



**CON 244**  
**Construction Contracting**  
**Lesson 2**  
**Student Guide**

**May 2016**

This page intentionally left blank.

## Table of Contents

Lesson 2 – Acquisition Planning .....	5
Overview .....	5
Lesson Details .....	6
<b>Lesson 2 – Acquisition Planning .....</b>	<b>7</b>
<b>Introduction .....</b>	<b>7</b>
<b>Facility Related Terms and Project Identification .....</b>	<b>9</b>
<b>Discussion: What is a Facility?.....</b>	<b>13</b>
<b>Acquisition Plan .....</b>	<b>15</b>
<b>Contracting Considerations.....</b>	<b>20</b>
<b>Project Delivery Method: Design-Bid-Build vs. Design-Build.....</b>	<b>21</b>
<b>Contracting Method.....</b>	<b>28</b>
<b>Options .....</b>	<b>30</b>
<b>Partnering.....</b>	<b>30</b>
<b>ISO 9000, 14000 .....</b>	<b>31</b>
<b>Funding.....</b>	<b>32</b>
<b>Government Furnished Property .....</b>	<b>35</b>
<b>Environment, Energy and Sustainability Considerations .....</b>	<b>36</b>
<b>Case Study.....</b>	<b>41</b>
<b>Milestones.....</b>	<b>44</b>
<b>Summary .....</b>	<b>45</b>

This page intentionally left blank.

## Lesson 2 – Acquisition Planning

### Overview



This lesson will focus on the first step in contracting: acquisition planning.

Questions to ponder:

What is Acquisition Planning?

Who is responsible for ensuring it is done?

When is it done?

What are the critical steps?

Does the plan have to be written?

## Lesson Details



### Terminal Learning Objective

- Given a contract requirement, determine if it is a construction requirement, and devise a Construction Acquisition Plan in accordance with FAR, DFARS and any agency policies and procedures.

**Lesson Title** Acquisition Planning

**Terminal Learning Objective** Given a contract requirement, determine if it is a construction requirement and describe how to devise a Construction Acquisition Plan in accordance with FAR Part 7, DFARS 207 and agency policies and procedures.

**Enabling Learning Objectives**

- Discuss the policies of the FAR in Construction Acquisition Planning.
- Identify the appropriate construction acquisition plan type.
- Determine the individuals that make up a construction acquisition team.
- Demonstrate which contract type and contract process is best for the acquisition.
- Compare the types of funding available for appropriateness and whether Government Furnished Property will be provided.
- Examine the impact of environmental planning in construction projects.
- Discuss the components of a Plan of Action and Milestone (POA&M) Plan.

**Time Required** 2 hours

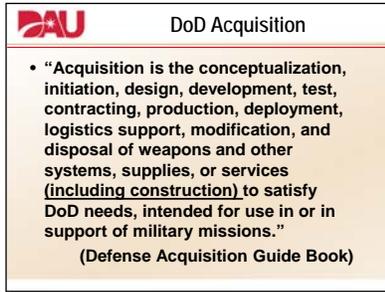
**Method of Instruction** Lecture, Exercises

**References, Supplemental Readings** None.

**Evaluation Method** Student performance will be assessed on course exam and Capstone Case Study.

## Lesson 2 – Acquisition Planning

### Introduction



Questions to ponder:

What is Acquisition Planning?

FAR 2.101 –

*“Acquisition planning” means the process by which the efforts of all personnel responsible for an acquisition are coordinated and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost. It includes developing the overall strategy for managing the acquisition.*

Who is responsible for ensuring it is done?

*FAR 7.101(a) Agencies shall perform acquisition planning and conduct market research (see [part 10](#)) for all acquisitions in order to promote and provide for –*

- (1) Acquisition of commercial items or, to the extent that commercial items suitable to meet the agency’s needs are not available, non-developmental items, to the maximum extent practicable (10 U.S.C. 2377 and 41 U.S.C. 3307.);*
- (2) Full and open competition (see [part 6](#)) or, when full and open competition is not required in accordance with [Part 6](#), to obtain competition to the maximum extent practicable, with due regard to the nature of the supplies or services to be acquired (10 U.S.C. 2305(a)(1)(A) and 41 U.S.C. 3306(a)(1));*
- (3) Selection of appropriate contract type in accordance with [part 16](#); and*
- (4) Appropriate consideration of the use of pre-existing contracts, including interagency and intra-agency contracts, to fulfill the requirement, before awarding new contracts. (See [8.002](#) through [8.004](#) and [subpart 17.5](#)).*

*(b) This planning shall integrate the efforts of all personnel responsible for significant aspects of the acquisition. The purpose of this planning is to ensure that the Government meets its needs in the most effective, economical, and timely manner. Agencies that have a detailed acquisition planning system in place that generally meets the requirements of [7.104](#) and [7.105](#) need not revise their system to specifically meet all of these requirements.*

Who has the overall responsibility for Acquisition Planning?

*207.103 Agency-head responsibilities.*

*(g) The program manager, or other official responsible for the program, has overall responsibility for acquisition planning.*

When is it done?

*7.104(a) Acquisition planning should begin as soon as the agency need is identified, preferably well in advance of the fiscal year in which contract award or order placement is necessary.*

What are the critical steps?

1) Establish the team

*7.104(a) ...In developing the plan, the planner shall form a team consisting of all those who will be responsible for significant aspects of the acquisition, such as contracting, fiscal, legal, and technical personnel... The planner should review previous plans for similar acquisitions and discuss them with the key personnel involved in those acquisitions.*

2) Establish key dates and criteria

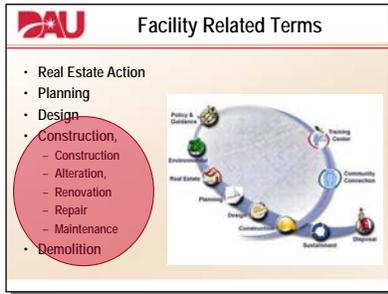
*FAR 7.105 In order to facilitate attainment of the acquisition objectives, the plan must identify those milestones at which decisions should be made (see paragraph (b)(21) of this section). The plan must address all the technical, business, management, and other significant considerations that will control the acquisition. The specific content of plans will vary, depending on the nature, circumstances, and stage of the acquisition.*

3) Does the plan have to be written?

*DFARS 207.103(e) Prepare written acquisition plans for acquisition programs meeting the thresholds of paragraphs (d)(i)(A) and (B) of this section on a program basis. Other acquisition plans may be written on either a program or an individual contract basis.*

Note: Check your agency regulations to see if they require a written plan for construction projects.

**Facility Related Terms and Project Identification**



Recall from Lesson 1, during the life cycle of a facility there are many stages – each with its own terminology and special rules.

These include implications regarding funding, labor, safety, environmental practices, energy efficiencies, and even materials, means and methods

GAO Redbook Volume III, Chapter 13  
<http://www.gao.gov/products/GAO-08-978SP>

41 U.S.C. § 12

*“Originally enacted in 1868, 41 § U.S.C. § 12 provides: “No contract shall be entered into for the erection, repair, or furnishing of any public building, or for any public improvement which shall bind the Government to pay a larger sum of money than the amount in the Treasury appropriated for the specific purpose.”*

*“This is one of the permanent funding statutes through which Congress implements its control of the public purse, and has often been cited in tandem with other funding statutes such as the purpose statute (31 U.S.C. § 1301(a)) or the Anti-deficiency Act (31 U.S.C. § 1341). Its purpose, as with the other funding statutes, is to prevent the executive from creating obligations beyond those contemplated and authorized by Congress”*

*“The essence of 41 U.S.C. § 12 is not that public buildings and improvements are in any way bad or undesirable, but merely that they are sufficiently important—and sufficiently costly—that agencies should not undertake them without congressional sanction.”*

**DAU** Construction: FAR Definition

- **FAR 2.101** - Construction, alteration or repair (including dredging, excavating and painting) of buildings, structures or other real property.
- See examples on page 10



Once an acquisition requirement is received, contracting personnel must determine if it is a construction requirement.

FAR 2.101 defines construction as “construction, alteration, or repair (including dredging, excavating, and painting) of buildings, structures, or other real property.”

The definition is further described by stating that “buildings, structures, or other real property” includes, but is not limited to improvements of all types. Examples are provided in the following table:

Bridges	Streets	Power Lines
Dams	Subway	Cemeteries
Plants	Tunnels	Pump Stations
Highway	Sewers	Railways
Parkways	Mains	Airports
Terminals	Docks	Piers
Wharves	Lighthouses	Buoys
Jetties	Breakwater	Levies
Ways	Canals	Channels

Discussion Questions:

What is “construction?”

What is Alteration?

What is Repair?

What is Maintenance?

Are there other terms that apply?

What are the different kinds of Facilities? (i.e. temporary, permanent etc.)

**DAU** What is "Construction"?

- Construction = New capability or footprint
- Alteration = Changing existing facility to meet a new mission
  - Potentially new footprint when done
- Renovation = Changing existing facility to meet new codes: Same function and facility structure when finished!
  - No change in facility footprint or function.

**Construction:** New capability or footprint

**Alteration:** Changing existing facility to meet a new mission  
Potentially new footprint when done

**DAU** Restoration & Modernization?

- The act of improving something; bringing the building back up to code.
- Serves to keep the inventory of facilities modern and relevant, extend the service life of individual facilities and restore capability lost due to man-made or natural causes.
- Also the improvements of the construction added increased the value of the property.
- Other terms Renovation, Recapitalization, Sustainment, Restoration, Modernization

**Renovation:** Changing existing facility to meet new codes:

Same function and facility structure when finished!  
No change in facility footprint or function.

