Published quarterly by the National Association of Purchasing Management  
Location: The University of Texas, Perry-Castañeda Library (QHF5437A2 J6)

***Journal of Accountancy***

Published monthly by the American Institute of Certified Public Accountants  
Location: SAO Library

***Journal of Accounting and Public Policy***

Published quarterly by North Holland Publishers  
Location: The University of Texas, Perry-Castañeda Library (HJ 9701 J687)

***Journal of Accounting Research***

Published quarterly by the Graduate School of Business, University of Chicago  
Location: The University of Texas, Perry-Castañeda Library (657.05 J827)

***Journal of Business Ethics***

Published monthly by D. Reidel Publishing Company  
Location: The University of Texas, Perry-Castañeda Library (HF 5387 J68)

***Journal of Business Finance and Accounting***

Published quarterly by Basil Blackwell, Limited (UK)  
Location: The University of Texas, Perry-Castañeda Library (HG 1 J581)

***Journal of Business Forecasting Methods and Systems***

Published bimonthly by Graceway Publishing Company, Incorporated  
Location: The University of Texas, Perry-Castañeda Library (HB 3730 J65)

***Journal of Economic Behavior and Organization***

Published monthly by North-Holland Publishing Company  
Location: The University of Texas, Perry-Castañeda Library (HD 58.7 J68)

***Journal of International Economics***

Published monthly by North-Holland Publishing Company  
Location: The University of Texas, Perry-Castañeda Library (HF 1 J65)

***Journal of Risk and Insurance***

Published by the American Risk and Insurance Association  
Location: The University of Texas, Perry-Castañeda Library (368.05 J827)

***Journal of Systems Management***

Published monthly by the Association for Systems Management  
Location: The University of Texas, Perry-Castañeda Library (658.05 SY91)

***Journal of the Operations Research Society***

Published monthly by the Operations Research Society of America  
Location: The University of Texas, Engineering Library (658.05 OP3)

***Lists of Parties Excluded from Federal Procurement Programs***

Published monthly by the United States General Services Administration  
Location: The University of Texas, Perry-Castañeda Library (DOCS GS1.29 MONTHLY MFICHE)

***Management Accounting***

Published monthly by Straker Brothers, Limited (UK)  
Location: The University of Texas, Perry-Castañeda Library (HF 5686 C8 C684)

***Managerial Finance***

Published quarterly by Barmarick Publications, Limited (UK)  
Location: The University of Texas, Perry-Castañeda Library (HG 1 H332)

***NASACT News***

Published bimonthly by the National Association of State Auditors, Comptrollers, and Treasurers  
Location: SAO Library

***National Contract Management Journal***

Published quarterly by the National Contract Management Association  
Location: The University of Texas, Perry-Castañeda Library (HD 3858 N372)

***National Public Accountant***

Published monthly by the National Society of Public Accountants  
Location: The University of Texas, Perry-Castañeda Library (657.05 N213)

***National Underwriter Property and Casualty - Risk and Benefits Management***

Published weekly by the National Underwriter Company  
Location: The University of Texas, Perry-Castañeda Library (MFICHE 8944)

***Operations Research***

Published monthly by the Operations Research Society of America  
Location: The University of Texas, Perry-Castañeda Library (Q 175 O63)

***Practical Accountant***

Published monthly by Faulkner and Gray  
Location: SAO Library

***Production and Inventory Management Journal***

Published quarterly by the American Production and Inventory Control Society  
Location: The University of Texas, Perry-Castañeda Library (HD 69 P7 P75)

***Production and Inventory Management Review and APICS News***

Published monthly by TDA Publications  
Location: The University of Texas, Perry-Castañeda Library (HD 69 P7 P76)

*Public Contract Law Journal*

Published monthly by the American Bar Association, Contract Law Section  
Location: The University of Texas, Law Library (LAW K 16 U19)

***Purchasing***

Published monthly by Cahners Publishing Company  
Location: The University of Texas, Perry-Castañeda Library (658.705 P9711)

*Purchasing World*

Published monthly by Technical Publishing Company  
Location: The University of Texas, Perry-Castañeda Library (HF 5437 A2 P83)

*Risk Analysis*

Published quarterly by the Society for Risk Analysis and Plenum Publishing  
Location: The University of Texas, Perry-Castañeda Library (T 174.5 R55)

***Risk Management***

Published monthly by the Risk and Insurance Management Society  
Location: The University of Texas, Perry-Castañeda Library (HG 8059 C7 N312)

***SAM Advanced Management Journal***

Published quarterly by the Society for Advancement of Management  
Location: The University of Texas, Perry-Castañeda Library (HD 28 S622)

***Sloan Management Review***

Published quarterly by the Sloan School of Management, M.I.T.  
Location: The University of Texas, Perry-Castañeda Library (HD 28 S56)

*Today's CPA*

Published bimonthly by the Texas Society of Certified Public Accountants  
Location: SAO Library

