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“Control Your Construction Costs by Not Duplicating Spaces”

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The cost of construction, like almost everything, seems to go up every year. Only rarely during my career have I witnessed any expense associated with building decrease. When it does decrease, it usually doesn't stay low long. These facts make it more important to do everything possible in reducing your construction costs. One critical step in controlling your construction costs is in not duplicating the activities or spaces needed in your new or renovated facility.

Let's start by looking at a real case scenario. We were recently hired by a fire department to design a new headquarters facility. The City had previously employed a designer to provide programming for budgeting purposes. Their first program resulted in a proposed facility of approximately 30,000 square feet and included several duplicated spaces simply because the designer did not have experience in how a fire station functions. After we revisited the program, we were able to cut the facility size to approximately 28,000 square feet while not sacrificing any function. Now 2,000 square feet doesn't sound like a lot compared to the total size of the building, but 2,000 square feet times a construction cost of \$120/sf is \$240,000!

Keep in mind that the purpose of this discussion is to encourage thought on how to reduce space from your planned facility. Some of the spaces discussed may very well need to be duplicated in order for your department to function properly. You will ultimately be the one to make that decision.

The typical medium to large station has training/community rooms and dayrooms. There is an obvious advantage to have a kitchen or food prep area near each of these rooms. We often see a small warming kitchen located just off of the training/community room for the occasional meal that is served. If the training/community room and dayroom can be planned near each other one kitchen may be able to serve both areas. We often design the kitchen between the training/community room and the dayroom with passage doors and counter doors serving each side. This allows the kitchen to serve into either and saves the cost of unnecessary space and seldom used appliances. Kitchens are often the most expensive room(s) in the building. Why build more of them than you need?

Conference rooms are another space that you may consider minimizing. Most stations that have conference rooms for sixteen persons or less use them less than once every week or so. If you have sized your training/conference room for the maximum occupancy consider incorporating a de-mountable wall that allows you to section off a small portion of the room for daily conferences. Then you can open the de-mountable wall when you need to accommodate a larger gathering. There are several areas in the typical station that can be used for meetings such as training rooms, conference rooms, dining rooms, dayrooms, etc. Keep these areas and their frequency of use in mind to make sure that you don't duplicate conference facilities.

Departments often need to provide a library to house training and reference materials for the fire fighters use. Very few stations have enough residents to warrant a separate, dedicated room for a library. The library can be combined with a conference room, or even the training room. If the training room is to be occasionally used for community events, the library can be a large storage closet adjacent to the training room that is locked when community events are taking place.

If your station is to have a full-time receptionist, consider yourself lucky. For those of you who will not have this position consider combining the radio/report/watch room into one space with a pass window to the lobby. This space is likely to be occupied much of the day, thus providing personnel to "receive" any visitors.

These are just the beginning of ideas to consider when you are attempting to minimize the needed space for your new or renovated station. By all means, build as much space as you can possibly afford when you finally get the opportunity. You'll never be able to build future space any cheaper than now. But once you start calculating how much every square foot of space is going to cost, you'll likely find it necessary to cut back. Eliminating duplicated spaces should be the first step in reducing the budget.