The act of improving something - bringing the building back up to code.

Serves to keep the inventory of facilities modern and relevant, extend the service life of individual facilities and restore capability lost due to man-made or natural causes.

Also the improvements of the construction added increased the value of the property.

Other terms Renovation, Recapitalization, Sustainment, Restoration, Modernization

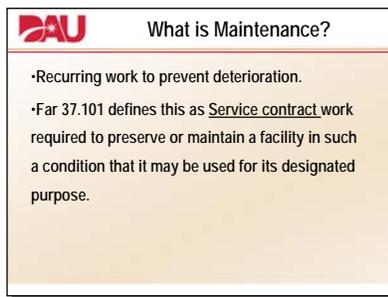
**DAU** What is Repair?

The restoration for use for a designated purpose by overhauling, reprocessing, or replacing parts or materials that have deteriorated by action of the elements or by wear and tear in use, and which have not been corrected through maintenance.

- Implication: Failure has occurred or is immanent
  - FAR calls this construction
  - DOD FMR directs funding as O&M

**Repair:** The restoration for use for a designated purpose by overhauling, reprocessing, or replacing parts or materials that have deteriorated by action of the elements or by wear and tear in use, and which have not been corrected through maintenance.

- Implication: Failure has occurred or is immanent
- FAR calls this construction
- DOD FMR directs funding as O&M



**DAU** What is Maintenance?

- Recurring work to prevent deterioration.
- Far 37.101 defines this as Service contract work required to preserve or maintain a facility in such a condition that it may be used for its designated purpose.

**Maintenance:**

- Recurring work to prevent deterioration.
- Far 37.101 defines this as Service contract work required to preserve or maintain a facility in such a condition that it may be used for its designated purpose.

**Discussion Questions:**

You have a contract for replacing carpet, is that a service or construction?

What kind of contract is it to demolish a building and not perform further construction?

At what point does a contract for painting change from service to construction?

Where in the FAR/DFARS would you find this information?

When a customer comes and asks for something to be done, the first step is to define what the customer is asking. Does the requirement fit the FAR's definition of construction? If it does, then we know we need to do construction acquisition planning. If it does not, then we know we are not dealing with construction

**Discussion: What is a Facility?**

**DAU** What is a Facility?

- Permanent Construction.
  - Buildings and facilities
  - life expectancy of more than 25 years.
  - Energy efficient,
  - Finishes, materials, and systems selected for low maintenance and low life cycle cost.
- Semi-permanent Construction.
  - Buildings and facilities
  - Life expectancy of more than five years but less than 25 years.
  - Energy efficient
  - Finishes, materials, and systems selected for an average degree of maintenance based on life cycle cost.

**Permanent Construction:**

Buildings and facilities designed and constructed to serve a life expectancy of more than 25 years. They shall be energy efficient, and have finishes, materials, and systems selected for low maintenance and low life cycle cost.

**Semi-permanent Construction:**

Buildings and facilities designed and constructed to serve a life expectancy of more than five years but less than 25 years. They shall be energy efficient, and have finishes, materials, and systems selected for an average degree of maintenance based on life cycle cost.

**DAU** What is a Facility?

- Temporary Construction.
  - Buildings and facilities
  - Life expectancy of five years or less using low cost construction
  - Finishes, materials, and systems selected with maintenance factors as secondary considerations.
- Mobilization and Emergency Construction.
  - Building and facilities
  - Serve a mobilization or emergency requirement.
  - Austere to minimize design and construction time and maximize conservation of critical materials and funds.
  - Maintenance factors and longevity are secondary considerations.

**Temporary Construction:**

Buildings and facilities designed and constructed to serve a life expectancy of five years or less using low cost construction, with finishes, materials, and systems selected with maintenance factors as secondary considerations.

**Mobilization and Emergency Construction:**

Building and facilities designed and constructed to serve a mobilization or emergency requirement. Buildings shall be austere to minimize design and construction time and maximize conservation of critical materials and funds. Maintenance factors and longevity are secondary considerations.

**DAU** What is a Facility?

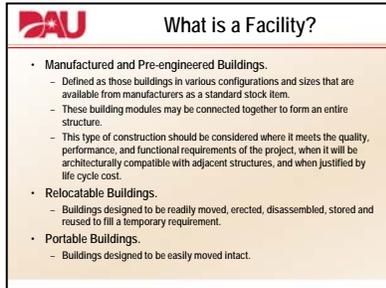
- Contingency Construction.
  - Structures erected during combat or contingency operations, as defined in 10 USC 101 (a) (13)
  - Intended to meet a temporary operational requirement to facilitate military operations.
  - Such structures may not be used for the purpose of satisfying requirements of a permanent nature at the conclusion of combat or contingency operations.
- Building System and Subsystems.
  - An assembly of dimensionally and functionally pre-coordinated subsystems which, when combined, produces an essentially complete building.
  - A subsystem is one of many building components designed and manufactured to be integrated with other subsystems to produce an entire building system.

**Contingency Construction:**

Structures erected during combat or contingency operations, as defined in 10 USC 101 (a) (13) that are intended to meet a temporary operational requirement to facilitate military operations. Such structures may not be used for the purpose of satisfying requirements of a permanent nature at the conclusion of combat or contingency operations.

## Building System and Subsystems:

An assembly of dimensionally and functionally pre-coordinated subsystems which, when combined, produces an essentially complete building. A subsystem is one of many building components designed and manufactured to be integrated with other subsystems to produce an entire building system.



**DAW** What is a Facility?

- **Manufactured and Pre-engineered Buildings.**
  - Defined as those buildings in various configurations and sizes that are available from manufacturers as a standard stock item.
  - These building modules may be connected together to form an entire structure.
  - This type of construction should be considered where it meets the quality, performance, and functional requirements of the project, when it will be architecturally compatible with adjacent structures, and when justified by life cycle cost.
- **Relocatable Buildings.**
  - Buildings designed to be readily moved, erected, disassembled, stored and reused to fill a temporary requirement.
- **Portable Buildings.**
  - Buildings designed to be easily moved intact.

## Manufactured and Pre-engineered Buildings:

Manufactured or pre-engineered buildings are defined as those buildings in various configurations and sizes that are available from manufacturers as a standard stock item. These building modules may be connected together to form an entire structure. This type of construction should be considered where it meets the quality, performance, and functional requirements of the project, when it will be

architecturally compatible with adjacent structures, and when justified by life cycle cost.

## Relocatable Buildings:

Buildings designed to be readily moved, erected, disassembled, stored and reused to fill a temporary requirement.

## Portable Buildings:

Buildings designed to be easily moved intact.

## Acquisition Plan



Once the requirement for construction is defined, then begins the acquisition planning process. FAR 2.101 defines Acquisition Planning as follows:

### Acquisition Planning, FAR 2.101

Process by which the efforts of all personnel responsible for an acquisition are coordinated, and integrated through a comprehensive plan for fulfilling the agency need in a timely manner and at a reasonable cost. It includes developing the overall strategy for managing the acquisition.”

### DoD Policy

FAR specifies that Acquisition Planning shall be performed for all acquisitions. However, DFARS 207.103 states written acquisition plans shall be accomplished for the following:

- Development- Total Cost of All Contracts Estimated at \$10 million
- Production or Services – Total Cost of All Contracts Estimated at \$50 Million or more for all years or \$25 million or more for any fiscal year.
- Any Other – Considered Appropriate by the Department or Agency.

Based on the above, agencies shall establish dollar thresholds, complexity, and approvals required for construction projects; however, FAR policy concerning what is to be covered in an Acquisition Plan shall be adhered. The specific content of plans will vary, depending on the nature, circumstances and stage of the acquisition

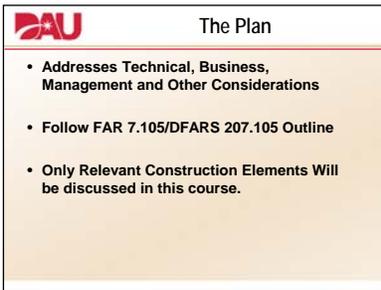


The team should include all those people who will be involved and responsible for different parts of the acquisition.

- Contracting Officer
- Contract Specialist
- Program Manager
- Budget Officer
- Engineer or Architect
- User
- Customer
- Legal
- Technical Representative
- Environmental Personnel

The plan should identify people involved and their responsibility to the team.

Getting the right mix of personnel on the team is essential. Try to bring as much experience to the team as possible.



The plan shall address all the technical, business, management and other significant considerations that will control the acquisition. A complete Acquisition Plan can be found in the Appendix.

