

## MISLEADING JAIL BED COSTS

by Allen R. Beck, Ph.D.

"How much will a new jail cost?" is one of the early questions county commissioners and taxpayers often ask before a new jail is planned. The usual answer involves taking the average jail bed cost and multiplying that by the number of inmates that someone thinks will be kept in jail. However, to their dismay, that answer is often far from accurate when their new jail is built.

Unfortunately, the concept of "average jail bed cost" is poorly defined and the numbers sometime change drastically from jail to jail and from year to year. Jail planners often face the dilemma of trying to decide what number to use. For example, an annual survey of jail construction by Camille Camp and George Camp disclosed that over a five-year period in the 1990's the average cost of new jail beds fluctuated between \$38,000 to \$74,000.<sup>1</sup> Furthermore, the pattern of fluctuation was not progressive, i.e., starting lower and going higher, but seemingly random. For example, examination of the data provided by Camp and Camp discloses that the average bed cost was \$49,367 in 1994, two years later in 1996 was lower, \$40,593, and then jumped to \$73,339 in 1997.<sup>2</sup> During 2006, estimates were found to be as high as \$100,000 per bed. Other sources of information, such as individual architects, occasionally provide much higher estimates. These higher estimates, generally, are based on a specific type of jail in a specific locality.

Usually when someone speaks of the "average jail bed cost," that person is referring to an estimate based on a national survey of newly constructed jails. The calculation of the average jail bed cost is simple: the total cost of constructing a jail is divided by its number of beds. However, the comparison of average bed costs between communities is confusing. This confusion arises because different items are included in construction costs in different communities. Thus, a national average is a hodgepodge of data. To provide insights into the problem of creating a national average, this article examines fifteen factors that contribute to cost variation.

### 1. The definition of jail varies

A variety of facilities may be called a jail, such as a detention facility, booking facility, satellite or overflow facility, work release center, county work camp, county boot camp, and so on. Not all of these facilities are complete jails. Some include all services while others provide only limited, or perhaps no services. For example, a county having an existing jail may build another housing unit to add to overall capacity without closing the old facility. Often such units lack important features such as a full medical unit, as inmates who are sick are transferred to the unit containing a fully functional infirmary. The same may exist for other functions, such as food service. Meals may be prepared at a central location and shipped to other units.

### 2. Jails differ in design type

Since the average cost of a jail bed is based upon taking the overall cost of a jail and dividing it by the number of beds it contains, differences in the type of a jail will affect the cost of an average jail bed. For example, the design types: linear design, indirect supervision design and direct supervision design, and type of structure: low-rise (single story) configuration and high-rise (multiple story) configuration will have different overall square footage and construction associated costs.<sup>3</sup> Thus, a low-rise jail based on indirect supervision design is not likely to have the same average jail

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<sup>1</sup> Camp, Camille G. & Camp, George M. "Average Cost Per Bed for Jail System Construction and Renovation, 1990- 1997." *The Corrections Yearbook*. Middletown, CT: Criminal Justice Institute, Inc., 1998, p. 243. Please note that the cost figures have been rounded in this example of average jail bed costs provided by Camp and Camp.

<sup>2</sup> Ibid

<sup>3</sup> Both indirect supervision and direct supervision designs fall into the category of podular designs. They have been separated in this article because the indirect supervision design has evolved to be different and, often, less costly to construct and staff. From a security and safety standpoint, the direct supervision design is preferred by many correctional agencies

bed cost as a high-rise jail having indirect supervision.

**3. Jails differ in what they contain**

Some jails are warehouses, not providing many services for intervention into the problems that bring offenders to jail, such as substance abuse. Other facilities provide space for treatment and offices for related staff. In addition, work release may be a part of a jail in some counties but not in others. Another of the features that artificially inflates the cost of a jail is the inclusion of sheriff's offices for non-jail functions, e.g., a communications center for dispatching patrol operations and offices for patrol and investigations staff. Some comprehensive facilities contain courtrooms and offices that can be used by prosecutors, public defenders, and law enforcement agencies, e.g., city police and state troopers.

**4. Construction fabrication differs**

The approach to fabrication is not the same for all jails. For example, prefabricated cells and walls are sometimes used in small and medium low-rise facilities. In addition, there are variations in prefabrication, e.g., walls can be cast on-site using special methods which provide a product similar to prefabricated walls that are cast in a remote factory and shipped to the site. There are pros and cons of various methods and some of the less costly methods may not be applicable in all settings. Caution, though, should be exercised when the temptation arises to use some of the "economy" approaches, for there are more than just a few horror stories about jails experiencing deterioration of "cost efficient" materials. In addition, some firms using "cost efficient" materials take unforgivable steps (from an operational standpoint) in cutting corners in facility design so as to keep the overall cost low.

**5. Renovation of an existing structure reduces construction costs**

Although renovation is not usually considered "new bed" construction, there are instances in which statistics on jail costs may not separate new beds and renovation. Most commonly reported statistics break out new and renovated bed costs. However, the reader should check the informational source to ensure that mixing of costs has not occurred.

**6. Land preparation differs from site to site**

The preparation of a jail site is usually included as a construction cost. This cost can vary according to geographic location and type of terrain. Site development could involve, for example, excavation of terrain irregularities, providing land fill, laying water lines from a distant main line, building roads with the site and from a nearby highway as a cost to the project, etc. Additionally, some jails may have a basement rather than being built on a slab.

