

Chapter 13 – Facility Design

Wow...what a great facility!

That's what you say when you enter a well-designed facility, whether it be a library, fitness center, bowling center, club, or a child development center. It's what you want customers to say about *your* facility. Where do great facilities originate? They are the culmination of a process which starts with *planning and budgeting* and results in an attractive facility which customers enjoy...and one that is efficient to operate.

Design and layout affect the costs of opening a new facility, of course, and they also can affect the costs of operation. Poorly-designed facilities can cause inconvenience to both customers and employees. One real life example was a service bar in a military club dining room that featured draft beer...but had no way to replenish the kegs (short of rolling them down the customer hallway and hefting them over the bar in the middle of the dining room)!

An operation which is too small for the customer base will cause service problems and unhappy customers (as well as unhappy employees). However, a facility which is too large will never seem completely successful, and will require increased costs for heating, ventilation, air conditioning, cleaning and maintenance.

It has been said that the best décor for a hospitality operation is "people in chairs." In other words, customers want to go to popular places, and if the facility is nearly empty, customers may come in and quickly leave...making the perception that much worse. How do you get "people in chairs?" Study the Marketing Chapter, coming up soon.

Even if you do not have the advantage of designing the facility in which you will work, you are likely to be involved in at least some renovation projects as things change. The more you know about layout and design, the better you will be able to deal with these situations.

Project Validation Assessment (PVA)

DoDI 7700.18, *Commissary Surcharge, Nonappropriated Fund (NAF), and Privately Financed Construction Reporting Procedures*, defines a Project Validation Assessment (PVA) as, "An independent or commercial review that certifies the need for a project based on consumer demand, market competition, cost estimates, and financial viability." Another term used is Needs Validation Study (NVS).

Each Service has similar requirements in order to validate the need for a building or remodeling project. Obtain the specific, current requirements from your Service headquarters, and follow the requirements closely. Remember that DoD requires a PVA on any NAF project over one million dollars.

You may feel that the requirements (especially the paperwork) are annoying, and are designed to keep you from accomplishing your mission in the best way possible. Think again! The purpose of the process is to ensure funding when necessary, improve the final results, and avoid sub-optimization (the tendency to make a small project the best it can be, but at the expense of the big picture). Successful managers embrace the process and make it work for them. Keep your goals in mind, as well as the missions of MWR/Services worldwide.

Design/Build

Design/Build is a contracting method in which the design and construction are combined in a single contract with one contractor. This usually results in lower costs, faster projects, and more efficient coordination.

Return on Investment

Not all NAF construction projects are for revenue-producing activities, but for those that are, there needs to be a method of evaluating the projected return on investment. There is never enough money to finance all of the requested construction projects, so each Service headquarters is faced with evaluating projects to determine which will be funded.

If you are involved in a construction/remodeling project for a revenue-generating activity, part of your proposal must show ROI (Return on Investment) from the proposed project. For example, if you are going to build new bowling lanes, how much additional revenue will this generate? This will be compared to the costs of the project to determine which projects should be funded first.

DoD, for example, requires the establishment of a “Hurdle Rate,” the required rate of return in a discounted cash flow analysis. It is used as the benchmark to rank, compare, and select construction projects.

An Internal Rate of Return (IRR) is calculated for each project. The IRR is a rate at which the present value of investment is equal to the present value of the returns on that investment. The IRR needs to meet or exceed the established Hurdle Rate for it to be considered a viable project for NAF funding. If the IRR is less than the Hurdle Rate, the project is not a good financial investment. In MWR/Services, however, the quality of life aspects of the projects are often considered in addition to the financial return.

Facility Design Considerations

The following considerations have been suggested when planning a facility’s construction or remodel:

- Management should negotiate the best price possible.
- The facility should appeal to both customers and employees.
- There should be a maximum return on investment.
- There should be an efficient flow of people and products.
- The facility should provide for safety in both front and back of the house.
- Sanitation issues must be taken into consideration.
- The facility should lend itself to work efficiency.
- Maintenance costs should be kept as low as possible.
- Design should facilitate management supervision.
- Flexibility and anticipating future changes is critical.

With the wide variety of activities and operations classed as “MWR/Services” all over the world, it is impossible to provide specific guidance for your next facility design/remodeling project. A campground will have different needs from a library; a golf course is not the same as a bowling

center; auto repair shops will be completely different from child development centers. Any successful construction or remodeling project will require a *team* approach. Your contracting officer, supervisors, architects, professional designers, consultants, contractors, suppliers...everyone needs to work together to ensure a successful project.

Furnishings, Fixtures & Equipment (FF&E)

Since facility design and funding often takes place over a period of years, occasionally the furnishings, fixtures, and equipment are overlooked. A budget line item might be developed, but it must be funded within the correct budget cycle to align with construction processes. Imagine not being able to open a facility on time because the lead time on budgeting, ordering, and receiving FFE was not managed with the same care as the facility project! For help in identifying FF&E for your specific operation, we recommend you reference the IMCEA Online Resource Guide. There are many authorized suppliers to the military, and some of the best are Associate Members of IMCEA. (<https://imcea.org/resource/welcome.php>).

Summary Chapter 13

Facility design and layout affect not just the start-up costs, but also the operational costs of your MWR/Services operation.

You will need to obtain your specific Service's Project Validation Assessment (PVA)/ Needs Validation Study (NVS) requirements and follow them carefully.

For revenue-generating activities, you will also need to project a return on investment (ROI).

There are certain principles that apply to all design projects. These principles involve negotiating the best price, facility appeal to customers and employees, return on investment, efficient flow of people and products, safety, sanitation, work efficiency, maintenance, management supervision, and flexibility.

Don't forget to plan for, budget, and order the furnishings, fixtures, and equipment!