The following outline follows FAR 7.105, DFARS 207.105, and PGI 207.105 but lists only the issues that would be identified for a construction acquisition plan:

**Major Elements:**

---

**Part A: Acquisition Background and Objectives:**

1. Statement of Need
2. Applicable Conditions Affecting the Acquisition
3. Cost Goals and Rationale (i.e., Life Cycle, Design & Should-Cost)
4. Capability or Performance
5. Delivery or Performance Period Requirements. (Urgency)
6. Trade-offs
7. Risks (Technical, Cost, Schedule)
8. Acquisition Streamlining effects

**Part B: Plan of Action**

1. Sources
2. Competition
3. Contract type selection
4. Source Selection Procedures (if applicable)
5. Acquisition Considerations (Options, Special Clauses & Method)
6. Budgeting and Funding
7. Product or Service Descriptions
8. Priorities, Allocations, and Allotments (i.e., DPAS)
9. Contractor Versus Government Performance (A-76)
10. Inherently Governmental Functions
11. Management Information Requirements
12. Make or Buy Considerations
13. Test and Evaluations
14. Logistics Considerations
15. Government Furnished Property
16. Government Furnished Information
17. Environmental and Energy Conservation Objectives
18. Security Considerations
19. Contract Administration
20. Other Considerations Not Already Addressed
21. Milestones for the Acquisition Cycle
22. Identification of Participants in Acquisition Plan Preparation

Although all elements of the Acquisition Plan Outline above are important to the overall planning of the project, this lesson will focus on a few issues that in the constantly changing acquisition world are unique to construction.



Part a, Item 1, requires the Acquisition Planning Team to introduce the plan by a brief statement of need. Although a need statement is not unique for construction acquisitions, once the need statement has been determined, it effects other elements of the acquisition plan.

The statement of need will be utilized throughout the entire life of the contract.

When we get with the customer, technical reps, A/E firms, etc do we have the same need in mind? Probably not, but we need to get together and understand what each party “requires”.

Once the need is determined, it will be utilized throughout the life of the acquisition. How? As follows:

Project scope: - The requirements of the total construction project as a final product to the customer. This scope will also be submitted for funding.

Design Scope - The team must decide if the project could be adequately designed with in-house technical personnel or if the need for architect-engineer services will be required. Then produce a design scope.

Implementing the Scope - The construction contract scope is used in synopsising the requirement.



Part b, Item 1 of the Acquisition Plan Outline states that the plan must indicate the prospective sources that can meet the need defined by the Government and refers to the procedures outlined in FAR Part 10, Market Research.

Techniques for conducting market research at FAR 10.002(b) in the acquisition planning phase could include, but is not limited to:

- Contacting Knowledgeable Individuals in Government and Industry Regarding Market Capabilities to Meet Requirements
- Reviewing Recent Results of Market Research Undertaken to Meet Similar or Identical Requirements
- Querying Government Data Bases
- Participating in Interactive, On-line Communication

During this phase, market research is conducted to assure the need of the customer can be met based on current construction data.

Discussion Questions:

Why does the FAR require Market Research?

What does FAR Part 10, Market Research require?

## Contracting Considerations



There are numerous considerations to be addressed during acquisition planning.

When we discuss type of contract, FAR Part 16.101 states there are two broad categories, Fixed Price and Cost Reimbursement. However, under these categories are different vehicles to get the work done.

The most frequent vehicle type for construction has been to issue an IFB and/or RFP and award a fixed price contract. However, during the acquisition phase the various contract types need to be analyzed.



In construction contracting the selection of contract type is usually a firm-fixed price type contract. However, within the firm-fixed price contract there is the indefinite-delivery contract vehicle.

The indefinite-delivery contract vehicle would allow an agency to utilize one construction contract to accomplish numerous construction projects of a similar nature. Examples include: Multiple Award Task Order Contract

(MATOC) Job Order Contract (JOC); Task Order Contract (TOC); Multiple Award Construction Contract (MACC) and Simplified Acquisition Base Engineering Requirement (SABER).

The IDIQ contract types are becoming increasingly common in the construction environment. Agency requirements, naming convention and guidelines vary. The Acquisition Planning Team should consider the indefinite-delivery vehicle; however, if the current construction requirement is for an excessively large, one-time acquisition, this vehicle maybe inappropriate.

The Acquisition Planning team must also consider which procedures to utilize in awarding the type of contract selected. In the past, most construction projects were awarded as firm-fixed price type contracts utilizing the sealed bidding procedures. However in recent years, construction contracting has become more flexible concerning procedures for award. Aside from sealed bidding procedures, the following additional procedures will need to be considered by the Acquisition Planning Team.

**Project Delivery Method: Design-Bid-Build vs. Design-Build**

**DAU Design-Build vs. Design-Bid-Build**

- Design Bid Build**
  - Design is done by A/E firm or in-house
  - Selection of Architect and Engineers limited as discussed in CON 243
  - Complete design becomes SOW for construction contract
- Design Build**
  - Awarded as a construction contract
  - One contractor is responsible for the design and construction
  - Design is usually subcontracted or joint venture partner
  - Government loses control if requirements go above minimum described

During acquisition planning you must determine if you are going to complete the project using the Design Build or Design Bid Build method.

**FAR 36.102**

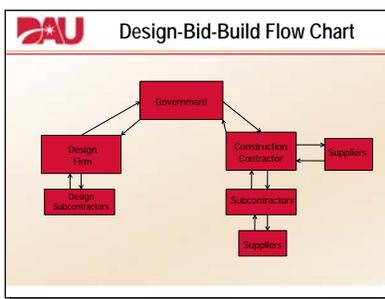
*“Design-bid-build” means the traditional delivery method where design and construction are sequential and contracted for separately with two contracts and two contractors.”*

*“Design-build” means combining design and construction in a single contract with one contractor.”*

**DAU Design-Bid-Build**

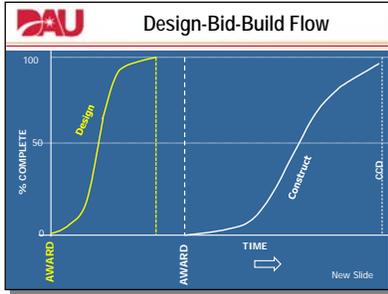
- Completing a design either in-house or through an Architect/Engineering (A/E) contract
- Then use that complete design as your scope of work for the construction contract that would follow.
- If an A/E contract is awarded for the design, you must follow the Selection of Architects and Engineers procedures as stipulated in FAR 36.6
- Construction Contract follows FAR 36.104

Design Bid Build refers to completing a design either in-house or through an Architect/Engineering (A/E) contract and then using that complete design as your scope of work for the construction contract that would follow. If an A/E contract is to be awarded for the design, you must follow the Selection of Architects and Engineers Statute procedures as stipulated in FAR 36.6.



**Organization of a Design Bid Build Contract Arrangement.**

2 contract actions,  
 2 direct lines of communication,  
 RFI process involving government review  
 Designer or Record is a government agent and the design (intellectual property) transfers as a matter of contract terms.



Since there are two contracts the project follows a linear set of “S” curves

- 
- DAU Design-Bid-Build Advantages**
- One contract for design and one contract for construction
  - Preaward is quicker
  - Funding – you don't have to wait for entire project funding to complete design  
--- design one year, construct the next
  - Specialized facilities – ensures that the facility is designed exactly as they need it

There are several advantages of using Design Bid Build:

Funding – you don't have to wait for entire project funding to complete design

--- design completed during one period, construction work completed during the next period.

Specialized facilities – if the facility has a very specialized use, we need the design to show those exact specifications. To do this using Design Build, the RFP would have to be so detailed that the cost of producing it would be similar to actually doing the design.

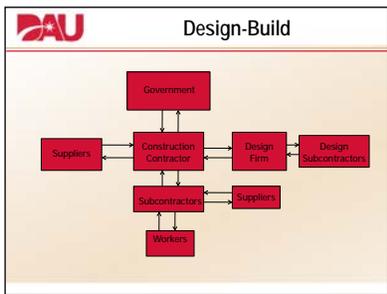
- 
- DAU Design-Bid-Build Disadvantages**
- Design can be put “on the shelf”
  - Design subject to the Selection of Architects and Engineers limited by statute to 6% of ECC
  - Errors in design will require the government to get the A/E to make the corrections at no expense to Gov't.
  - Too many RFIs, REAs and Claims
  - Contractors might try to “buy-in”

The disadvantages of using Design Bid Build are basically the advantages of using Design Build.

**DAU FAR 36.3 Two Phase Design-Build**

- Use –
  - Three or more offerors anticipated
  - Consider offerors' proposal expenses due to design work required before proposals being prepared
- Criteria For Use:
  - Extent project requirements adequately defined
  - Time/Funding constraints
  - Capability and experience of contractors
  - Capability of agency to manage the process
- Procedures –
  - One solicitation can be issued for both phases

The Design Build method combines the design and construction into one contract. The contractor typically subs out the design work to an A/E firm or enters into the contract as a joint venture with them.

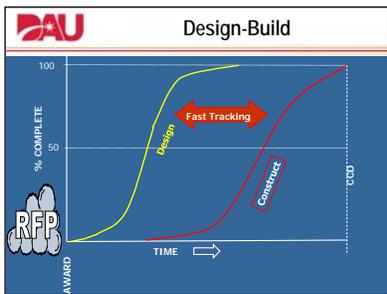


Even though some work required under the design build contract is A/E in nature, the procedures in FAR 36.6 do not apply, as the contract is a construction contract and not an A/E contract.

1 Contract, means no government involvement in the review of constructor-designer RFI

Designer of record is a sub contract and therefore no direct line of government communication. Designs are not paid for directly and will not transfer to the government unless specified.