**Professional Associations  
and Research Entities**

Academy of Management  
Columbia, South Carolina  
(803) 777-5969

American Accounting Association  
Sarasota, Florida  
(813) 921-7747

American Institute of Certified Public Accountants  
New York, New York  
(212) 596-6200

American Management Association  
New York, New York  
(212) 586-8100

American Production and Inventory Control Society  
Falls Church, Virginia  
(800) 444-2742

American Purchasing Society  
Tempe, Arizona  
(602) 752-6276

American Risk and Insurance Association  
Bloomington, Illinois  
(309) 454-6900

American Society for Decision Sciences  
Atlanta, Georgia  
(404) 651-4000

Association for Investment Management and Research  
Charlottesville, Virginia  
(804) 977-6600

Association for Systems Management  
Cleveland, Ohio  
(216) 243-6900

Association of Government Accountants  
Alexandria, Virginia  
(703) 684-6931

Bureau of Business Research, UT Graduate School of Business  
Austin, TX  
(512) 471-1616

Cornell University Graduate School of Business and Public Administration  
Ithaca, New York  
(607) 255-2327

Council of State Governments  
Lexington, Kentucky  
(606) 231-1939

Financial Executives Institute  
Morristown, New Jersey

(201) 898-4600

Financial Management Association  
Tampa, Florida  
(813) 974-2084

Financial Managers Society  
Chicago, Illinois  
(312) 578-1300

Government Finance Officers Association  
Washington, D.C.  
(202) 429-2750

Governmental Accounting Standards Board  
Norwalk, Connecticut  
(203) 847-0700

Harvard Business School  
Cambridge, Massachusetts  
(617) 495-9400

Institute of Industrial Engineers  
Norcross, Georgia  
(404) 449-0460

Institute of Internal Auditors  
Altamonte Springs, Florida  
(403) 830-7600

Institute of Management Accountants  
Montvale, New Jersey  
(201) 573-9000

Institute of Management Sciences  
Providence, Rhode Island  
(401) 274-2525

Institute of Professional Accounting  
Graduate School of Business, University of Chicago  
Chicago, Illinois  
(312) 702-7743

International Federation of Purchasing and Materials Management  
Bergen, Netherlands  
(310) 2208-99797

National Association of Credit Management  
Columbia, Maryland  
(410) 740-5560

National Association of Purchasing Management  
Tempe, Arizona  
(602) 752-6276

National Association of State Auditors, Comptrollers, and Treasurers  
Lexington, Kentucky  
(606) 276-1147

National Association of State Purchasing Officials  
Lexington, Kentucky  
(606) 231-1906

National Contract Management Association  
Vienna, Virginia  
(703) 448-9231

National Institute of Business Management  
New York, New York  
(800) 543-2053

National Institute of Governmental Purchasing  
Falls Church, Virginia  
(800) 367-6447

National Purchasing Institute  
Bethesda, Maryland  
(301) 951-0108

National Society of Public Accountants  
Alexandria, Virginia  
(703) 549-6400

Operations Research Society of America  
Baltimore, Maryland  
(410) 528-4146

Risk and Insurance Management Society  
New York, New York  
(212) 286-9292

School of Management  
Cambridge, Massachusetts  
(617) 253-2659

Society for Risk Analysis  
McClean, Virginia  
(703) 790-1745

Texas Association of Certified Public Accountants  
Dallas, Texas  
(214) 689-6000

Texas Association of Certified Public Accountants, Austin Chapter  
Austin, Texas  
(512) 452-9439

United States General Accounting Office  
Washington, D.C.  
(202) 512-6000

Universal Public Purchasing Certification Council  
Falls Church, Virginia  
(800) 367-6447

University of Georgia Institute of Government  
Athens, Georgia  
(706) 542-2736

University of Texas at Austin Graduate School of Business  
Austin, Texas  
(512) 471-5921

**Related Modules and Reports**

Budgets  
Fixed Assets  
Inventories  
Logistics  
Organization Structure  
Scheduling

*SAO Report 7-007: Report to Management on Administrative and Accounting Controls Utilized in the Statewide Purchasing and Payment System*

*SAO Report 9-116: Report on the Procurement of Goods and Services Within Texas State Government*

*SAO Report 0-014: Report on State Government Service Bureaus and Other Data Processing Alternatives*

*SAO Report 2-164: Audit Follow-Up on Governmental Service Bureaus and Other Data Processing Alternatives*

*SAO Report 2-144: Follow-up: Report on the Procurement of Goods and Services Within Texas State Government*

*SAO Report 3-0091: Contracting for State Services*

**Training**

External seminars are provided by the National Institute of Governmental Purchasing, Incorporated, for the areas listed below. Such training leads to examination and certification as a Certified Professional Public Buyer (CPPB) and/or Certified Public Purchasing Officer (CPPO):

- General Public Purchasing
- Public Procurement Management, Part 1
- Public Procurement Management, Part 2
- Public Purchasing and Materials Management

*Auditing the Materials Management Function: Fixed Assets, Inventory, Procurement*

In-house training developed by Bill Addison and Janet Reynolds

Location of materials: Methodology Project Team