

While both firms deviated from some of the recommendations made by the corrections team and DLR group, the most significant challenges and potential liability for staff, public and inmates identified by the Escambia County Corrections staff is the poor layout of the facility that Yates provided with the intention of expansion to Phase II going vertical. Their location of pre-class on the fourth floor and juveniles on the ground floor near ACR/booking is very concerning. While vertically, the design technically meets the separation of juveniles from "normal sight and sound", there is too much movement in that area that could potentially lead to bad results with a probability the juveniles inadvertently coming in contact with or near adults. In the Yates proposal, when phase II is added, vertically the design will require even more staff and cause further safety/response time issues. While Corrections understand there is limited property, Caddell was able to adhere to most of the recommendations, new jails avoid going too vertical because elevators are outrageous in price and when they become non-operational, it is a nightmare to deliver inmate meals via several flights of stairs.

The Yates firm deviated significantly from what was clearly clarified by the corrections team and DLR group by relocating two extremely complex classification of inmates (juveniles and pre-class). First, let's exclusively address annual recurring personnel expenses solely for the supplementary officers it will require based on Yates rationale to relocate pre-class to the fourth floor of the facility. By relocating the pre-class housing unit from the ground floor to the fourth floor (which should always be adjacent to booking), this will undoubtedly require additional staffing. Pre-class units have the most inmate movement out of any other unit in the jail. This will necessitate an additional 10 FTE correctional officers, resulting in a minimal of \$639,000 of annual recurring personnel costs. Over the usual recommended usage span of a jail facility (which is generally 20-30 years), in calculating just those annual recurring personnel costs for 10 FTE's (at today's loaded salary rate and not accounting for projected increases), we would be looking at \$15,975,000 over a 25-year period simply for their relocation of a housing unit.

Notwithstanding the other issues that could potentially arise for officers having to take the stairwell, etc. when responding to emergencies because they generally take the fastest route. This can increase slips, falls, etc. resulting in employees getting injured and workers comp claims. Since it appears the intention of the Yates group is to go vertical when Phase II of the new jail is built, this would only get worse.

Based on the Best Management Practices of jails and/or prisons intended design philosophy which is to construct a facility that is safe and secure for the public, staff and inmates; as well as the concept of a functional facility to be operationally efficient, Yates rates extremely poor with their vertical design and placement choices of high movement housing units. With the proper amount of land, the preferred modern theory of most jails and prisons try to keep it to no more than 4 levels.

Those contemplating building a new jail at a location remote from court facilities should consider the staffing impact and whether alternatives to in-court appearances -- such as *video first appearance* or *a first appearance court at the jail* -- would be feasible. Designers must also consider the impact of frequent movement to court facilities:

- separating the flow of inmates, public, and court personnel;
- searches before and after court appearances;
- temporary court holding;
- holding at the remote court facilities; and
- potential meal service, attorney visits, and emergency medical services.

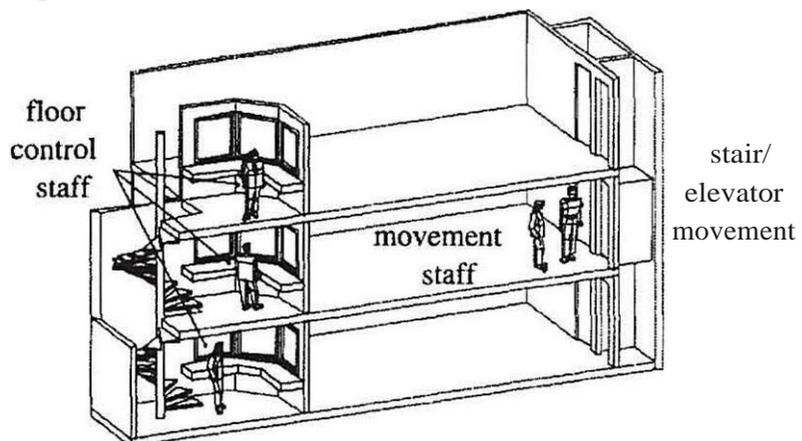
Another staff-consuming activity is providing transportation to, and security at, *medical facilities* in the community.

SINGLE-LEVEL VS. MULTI-LEVEL DESIGN

A multi-level design with just 10 to 15 beds on each floor can drive staffing costs to unaffordable levels. For example, if each floor requires a minimum of one 24-hour post, a 3-floor jail with a capacity of 45 beds could well require a minimum of 15 housing area security staff (3 floors x 3 posts x 1.67 relief factor = 15 staff) just to meet minimum standards in some states and to ensure safety and security. This does not include administrative staff, support staff, or any other security staff.

In addition, movement of people and services (food service and laundry, for example) can become more time consuming and complicated in a multi-level facility, particularly a small one with fewer staff. Required stairways and elevators present the jail staff with additional surveillance problems and security risks. Multiple levels also add to fire safety complications in terms of design and exiting. Also, the potential exists for increased maintenance problems and costs (elevator service, more potential for equipment failure, and more problems in managing operations when essential equipment fails).

Multiple levels also eliminate the ability to create direct sight lines between staff posts and preclude any direct interrelationship between them unless an attempt is made at some sort of *vertical connection* such as a stairway.



VERTICALLY
CONNECTED POSTS

Any attempt to connect fixed posts on two or more levels must be carefully evaluated since there are potentially serious limitations of this approach.