1 Contract, therefore 1 continuous project “S” curve or 2 curves superimposed



*FAR 36.104 (a) Unless the traditional acquisition approach of design-bid-build established under 40 U.S.C. chapter 11, Selection of Architects and Engineers or another acquisition procedure authorized by law is used, the contracting officer shall use the two-phase selection procedures authorized by 10 U.S.C. 2305a or 41 U.S.C. 3309 when entering into a contract for the design and construction of a public building, facility, or work, if the contracting officer makes a determination that the*

*procedures are appropriate for use.*

**FAR 36.301**

*(a) During formal or informal acquisition planning (see Part 7), if considering the use of two-phase design-build selection procedures, the contracting officer shall conduct the evaluation in paragraph (b) of this section.*

*(b) The two-phase design-build selection procedures shall be used when the contracting officer determines that this method is appropriate, based on the following:*

- (1) Three or more offers are anticipated.*

(2) Design work must be performed by offerors before developing price or cost proposals, and offerors will incur a substantial amount of expense in preparing offers.

(3) The following criteria have been considered:

- (i) The extent to which the project requirements have been adequately defined.
- (ii) The time constraints for delivery of the project.
- (iii) The capability and experience of potential contractors
- (iv) The suitability of the project for use of the two-phase selection method.
- (v) The capability of the agency to manage the two-phase selection process.
- (vi) Other criteria established by the head of the contracting activity.



**DAU FAR 36.3 Two Phase Design-Build**

- Proposals evaluated in Phase One to determine which offerors will submit proposals in Phase Two
- One contract awarded using competitive negotiation
- Phase One Includes -
  - Scope of work
  - Phase-one evaluation factors: Technical approach, specialized experience, capability to perform, past performance, and other appropriate factors
  - Phase-two factors
  - Must state max number of proposals accepted for phase-two (NTE 5 unless justified)
  - Selection of the most highly qualified offerors

Under the Two-Phase Design Build concept the agency must either develop a scope of work that defines the project or contract out for those services under FAR 36.6, Architect-Engineer Services. Utilizing Two-Phase Design Build selection procedures should result in a firm- fixed price contract.

In accordance with FAR 36.303, Phase One shall include a scope of work; phase-one evaluation factors; Phase Two Evaluation factors; and a statement of the maximum number of offerors that will be selected to submit phase-two proposals (NTE 5 without the head of the contracting activity (HCA), delegable to a level no lower than the senior contracting official approval when the acquisition exceeds \$4 million).

Phase Two shall be prepared in accordance with Part 15 and include phase-two evaluation factors.



**DAU FAR 36.3 Two Phase Design-Build**

- Phase Two - Prepared and Evaluated IAW FAR Part 15.304
  - Phase II Factors examples are: Design concepts, management approach, key personnel, and proposed technical solutions
  - Technical and price proposals required and evaluated separately

Phase 1 - Proposals evaluated to determine proposers to be included in Phase 2. RFP must state maximum number of proposals that will be accepted to submit in Phase Two NTE 5 (unless justified by HCA per FAR 36.303-1(a) (4)). Phase 1 submittals include details of suggested technical approach to the project, technical qualifications, experience, capabilities, past performance factors, etc.

Although the Two-Phase Design Build procedures are unique to construction; the procedures may not often be utilized. In accordance with FAR 36.104, other acquisition procedures are allowed under 10 U.S.C 2862 for design-build.

These procedures are currently being utilized for construction projects. Depending on agency guidelines, the design-build procedures allow the same firm to perform the design and construction or subcontract either phase of the work. Therefore the “two phases” become the design and then the construction



**Design-Build Advantages**

- Time and Cost
  - only one contract is issued
  - no delay between complete design and work starting
  - “fast-tracking”
  - less cost growth
- Contract Administration
  - who resolves issues with design – they do
  - only one contract to administer

There are several advantages to using design build:

**Time:** It tends to be perceived as “faster.” Most of this is perception and field reality has shown a mixed result

**Only one contract issued – leading to an easier administration:** Again this is mostly perception. There is only one contract but that does not mean that admin will necessarily be easier. – Different – true

No delay between completion of design and work starting. This is absolutely true and also allows for “fast-tracking” (starting construction before the design is complete – note: some agencies do not allow fast-tracking).

### Contract Admin

Since there is only one contract, the designer and constructor resolve most of the differences internally.



**Design-Build Disadvantages**

- Using D-B gives up more control to the contractor
- Requires a solid PWS/SOO which most government officials don't know how to do
- What stage of design does the agency give to the DB contractor?
- The contractor usually subs the design to a subcontractor, so less access to designer.
- Since the contractor's PWS/SOO becomes the SOW for the contract, any change will require a contract modification
- Limited number of design-build contractors
- Increased proposal preparation cost for contractors SB considerations

There are several advantages to using design build:

**Time**

- only one contract is issued
- no delay between complete design and work starting
- “fast-tracking” (starting construction before the design is complete – same agencies do not allow fast-tracking)



**Design-Build Disadvantages**

- Using D-B gives up more control to the contractor
- Requires a solid PWS/SOO which most government officials don't know how to do
- What stage of design does the agency give to the DB contractor?
- The contractor usually subs the design to a subcontractor, so less access to designer.
- Since the contractor's PWS/SOO becomes the SOW for the contract, any change will require a contract modification
- Limited number of design-build contractors
- Increased proposal preparation cost for contractors SB considerations

The initial RFP must be very well defined. You must know what you want the facility to DO! You must also not really care what it LOOKS LIKE. Doing DB gives up a good bit of Government control of the end result.

Also the Designer of Record is a subcontract and therefore not the government agent. Designs and other intellectual property do not automatically transfer to the government.

Note: if it is not in the RFP, don't expect it. Every change in the design will likely be a contract modification and at an increased cost.

**DAU** When To Use Each

- D-B-B: If you have time to develop detailed design and you want to get it at the lowest price. (FAR requires it)
- D-B: If you know what you want (by at least the 35% design), you want it fast, and you're willing to take what is delivered in the end.

Nav 08a 2-10

D-B-B: If you have time to develop detailed design and you want to get it at the lowest price. (FAR requires it)

D-B: If you know what you want (by at least the 35% design), you want it fast, and you're willing to take what is delivered in the end.

**DAU** Turnkey Procedures

- Similar to Design-Build Procedures
- Contractor Will Furnish Additional Services
  - Project Financing
  - Site Selection
  - Facility Operation/Maintenance for a Period of Time
- Ex.: Public/Private Venture Housing, Power Generation, Dams

Another option under the design-build concept, is Turnkey. Turnkey is very similar to Design-Build procedures since the same contractor that designs the project also builds it; however, with Turnkey the difference is that the contractor could furnish additional services such as:

- Project Financing
- Site Selection
- Obtaining Permits and Inspections
- Operation of the Facility for a Period of Time

Full title remains to be held by the contractor until the “keys” are turned over to the Government. The following are types of projects that maybe well suited:

- Large military housing projects
- Power generating facilities
- Dams

The key here is that the contractor physically turns over the keys to the construction project. An example: Housing projects have been done where the contractor selects the site, gets all the required permits for building, constructs the site, then manages the site. The Government assigns military personnel to live in the facilities, but the contractor continues to maintain the facilities. If the Government decides to accept ownership of the facilities, the contractor then hands over the keys. The Government may decide to have the contractor retain possession, move out, and then the facility becomes a commercial housing project of the contractor.

It is common throughout the agencies to have the contractor maintain the facility anywhere from 3-12 months.

**DAU** Early Contractor Involvement (ECI)

- Modeled after the private sector Contractor At Risk method.
- Design contract using Selection of Architects and Engineers
- Constructability review done by construction contractor as an “over the shoulder” review process
- Construction awarded as an option.
- Useful for highly complex of schedule driven specialty projects

**Early Contractor Involvement:**

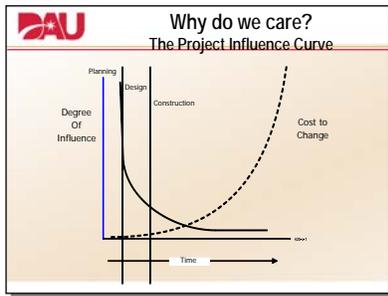
Is a technique modeled after the private sector Contractor At Risk method.

Design is awarded as a single action contract using Selection of Architects and Engineers Statute methods.

Construction contractor is brought on board to perform constructability review using an “over the shoulder” review process

Construction contract awarded as an option.

This technique has been found useful for highly complex of schedule driven specialty projects



The point is timing, method and contract vehicle all matter.

A DoD facility will be in place for an average of 75 years. 80% of all facility costs are found in the operations and maintenance. It is not unrealistic that the long term facility costs will out spend the initial weapons procurement that the facilities were intended to support.

Getting into the plan early assures the ultimate facility meets the needs of the warfighter. Paying attention to delivery method and contract type assure that the facility is designed and built to required standards and will meet the mission requirements both now and in the future.