**7. Security level differences of offenders may affect design**

Counties that have made the decision to develop alternatives to incarceration for low level offenders can reduce the total cost of jail construction by lowering their bed space requirements. Fewer low custody beds (usually dormitory style beds) means that the new jail will contain a higher proportion of medium and maximum custody beds (the more expensive beds). Thus, the shift in the mix of beds results in a higher average bed cost. The county saves money but to the outside observer the cost of the jail seems higher than in other jurisdictions.

**8. The number of beds within the same design may vary at time of construction**

Some jails are designed to accommodate an expansion of capacity without incurring additional construction costs. Initially, cells may be furnished with a single bunk (bed) and double-bunked at a later date. In another county, double bunking may be instituted at the beginning. This aspect of construction makes it difficult to compare average bed costs of jails having similar square footage in their inmate housing areas.

**9. Some jails are designed to accommodate future construction**

Some jails are built to accommodate construction of additional housing units at a future time when needed. This type of design requires an "oversizing" of certain components, such as a larger kitchen, that will support a bigger jail at a future date. In addition, this design approach may involve acquisition of a larger site and providing utility support, i.e., water and sewer, for the future housing units. This oversizing of facility and site increases the initial construction cost but saves money later. In the calculation of average jail bed costs, however, this consideration is overlooked and, as a result, the

oversized jail will appear to be more expensive.

**10. Differences in equipping facilities affect costs.**

Moderate and large sized facilities, e.g., 150 beds or more, tend to use more technology, such as touch screen computer systems for controlling doors and surveillance monitoring devices. Some large facilities have included very expensive fingerprint identification systems that are obtained as part of the financing of a new jail and are thereby disguised as part of construction costs. This confounding of construction and equipping costs would be avoided if equipment and furniture were not reported as part of new jail construction costs. However, separate cost breakouts are rarely reported in national statistics.

**11. Regional differences affect construction costs**

Identical jails built in different states often have much different construction costs. Regional factors driving up costs include labor unions, differences in access to construction materials, and local differences in how the cost of living affects material prices and labor rates. In addition, local construction demand could affect construction costs. Although there are general cost adjustment tables for regional construction, these adjustments are usually not contained in national statistics on the average jail bed cost.

**12. Compliance with standards will affect design**

Some jails are not built to comply with a specific set of standards other than fire and safety codes. Some states have standards governing space allocation and other design features, while others do not. Also some jurisdictions choose to meet standards of the American Correctional Association, ACA, which tend to be more demanding, e.g., each cell should have natural light. Thus, jails built according to state or ACA standards are likely to cost more per square foot than those built without such compliance.

**13. Standardization of design may reduce costs**

Several states have sought to reduce construction costs by standardizing a jail design for replication in different sites. This approach may involve paying an architect for a specific design with some accommodation for replication of that design at other sites. In addition, negotiations with contractors and suppliers may be involved on a multi-site basis. Such standardization is possible in those localities where the state can influence the counties to adopt a universal design.

**14. Adequacy of the design affects costs**

Poorly designed jails that cut corners on important security features (such as using suspended ceilings instead of secure ceiling construction) and facility components (such as omitting storage areas), tend to be less costly than well-designed facilities. Poor design is most often attributable to lower competency of the architectural team. Of course, the reporting of jail costs does not include a rating of design adequacy.

**15. Construction management may be included as a construction cost**

Construction management is an important function occurring during the preconstruction and construction phases of building a new jail. Construction management acts as the county's expert for cost control and reduction, compliance with design requirements, and adherence to the construction schedule. This management may include a variety of important functions, such as the bidding of services of the many subcontractors, such as the electrical and mechanical contractors, scheduling their work, and performing frequent on-site inspections to ensure that the architectural design is followed and that quality is satisfactory. Some medium and large counties have an engineering department that provides construction management but others have eliminated those capabilities as part of the campaign to reduce the size of government. In counties that have in-house construction management capabilities, the cost is usually not shown in the budget for new jail construction. However in counties not having in-house capabilities, an outside construction management firm may be used and the cost of that service may be reflected as an item in the construction budget.

As suggested in this list of fifteen factors, the average jail bed cost is based on a jumble of considerations. Given the manner of surveying jail costs and the likelihood that the mix of jails will vary from year to year, there is no reason to be surprised by fluctuation in average jail bed costs. Nor should decision makers be surprised to find that the average jail bed cost fails to reasonably approximate construction costs in their community.

The national average jail bed cost has the greatest utility in general discussion, for example it might be used by a county commission to explore the general cost differences between 150 and 200 bed jails. Sometimes, a separate inquiry within a particular region of the county with regard to a specific size jail will provide helpful information. However, that approach could also encounter some of the same interpretational problems found in a national survey.

The bottom line suggests that in the initial stages of community discourse about a new jail, cost figures should be expressed as very general approximations. Only at the point that a jail study has been concluded and an initial architectural plan has been developed will a reasonably accurate estimate of costs be available. That is the number typically used to plan jail financing.

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**ABOUT THE AUTHOR:** In 1978, Allen Beck became interested in how jail costs are calculated while serving as a trainer of criminal justice planners for the Law Enforcement Assistance Administration. His insights were subsequently refined during the course of planning many jails, evaluating correctional programs, and auditing criminal justice agencies. Dr. Beck is a principal of Justice Concepts Incorporated. He holds a Ph.D. in Criminal Justice and has been a full-time criminal justice consultant since 1983. Dr. Beck can be contacted at Justice Concepts Inc., 417 W. 87<sup>th</sup> Place, Kansas City, MO 64114, Phone: (816) 361-1711, Email: [abeck@justiceconcepts.com](mailto:abeck@justiceconcepts.com).

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