- *Loss of control.* With vertically connected control positions, the loss of one position in an assault can cause the loss of the other(s) unless special precautions are taken. These precautions (lockable hatches or doors) can complicate design and limit the actual connection between levels.
- *Insufficient staffing.* Placement of a secure control post on each floor visually linked to adjacent housing units represents a remote surveillance form of design. Yet if cost-saving measures result in only one officer moving vertically from one floor's observation post to another to control both floors, the design compromises the benefits that make the remote surveillance approach superior to intermittent surveillance (i.e., continuous observation of the inmate population and immediate intervention during conflicts and altercations).

Additionally, staffing control posts on multiple floors with one person becomes problematic when staff are needed simultaneously on two levels to unlock doors, back up roving officers, etc.

INMATE
SEPARATION

The extent to which inmates are separated in the facility and the manner in which separation is achieved can translate into staffing requirements. The need to separate inmates is addressed in all standards and was discussed in an earlier section of this document. Often, the greater the *number* of distinct housing units a facility has, the more staff it needs to supervise the units.

The *types* of inmates to be housed in the facility can also dictate the types and number of staff needed. A facility that houses both male and female inmates, for instance, should have both a male and a female jail officer on duty at all times and space for both (posts, lockers, showers, etc.).

If the jail has a long-term population, more programs and services -- such as exercise, visitation, work release, counseling, and mental health services -- and additional staff to administer them must be provided. A facility that primarily detains violent felons and career criminals requires more intensive staffing than one that houses nonviolent misdemeanants such as drunk driving and minor property offenders.

Decisions on inmate separation, housing types, and staffing levels should be based on the collection and analysis of data very early in the functional programming phase of the project.

VERTICAL VS. HORIZONTAL EXPANSION

No matter what method or expansion capacity number is chosen, it is best to err on the high side. The expansion plan by no means commits the jurisdiction to build additional beds. But if additional capacity is ever needed, it can be accommodated by the building and the site.

Additions to a jail can be built in basically two ways -- vertically or horizontally.

Vertical expansion assumes that future expansion will be constructed on top of the existing jail. In the case of housing, expansion is typically planned to be built on top of an existing housing pod, with the new pod having the same basic design and perimeter wall footprint as the pod below. With horizontal expansion, it is assumed that expansion construction will be adjacent and contiguous to the existing building.

The major benefit of vertical expansion is that a smaller site can be used because the expansion will take place on top of the existing building. This may be desirable if the jail is to be built on a small downtown site. However, several drawbacks to the vertical expansion approach should be considered:

- *Initial design may adversely affect design of future expansion.* If housing expansion is going to be constructed above an existing housing pod, it is normally assumed that the future pod will be designed like the pod below. This could, however, adversely affect the design of the expansion housing by eliminating design flexibility.

For example, assume that the vertical expansion plan calls for a dormitory to be built above an existing dormitory but, because of changing circumstances, a high-security housing pod with single cells is needed instead of a dormitory. Unless there is major renovation to the dormitory, the high-security housing cannot easily be built above it because the locations of interior plumbing and mechanical chases are not compatible with high-security housing.

In the same vein, jail standards could change from the time the jail is built to when expansion is needed. New standards may dictate different requirements for cell size, dayroom size, number of showers per inmate, etc. Like the above example, the housing area below dictates design of vertical expansion housing to a great extent.

Horizontal expansion, on the other hand, can provide flexibility. It will not be constrained by an existing building footprint or the plumbing and mechanical chases of a housing unit below.

- *Higher Initial Construction Cost.* If vertical expansion is to be used, initial construction costs for the structural elements of the building will be higher because the structure (columns, beams, etc.)

EXPANSION
CONCEPT FOR
EACH COMPONENT

must be designed and built to also support the weight of the future expansion construction.

- *Disruption to Facility Operations.* Vertical expansion will disrupt facility operations during construction. Construction workers, tools, and equipment will need to be inside the security envelope. If housing is to be built on top of an existing housing area, that area may have to be vacated during construction. This would be extremely disruptive because beds could be eliminated for a long period of time.

The expansion plan should not only include an expanded bed capacity, but also an expansion concept for every functional component of the Jail. These expansion concepts will tell the designer how each component will accommodate future capacity requirements and will, in turn, begin to dictate design and location. Considerations and options for expanding each component follow.

- *Master Control.* Allowance must be made for future control systems and panels. If the control system is computerized, expansion can be accommodated by adding control screens to the monitor; this does not require much if any additional space. If a hardwire control system is used, then space must be allocated during initial construction for panels that will control future locks and intercoms. Since this component is typically buried within the core of the building, it is difficult to expand without major renovation and disruption to operations and should be initially sized to accommodate expansion capacity.
- *Intake-Release.* This component should be sized to accommodate the expansion capacity of the jail because it must be continuously available for the intake and processing of arrestees. Renovation or expansion of this area would be extremely disruptive.
- *Property Storage.* Many jails store inmate property in garment bags, and expansion of this component can be achieved in several ways. First, the area could be oversized to accommodate additional hanging racks at a later date. Second, a tiered hanging rack could be used, where the lower tier could accommodate the initial capacity and the upper tier the expansion capacity. Third, the space could be designed to accommodate a hanging conveyor system similar to that found at a dry cleaning establishment. A conveyer system allows property bags to be stored more compactly, thus saving square footage. Space for the storage of bulk property items should be sized for expansion capacity.
- *Health Care.* This component could be designed for expansion capacity or it could be designed for initial capacity and expanded when the need arises. If the latter expansion option is chosen, the