## Contracting Method

**Sealed Bidding (FAR Part 14)**

- The contracting officer shall use sealed bid procedures for a construction contract if:
  - Time permits the solicitation, submission, and evaluation of sealed bids;
  - The award will be made on the basis of price and other price-related factors;
  - It is not necessary to conduct discussions with the responding offerors about their bids; and
  - There is a reasonable expectation of receiving more than one sealed bid.
- Ref: FAR 36.103(a) and FAR 6.401(a)

*FAR 36.103 (a) The contracting officers shall use sealed bid procedures for a construction contract if the conditions in 6.401(a) apply, unless the contract will be performed outside the United States and its outlying areas.*

**Two-Step Sealed Bidding**

- Step 1 - Technical proposals (for complex items) for evaluations and discussions without pricing information to a standard of acceptability
- Step 2 - Submission of sealed bids from offerors in Step 1 that are within the Competitive Range
- Considerations for Use:
  - Incomplete/Nonspecific (Inadequate) specifications
  - Definite Criteria for Evaluation
  - Competition Expected
  - Sufficient Time
  - FFP Contract Anticipated

*FAR 36.104 (a) Unless the traditional acquisition approach of design-bid-build ... is used, the contracting officer shall use the two-phase selection ... if the contracting officer makes a determination that the procedures are appropriate for use*

Two-step sealed bidding procedures are a combination of competitive procedures designed to obtain the benefits of sealed bidding when adequate specifications are not available. This method is especially useful in acquisitions requiring technical proposals, particularly those for complex items.

It is conducted in two-steps:

- Step-one consists of an RFP requesting technical proposals, evaluation, and discussions (if necessary) without pricing.
- Step-two involves the submission of sealed bids containing the price by those who submitted proposals in step-one

If the acquisition planning team is considering two-step sealed bid then in accordance with FAR 14.502, unless other factors require the use of sealed bidding, it may be used in preference to negotiation when all of the following conditions are present:

- Available specifications are not definitive or complete, or may be too restrictive without technical evaluation
- Definite criteria exist for evaluation of technical proposals
- More than one technical proposal is anticipated to be received
- Sufficient time is available for the process
- A firm-fixed price contract or fixed-price contract with economic price adjustment will be used.

Two-step sealed bidding may be applicable for construction projects when “state of the art” may be a factor, but the government may not be fully aware of the latest construction technology.

Any contract awarded using other than sealed bidding procedures is a negotiated contract. The regulations of FAR 15, Contracting by Negotiation, are the same when applied to a construction acquisition.

 <b>Contracting by Negotiation</b>
<ul style="list-style-type: none"> <li>• <b>The Acquisition Team Must Decide Which Process:</b> <ul style="list-style-type: none"> <li>– Tradeoff Process (15.101-1)                             <ul style="list-style-type: none"> <li>• Use if in best interest of Gov't to award to other than lowest price or most technically qualified</li> <li>• Awarded with or without discussions</li> </ul> </li> <li>– Lowest Price/Technically Acceptable Process (15.101-2)                             <ul style="list-style-type: none"> <li>• Use if best value is expected from lowest price of technically acceptable proposals</li> </ul> </li> </ul> </li> </ul>

An agency can obtain best value in negotiated acquisitions by using any one or a combination of source selection approaches. The Acquisition Planning Team should consider these approaches since, in different types of acquisitions, the relative importance of cost or price may vary. For example, for acquisitions where the requirement is clearly definable and the risk of unsuccessful contract performance is minimal, cost or price may play a dominant role in source selection. Thus

the reverse could be true with a greater performance risk

 <b>Contracting by Negotiation</b>		
<p>Sample Evaluation Factors &amp; Sub-factors can include:</p> <table border="0" style="width: 100%;"> <tr> <td style="vertical-align: top; width: 50%;"> <ul style="list-style-type: none"> <li>– Corporate Experience</li> <li>– Management Solutions</li> <li>– Engineering /Design Solutions</li> <li>– Quality Control Plan</li> <li>– Small Business Utilization</li> </ul> </td> <td style="vertical-align: top; width: 50%;"> <ul style="list-style-type: none"> <li>– Prime/Sub Specialized Experience</li> <li>– Prime/Sub Past Performance</li> <li>– Prime/Sub Key Personnel Experience</li> <li>– Cost &amp; Price</li> <li>– Safety Plan</li> </ul> </td> </tr> </table>	<ul style="list-style-type: none"> <li>– Corporate Experience</li> <li>– Management Solutions</li> <li>– Engineering /Design Solutions</li> <li>– Quality Control Plan</li> <li>– Small Business Utilization</li> </ul>	<ul style="list-style-type: none"> <li>– Prime/Sub Specialized Experience</li> <li>– Prime/Sub Past Performance</li> <li>– Prime/Sub Key Personnel Experience</li> <li>– Cost &amp; Price</li> <li>– Safety Plan</li> </ul>
<ul style="list-style-type: none"> <li>– Corporate Experience</li> <li>– Management Solutions</li> <li>– Engineering /Design Solutions</li> <li>– Quality Control Plan</li> <li>– Small Business Utilization</li> </ul>	<ul style="list-style-type: none"> <li>– Prime/Sub Specialized Experience</li> <li>– Prime/Sub Past Performance</li> <li>– Prime/Sub Key Personnel Experience</li> <li>– Cost &amp; Price</li> <li>– Safety Plan</li> </ul>	

The Acquisition Planning Team must consider and decide for use one the following two processes:

- **Tradeoff Process (FAR 15.101-1)** – This process is appropriate when it may be in the best interest of the Government to consider award to other than the lowest priced offeror or other than the highest technically rated offeror.

- **Lowest Price Technically Acceptable Source Selection Process (FAR 15.101-2)** – This process is appropriate when best value is expected to result from selection of the technically acceptable proposal with the lowest evaluated price.

Once the process is selected, the Acquisition Planning Team must develop evaluation factors and any subfactors. These factors will be incorporated into the acquisition plan.

 <b>IFB vice RFP</b>		
<table border="0" style="width: 100%;"> <tr> <td style="width: 50%; vertical-align: top;"> <p><b>IFB</b></p> <ul style="list-style-type: none"> <li>• Open Process</li> <li>• Public Bid Opening</li> <li>• Abstract Releasable</li> <li>• No Discussions</li> <li>• Only Price Considered</li> <li>• No Revisions</li> <li>• Options or Additive Bid Items</li> </ul> </td> <td style="width: 50%; vertical-align: top;"> <p><b>RFP</b></p> <ul style="list-style-type: none"> <li>• Closed Process</li> <li>• No Public Bid Opening</li> <li>• Limited Information at Award</li> <li>• Discussions Possible</li> <li>• Non Price Factors are Considered</li> <li>• Revisions Possible</li> <li>• Options/No Additive Bid Items</li> </ul> </td> </tr> </table>	<p><b>IFB</b></p> <ul style="list-style-type: none"> <li>• Open Process</li> <li>• Public Bid Opening</li> <li>• Abstract Releasable</li> <li>• No Discussions</li> <li>• Only Price Considered</li> <li>• No Revisions</li> <li>• Options or Additive Bid Items</li> </ul>	<p><b>RFP</b></p> <ul style="list-style-type: none"> <li>• Closed Process</li> <li>• No Public Bid Opening</li> <li>• Limited Information at Award</li> <li>• Discussions Possible</li> <li>• Non Price Factors are Considered</li> <li>• Revisions Possible</li> <li>• Options/No Additive Bid Items</li> </ul>
<p><b>IFB</b></p> <ul style="list-style-type: none"> <li>• Open Process</li> <li>• Public Bid Opening</li> <li>• Abstract Releasable</li> <li>• No Discussions</li> <li>• Only Price Considered</li> <li>• No Revisions</li> <li>• Options or Additive Bid Items</li> </ul>	<p><b>RFP</b></p> <ul style="list-style-type: none"> <li>• Closed Process</li> <li>• No Public Bid Opening</li> <li>• Limited Information at Award</li> <li>• Discussions Possible</li> <li>• Non Price Factors are Considered</li> <li>• Revisions Possible</li> <li>• Options/No Additive Bid Items</li> </ul>	

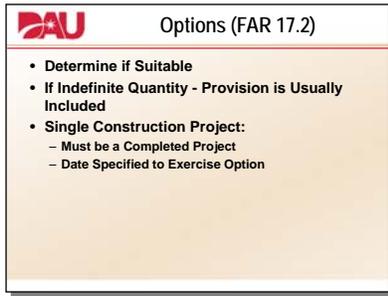
When considering source selection, the AP team should consider the following:

- Is Money/Dollars an Issue?
- Time Constraints?
- Extremely Technical in Nature?

If source selection is the method of choice, the Acquisition Plan must consider the best value for the Government and consider the “trade-offs”. The plan must

include the evaluation factors for consideration of award and specify what award will be based on.

## Options



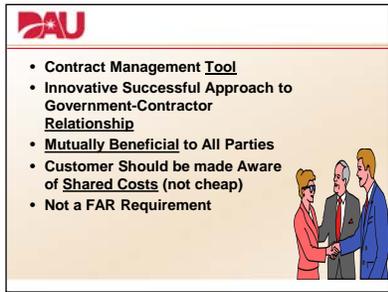
**DAU** Options (FAR 17.2)

- Determine if Suitable
- If Indefinite Quantity - Provision is Usually Included
- Single Construction Project:
  - Must be a Completed Project
  - Date Specified to Exercise Option

The Acquisition Planning Team is also required to discuss and decide if special contracting methods will be required. For construction acquisitions this would be the need for options. The Acquisition Planning Team must review the option provision and determine if the project is suitable for inclusion

When the contract type selected is an indefinite-quantity type contract the inclusion of the option provision is usually accomplished. However, an option to a single construction project may also be included. The option would need to be a completed project (100 additional Bachelor Officer’s Quarters) with a date as to when the option would be exercised (i.e., within 100 calendar of original project completion).

## Partnering



**DAU**

- Contract Management Tool
- Innovative Successful Approach to Government-Contractor Relationship
- Mutually Beneficial to All Parties
- Customer Should be made Aware of Shared Costs (not cheap)
- Not a FAR Requirement



Formal partnering is defined as a contract management tool technique that is recognized as an innovative successful approach in Government construction contracts by creating a Government- contractor relationship that promotes achievement of mutually beneficial goals.

Since there is no FAR requirement for partnering, the Acquisition Team must decide if incorporating formal partnering into the acquisition would be beneficial to all parties. At this point, the customer should be made aware that if formal partnering is included in the solicitation and accepted at contract award there are shared costs associated with partnering.

There is no FAR guidance on this. Since partnering facilitators can be expensive, this technique is usually limited to larger projects.

By definition, “a contract management tool technique that is being recognized as an innovative successful approach in Government construction contracts by creating a Government-contractor relationship that promotes achievement of mutually beneficial goals.

## ISO 9000, 14000

	ISO 9000, 9001, etc.
<ul style="list-style-type: none"> <li>• International Organization for Standardization</li> <li>• Certification of Company's Quality Processes</li> <li>• Not a FAR Requirement</li> <li>• If a Solicitation Requirement, Offerors Must be Certified           <ul style="list-style-type: none"> <li>– Ensure Competition Exists</li> </ul> </li> <li>• Usually Large Companies</li> <li>• Expensive</li> </ul>	

The Acquisition Planning Team is also required to include any other contracting considerations for the acquisition. The Acquisition Team should consider Partnering and International Standards Organization (ISO) 9000.

ISO 9000 is a certification of a company's quality processes. The certification is a long and expensive process for the construction company. Since there is no

FAR requirement for ISO 9000, the Acquisition Team must decide if incorporating ISO 9000 into the acquisition would be beneficial to the project. The Acquisition Planning Team should be aware that if ISO 9000 is incorporated into the acquisition, then Offerors must have the certification to be considered for award. Therefore, the Acquisition Team would need to ensure that ISO 9000 certified competition exists for the acquisition.

**Funding**



**Funding Considerations**

- Military Construction (MILCON)

Definition:  
The term "military construction" includes "any construction, development, conversion, or extension of any kind carried out with respect to a military installation."

10 U.S.C. 2801(a)

Part b, Item 6 of the Acquisition Plan Outline requires the Acquisition Planning Team to discuss the schedule for obtaining adequate funds. Therefore the Acquisition Planning Team must be familiar with the type of appropriation required and the timeliness of the funding since this may impact the project.

Construction projects are classified as maintenance, repair, or new construction. This section will focus on the requirements for new construction.



**Military Construction (MILCON)**

- New construction projects over \$1,000,000
- Two Categories of MILCON
  - **Unspecified** - Between \$1,000,000 and \$3 million, Service Secretary Approval
  - **Specified** - Excess of \$3 million, Specific Project Identification and Congressional Approval
  - **Emergency** – Excess of \$4 million\*
    - Safety, Security, and Health

Agencies, like Congress, classify new construction projects as either major or minor construction by the following dollar thresholds:

- Minor Construction – Under \$1,000,000
- Major Construction – Over \$1,000,000

Any new construction project anticipated to exceed the \$1.0 million threshold would be classified as major and Military Construction (MILCON) appropriation would be required.

There are two categories of MILCON appropriations with different approval levels as follows:

**Unspecified MILCON (UMC)** – Required for new construction projects between \$1.0 million and \$3.0 million. Require Service Secretary approval and congressional notification.

**Specified MILCON** – Required for new construction projects in excess of \$3.0 million. Require specific identification by project and require Congressional approval

Once the determination is made, if the new construction requirement is minor or major construction, the appropriation requirement can be made. Though some construction projects may contain a number of different funds (procurement, environmental), this discussion will focus on the two funds most commonly seen in new construction contracts. New construction projects can be funded with either Operations and Maintenance (O&M) or Military Construction (MILCON) appropriations

OPNAVINST 11010.20H CH-1  
24 June 2015

APPENDIX B  
AUTHORITY LEVELS AND FUNDING APPROPRIATIONS

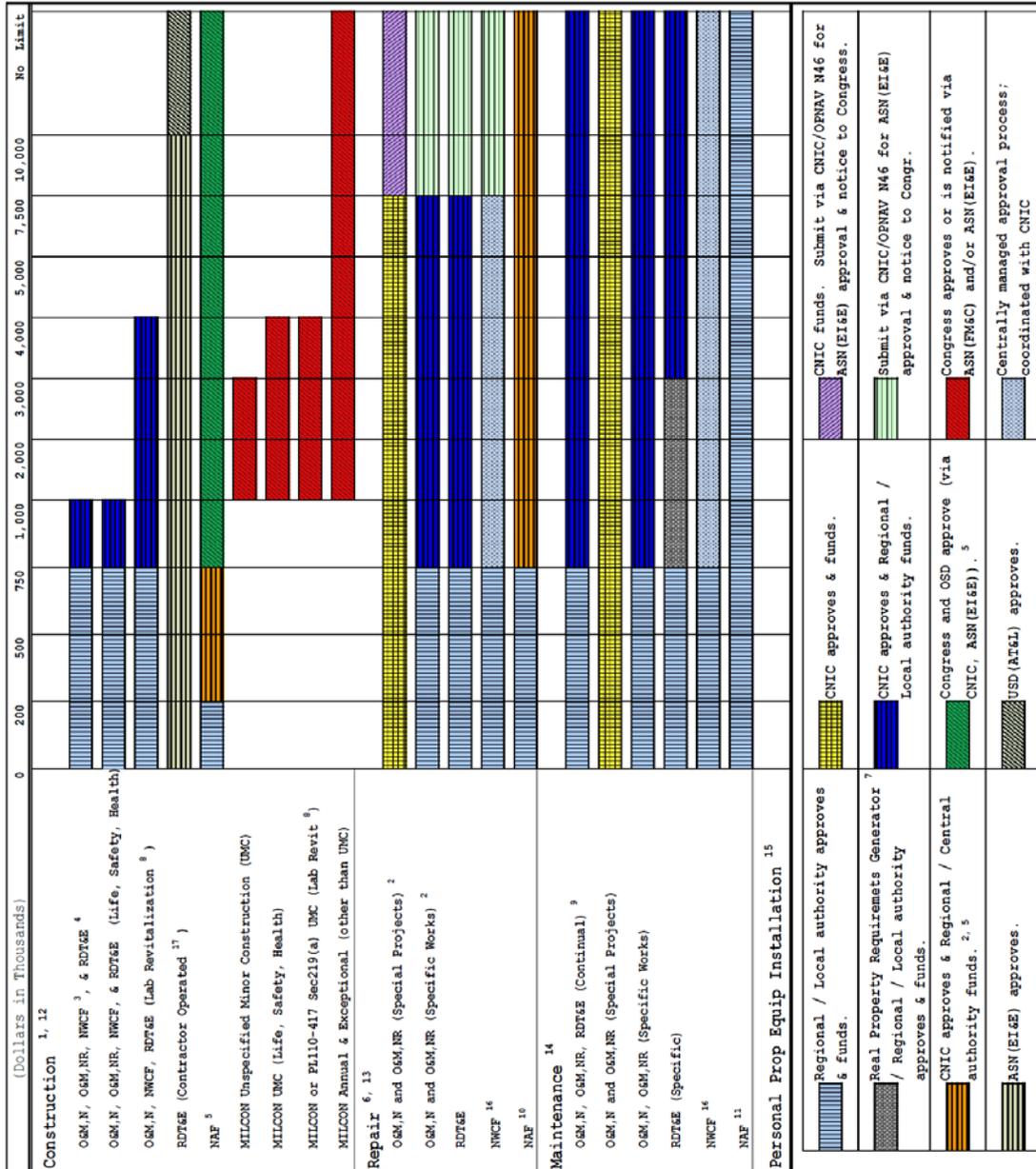


Figure B-1. Funding Authority Diagram

For minor construction projects the correct appropriation is operation and maintenance. O&M funding would also be utilized for any strictly maintenance and repair construction projects



DAU Facility Terms - Funding

- Construction
  - Threshold: 10 USC 2805
  - O&M under \$1,000,000
  - Unspecified Minor Construction for specific cases i.e. Life Safety
  - Specified MILCON Above \$1,000,000
- Variations on the term "Construction":
  - Construction = New capability or footprint
  - Alteration = Changing existing facility to meet a new mission: no new footprint!
  - Renovation = Changing existing facility to meet new codes: Same function and facility structure when finished!
  - Repair = Fix things that have broken. FAR calls this construction, DOD FMR calls this O&M
    - Caution: Repair by replacement becomes MILCON!

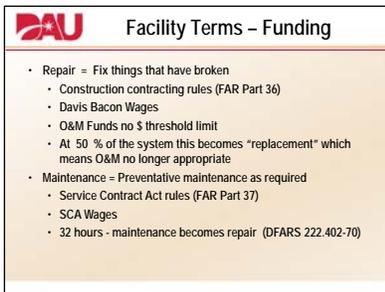
**Variations on the term "Construction":**

**Construction** = Subject to MILCON threshold New capability or footprint

**Alteration** = Subject to MILCON threshold Changing existing facility to meet a new mission: no new footprint!

**Renovation** = Subject to MILCON threshold Changing existing facility to meet new codes: Same function and facility structure when finished!

**Repair** = Operations and Maintenance Fix things that have broken. FAR calls this construction, DOD Financial Management Regulation (DODFMR) identifies this as O&M However, repair by replacement can become construction,



DAU Facility Terms - Funding

- Repair = Fix things that have broken
  - Construction contracting rules (FAR Part 36)
  - Davis Bacon Wages
  - O&M Funds no \$ threshold limit
  - At 50 % of the system this becomes "replacement" which means O&M no longer appropriate
- Maintenance = Preventative maintenance as required
  - Service Contract Act rules (FAR Part 37)
  - SCA Wages
  - 32 hours - maintenance becomes repair (DFARS 222.402-70)

**Maintenance** = Operations and Maintenance Preventative maintenance as required

## Government Furnished Property



Part b, Item 15, of Acquisition Plan Outline requires the Acquisition Planning Team to indicate any property to be furnished to contractors, including equipment, material and facilities, and discuss any associated considerations, such as availability or the schedule for its acquisition in accordance with FAR Part 45.

Although during acquisition planning many details regarding property may not be known, the team should still discuss this issue and should consider the following elements:

- Will the Item Be Directly Furnished or Acquired by the Contractor for the Government?
- What is the Availability of the Item?
- Are Sufficient Resources Available to Manage and Administer GFP in accordance with FAR Part 45?

Again, during acquisition planning the requirements may not be definite; however, the team should address Government furnished items and understand the impact of providing or not providing these items.

The decision to provide GFP/GFE to the contractor should be made well in advance. Many times in the planning stage details will not be known that would affect that decision. However, it should be considered and noted in the acquisition plan. GFP may be furnished directly to the contractor or the contractor may be required to obtain it on the Government's behalf.

Critical Elements to Consider:

1. If is to be furnished, what is availability?
2. Does the contract type selected lend itself to furnished GFP?
3. Will it be properly managed and administered by the activity?
4. Dollar value of GFP/GFE must be established?

Government must be prepared to assure:

- Timely Delivery,
- Suitable,
- free from deficiencies, and
- Safe GFP/GFE

GFP is similar in construction as any other type of contracting, but any negative impact of GFP is far more serious in construction as that impact directly affects the construction project schedule.

## Environment, Energy and Sustainability Considerations

**DAU** Environmental Considerations

- Acquisition Plan Must Now Consider Three Aspects:
  - Permitting and Environmental Impact Statements
  - Procedures for handling/disposing of HAZMAT/HAZWASTE
  - Procurement requirements of the Resource Conservation and Recovery Act

Part b, Item 17, of the Acquisition Plan Outline requires the Acquisition Planning Team to discuss all applicable environmental objectives associated with the acquisition, the applicability of an environmental assessment or environmental impact statement, proposed resolution of environmental issues, and any environmentally-related requirements to be included in the solicitation.

**DAU**

- Acquisition Plan Must State/Discuss:
  - Permits to be Obtained With Restrictions
  - Environmental Impact Statement, If Any
  - Any Asbestos or Lead Paint Identified
  - Handling & Disposal of Any Contaminated Material
  - All applicable Environmental and Energy Conservation objectives
    - FAR 7.105(b)(16) – written acquisition plans



The Acquisition Planning Team should review and list any environmentally-related permits that will need to be obtained and a description furnished as to any restrictions. If your agency already has an environmental impact statement (EIS) then include this in the acquisition plan with dates. If not already covered in the EIS, include any information concerning disposal of any known contaminated material, such as, if asbestos has been identified as part of the project.

Since courts have delayed, stopped, and or, imposed fines on construction projects in the past, the acquisition planning stage is crucial in discussing any and all environmental issues.

The FAR states that the permits obtained, or to be obtained, must be listed in the plan, and a description furnished as to any restrictions. If an environmental impact statement has been filed and received, it must be identified including dates. If asbestos has been identified as part of the project it must be explained in the plan. Also, include any information concerning disposal of any known contaminated material.

In 1969, NEPA (National Environmental Policy Act) was one of the first statutes that reflected the nation’s growing concern over the environment. It directed that Government policies and regulations reflect environmental considerations set forth in the Act, and required preparation of an Environmental Impact Statement (EIS) for all “major Federal actions significantly affecting the quality of the human environment.”

A lawsuit may be initiated by a party who believes that a contemplated major construction project will “significantly affect the quality of the human environment” in one more ways. In such instances, a lawsuit might be filed to: 1) Force preparation of an EIS, in order to, 2) Identify any environmental endangerment and require consideration of alternative work sites or other means to safeguard the environment.

**FAU** Environmental Considerations

- FAR Part 23 The Government's policy is to acquire supplies and services that promote energy and water efficiency, advance the use of renewable energy products, and help foster markets for emerging technologies. This policy extends to all acquisitions, including those below the simplified acquisition threshold.
- [www.energystar.gov](http://www.energystar.gov) & [www.eere.energy.gov/femp/procurement](http://www.eere.energy.gov/femp/procurement)
  - DOE's Federal Energy Mgmt Program
  - Energy Efficient Products

The **RESOURCE CONSERVATION AND RECOVERY ACT OF 1976 & 42 U.S.C. 6962** PREVIOUSLY primarily focused for our technical sections but requires agencies responsible for drafting or reviewing specifications used in agency acquisitions. Following several years of Executive Orders and field implementation, the FAR was updated to read:

*FAR 23.103 (a) Federal agencies shall advance sustainable acquisition by ensuring that 95 percent of new contract actions for the supply of products and for the acquisition of services (including construction) require that the products are—*

- (1) Energy-efficient (ENERGY STAR® or Federal Energy Management Program (FEMP)-designated);
- (2) Water-efficient;
- (3) Biobased;
- (4) Environmentally preferable (e.g., EPEAT®-registered, or non-toxic or less toxic alternatives);
- (5) Non-ozone depleting; or
- (6) Made with recovered materials.

This policy applies to ALL contract actions to include those below the micro purchase threshold (FAR 23.101)

In addition to other Environmental aspects contracting officers now must also give specific consideration in acquisition planning phase to inclusion of recoverable materials and “environmentally preferable and energy-efficient products and services” (FAR subpart 23.4 and subpart 23.7

**FAU** Environmental Considerations

- FAR Part 23 also requires KO's to address **recoverable materials, biobased, and “environmentally preferable & energy efficient products and services”** – to the max extent practicable (cost/competition/performance)
- EPA-Designated Products – RCRA/EO 13101
  - FAR 23.4 Use of Recovered Materials
    - (RCRA 1976 & 42 U.S.C. 6962)
  - FAR 23.405 Procedures:
    - Requires that all acquisitions of EPA-designated products above \$10,000
    - Contracting Officers are referred to <http://www.epa.gov/cpg/>

FAR 23.405 requires all agency acquisitions of EPA-designated products, including all types of micro-purchases. The requirement includes one-time purchases over \$10,000 and annual cumulative purchases that exceed \$10,000. For construction the EPA currently list the following products:

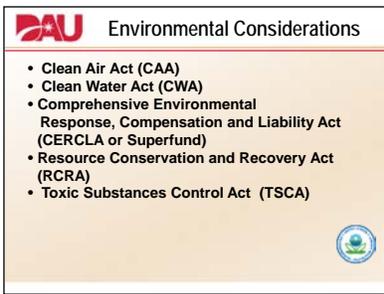


**Construction Products Listed on EPA’s webpage:**

- Building insulation
- Carpet & Carpet Insulation
- Cement and concrete containing:
  - Coal ash
  - Ground granulated blast furnace slag
- Consolidated and reprocessed latex paint
- Floor tiles
- Flowable Fill
- Laminated paperboard

- Patio blocks
- Railroad grade crossing surfaces
- Shower and restroom dividers/partitions
- Structural fiberboard

\*\*\* KO's are reminded that protest can come in any form and this would be an easy target, FAR subpart 23.7 Contracting for Envr. Preferable and Energy Efficient Products and Services



Why are we concerned with the environment? Because it is the LAW!

- Clean Air Act,
- Clean Water Act
- Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund)
- Resource Conservation and Recovery Act (RCRA)
- Toxic Substances Control Act (TSCA)

These are administered under federal authority of the Environmental Protection Agency:



Recently the Energy Management Act was added to the list. In DoD a major user of fossil fuel produced energy are buildings. Almost 75% of all fossil fuel produced energy is used by buildings.

What can we do?– build buildings that use less fossil fuels!

*FAR 36.104 (b) Agencies shall implement high-performance sustainable building design, construction, renovation, repair, commissioning, operation and maintenance, management, and deconstruction practices so as to—*

*(1) Ensure that all new construction, major renovation, or repair and alteration of Federal buildings complies with the Guiding Principles for Federal Leadership in*

*High-Performance and Sustainable Buildings (available at [http://www.wbdg.org/pdfs/hpsb\\_guidance.pdf](http://www.wbdg.org/pdfs/hpsb_guidance.pdf));*

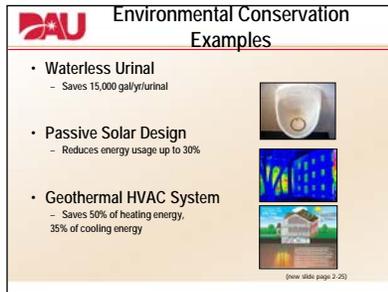
*(2) Pursue cost-effective, innovative strategies, such as highly reflective and vegetated roofs, to minimize consumption of energy, water, and materials;*

*(3) Identify alternatives to renovation that reduce existing assets' deferred maintenance costs;*

*(4) Ensure that rehabilitation of Federally-owned historic buildings utilizes best practices and technologies in retrofitting to promote long-term viability of the buildings; and*

*(5) Ensure pollution prevention and eliminate waste by diverting at least 50 percent of construction and demolition materials and debris by the end of Fiscal Year 2015.*

## Examples



### WATERLESS URINAL

A more recent innovation is urinals that do not use water at all. Models introduced in 1992[3] and others in 2001 by Sloan Valve Company, as well as Duravit, utilize a trap insert filled with a sealant liquid instead of water. The lighter-than-water sealant floats on top of the urine collected in the U-bend, preventing odors from being released into the air. Although the cartridge and sealant must be periodically replaced, the system saves anywhere

between 15,000 and 45,000 gallons (approx. between 56,800 and 170,000 liters) of water per urinal per year. Other companies do not use a cartridge; instead they have developed an outlet system that traps the odor, preventing the smell often present in toilet blocks. They can be installed in high-traffic facilities and in situations where providing a water supply may be difficult or where water conservation is desired. Due to high-level water restrictions, Brisbane has mandated conversion to waterless urinals and flush urinals are rarely seen.

### Passive solar design

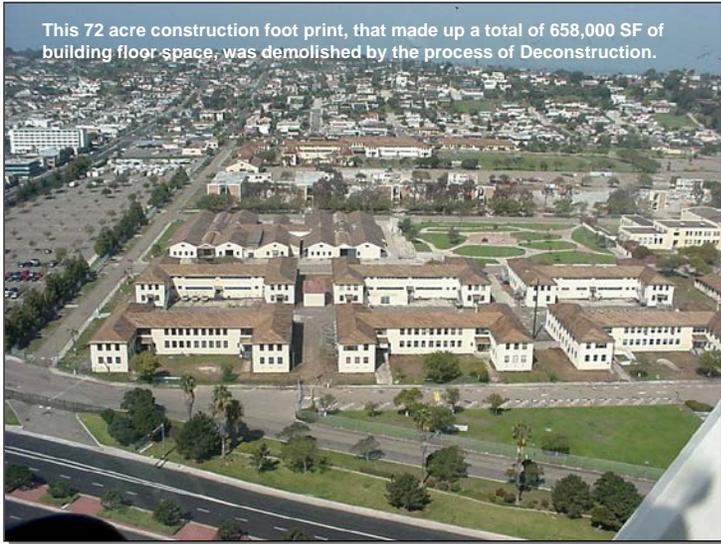
Following passive solar building design techniques, where possible buildings are compact in shape to reduce their surface area, with windows oriented towards the equator (south in the northern hemisphere and north in the southern hemisphere) to maximize passive solar gain. However, the use of solar gain is secondary to minimizing the overall energy requirements.

Passive houses can be constructed from dense or lightweight materials, but some internal thermal mass is normally incorporated to reduce summer peak temperatures, maintain stable winter temperatures, and prevent possible over-heating in spring or autumn before normal solar shading becomes effective.

## **Geothermal HVAC**

Geothermal Heating and cooling systems work differently from standard furnace and air conditioning system. Furnaces create heat by burning a fuel--typically natural gas, propane, or fuel oil. With geothermal systems, there is no need to create heat, hence no need for chemical combustion. Instead, the natural heat from the Earth is collected in winter through a series of pipes, called a loop, installed below the surface of the ground. Fluid circulating in the loop carries this heat to the home. An indoor geoexchange system then uses electrically-driven compressors and heat exchangers in a vapor compression cycle--the same principle employed in a refrigerator--to concentrate the energy from the Earth and release it inside the home at a higher temperature. In typical systems, duct fans distribute the heat to various rooms. In summer, the process is reversed in order to cool the home. Excess heat is drawn from the home, expelled to the loop, and absorbed by the Earth. Geothermal systems provide cooling in the same way that a refrigerator keeps its contents cool--by drawing heat from the interior, not by injecting cold air.

**Case Study**



*FAR 36.104 (b)(5) Ensure ... eliminate waste by diverting at least 50 percent of construction and demolition materials and debris by the end of Fiscal Year 2015.*

Can it be done?

**Barracks at Naval Training Center, San Diego**

Situation: Station closing due to BRAC action. 72 acres of land with multiple facilities dating to pre-World War II. Some will be renovated and retained by DoD. Some will be renovated as part fo the commercial re-use as required by the State Historic Preservation Office (SHPO) others will be demolished and the land sold to a developer.

Hazardous materials – Lead Paint, asbestos, PCB

Salvageable Material Removed From Project:	
Mixed Lumber (misc. wood)	(8) 40 ft. trailer loads
2x8 lumber and greater	(12) 40 ft. trailer loads
Wood beams	(6) 40ft. Trailer loads
Metal beams	(2) 40 ft. trailer loads
Misc. windows	(4) 40 ft trailer loads
Doors	(2) 40 ft. trailer loads

In addition to the above, many other items were salvaged or donated such as: Navy signs, pictures, chalkboards, lights, flag poles, trees, fire extinguishers, electrical panels, breakers and light poles.

**Rather than demolish – DECONSTRUCT!**



Watkins Contracting Inc. (WCI) was to salvage and recycle 75% of the demolished material.

The final reports shows that on raw tonnage basis WCI salvaged and recycled over 86 % of the demolished material.

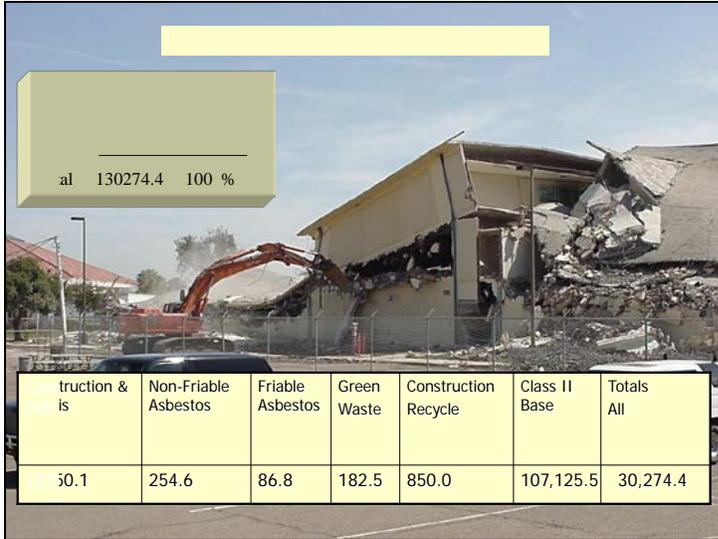
This project was completed 2 months ahead of an 8 month schedule. No accidents occurred on this project. WCI completed this project within budget and without change orders.

Many regulatory compliance agencies performed unannounced visits to the job site such as OSHA, Air Pollution Control District, etc. WCI finished this project with a perfect compliance record.

Virtually everything was salvaged.



75% planned: actual 86%



Summary there is a requirement for reuse. With creative talent, it can be done.

Discussion Questions:

What energy and pollution prevention measures are required by the FAR?

What energy efficiency measures are requirement by the FAR?

What are some things you can do on your base to ensure DoD achieves these goals ?

## Milestones

DAU	Milestones
	<ul style="list-style-type: none"><li>• End of the Acquisition Plan</li><li>• Dates Must Be Realistic and Could Include the Following...<ul style="list-style-type: none"><li>– Approval of Plan</li><li>– Statement of Work</li><li>– Specifications</li><li>– Completion of Package</li><li>– Issuance of Solicitation</li><li>– Contract Award</li><li>– Etc...</li></ul></li></ul>

Part b, Item 21, is the final requirement in the Acquisition Plan. This item requires the Acquisition Planning Team to address certain milestones for the acquisition cycle. Depending on agency guidelines, if the milestones are not met, the plan must be amended. Therefore, the team should be realistic when assigning the milestones.

The following items should be addressed:

- Approval of the Acquisition Plan
- Statement of Work
- Specifications
- Completion of Acquisition Package
- Purchase Request
- J&A for Other Than Full and Open Competition (where applicable)
- Issuance of Synopsis
- Issuance of Solicitation
- Evaluation of Proposals, Audits, etc.
- Beginning and Completion of Negotiations (if applicable)
- Contract Preparation, Review and Clearance
- Contract Award

## Summary

	In Summary...
<ul style="list-style-type: none"><li>▶ What is the Definition of Construction?</li><li>▶ Who should be on the Acquisition Team?</li><li>▶ What Two Types of Appropriations Fund New Construction Projects?</li><li>▶ Why do you need an Acquisition Plan?</li></ul>	

Acquisition planning is a crucial step in the construction acquisition process. Once acquisition planning is complete, the team can begin focusing on solicitation requirements for the construction project

### Summary Questions.

What is the Definition of Construction?

Who Should Be On The Acquisition Team?

What Two Types of Appropriations Fund New Construction Projects?

Why do you need an Acquisition Plan?

What are the main requirements to be considered at the following thresholds?

\$2,000

\$150,000

\$700,000

\$1,000,000

\$1.5 million

\$2.5 Million

\$3 Million

\$4 Million

