▶ **SUMMARY**
Only after you have studied the community's growth and have agreed on a logical plan that encompasses square footages that make sense, can you begin to design a facility that truly meets a department's needs.

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■ Mesquite, Texas
Police Department

FACILITY DESIGN – NEW OR RENOVATION

PLANNING FOR NEW CONSTRUCTION, RENOVATION OR ADAPTIVE REUSE

> By Hal Sargent

As architects and planners who regularly assist police departments in resolving growth issues, we have a simple way of knowing when a department can no longer avoid a discussion of a possible major renovation or expansion of facilities: They have run out of existing buildings to acquire from private sources.

It is something we see all the time: bank branches, medical clinics, and other similar small buildings or office suites that are no longer valued by their institutions. They are offered to city agencies, who use them as overflow space. This type of multiple Band-Aid approach can satisfy immediate needs, but at the point where departments become spread over numerous addresses, or when employees are asked to move multiple times, it can become costly and difficult to manage.

For a department on the verge of hiring an outside firm to study its operation in detail, the process can seem daunting. Assessing a department's current facili-

ties and its options moving forward goes well beyond locating and counting up the department's itinerant employees. Such studies produce a huge amount of data—so much data that a department could go for years looking at all the what-ifs.

But, departments typically find that the process offers invaluable insights into how the department functions now, while providing a roadmap to future operational efficiency, regardless of what type of capital project it ultimately undertakes.

Something Old, Something New

Although many cities first engage the services of a planning specialist specifically because they want to know whether renovation of their existing building is feasible, this is actually among the more straightforward issues planners must contend with. Deciding between new construction and renovation is strictly a matter of 'asset value.'

For a renovation to be financially worthwhile, the amount of money spent in demolition must be lower than the value of the asset that remains prior to rebuild. If you were to spend $3 million stripping away interiors to save a building shell and site worth only $2.5 million, you'd have just thrown away $500,000.

The equation in Keller, Texas, where we were brought in to study the renovation/new construction question, really was that simple. This suburban community had a large jail, representing about a third of the existing building, with which the department was very happy.

Given this asset's tremendous value, it would never have made sense to build an entirely brand-new facility. With that settled, the next question was whether the project could be phased in such a way that temporary quarters would not have to be purchased or leased to relocate the department for the two years it would take to fully design, expand, and renovate the building.

In cases where there is ample land to expand horizontally, phasing is generally possible. On tighter sites, a vertical

■ **Keller, Texas Police Regional Facility**

expansion, which requires removal of the existing roof and much more in the way of structural upgrades, will necessitate sending the department offsite for the duration of the project, and such related costs must be factored in.

It's the hundreds of smaller questions that quickly become the focus of facility needs assessments. To begin with, unlike many municipal facilities, police buildings are extraordinarily complex, technically, to plan. To offer a contrast, design of public schools adheres to state standards for everything from classroom square footage to the placement of sinks, and there are no 'back of the house' issues to deal with—and much less in the way of state-of-the-art technology.

Once you know the number of rooms, the templates for public school standards take over. Public safety buildings, on the other hand, have public and secure sides that must be integrated, as well as operational requirements that change from jurisdiction to jurisdiction, depending on the size and growth of the community in question, specific enforcement issues, local demographics, structure of local services, and many other unique characteristics.

Planners thus have two divergent goals—to draw up a list of comparable

cities, with the purpose of suggesting general scope and square footage of potential facilities; and, at the same time, to identify the many singular aspects of police (and city) operations that will suggest multiple alternatives for each separate space in the facility, and the facility as a whole.

In the first case, demographic data is collected on current populations, projections of population growth, local demographics including expectations for service, regional influences, and regional transportation networks, all of which will have an impact on the size and structure of police divisions.

For example, two cities that are very comparable in terms of population size, density and cultural mix may diverge significantly just because of the presence, in one case, of a nearby larger city on a major highway or a location near an international border.

Also serving to confound comparability will be the specific community's culture and traditions, and the current organizational structure of its city agencies—a reason why the existence or performance of a citywide needs assessment is often another critical aspect of public-safety facility planning.

Among the common examples that will impact planning: An adjoining or

separate city hall; the presence (or not) of neighborhood services or other divisions that the community has requested and nurtured over time; population density within specific neighborhoods; the community's primary developed environment (urban, suburban, rural, exurban); and the nature of the community's demographics (high or low per capita income, for example).

Looking Forward

Certain aspects of a police building are somewhat automatic in terms of space allocation and function, but a key in all of these investigations is planning for future growth. While the nature and needs of a tactical unit, for example, are similar across jurisdictions, a growing community that can foresee a gradual shift from suburban to urban environments will need to plan carefully to be able to accommodate a more robust unit. Similarly, city jail planning must take into account how quickly regional agencies have historically met their obligations to take detainees.

At this stage of a needs assessment, divisions are met with singly, with information then brought back to a senior group to process, integrate with other divisions' needs, and make recommendations. Things as simple as conference rooms require many conversations, and matrixes that spell out what sizes of conference rooms, shared by which divisions, help ensure departments don't end up with unused or duplicated space, but instead can look forward to efficient space that meets many different functional needs.

Since existing operations will reflect the space the department currently occupies, planners and the various divisions will spend hours investigating both how the department, for example, handles evidence and how best practices suggest it should handle evidence in the future. Care must be taken, by everyone, to avoid a default to 'the way it has always been done' if it can be done better, even where a new system will add to the up-front cost.

For example, in most new facilities,

■ **Grand Prairie, Texas Public Safety Facility**

accommodations are made for the inclusion of storage lockers in the evidence department equipped with an electronic tracking system. These systems are more costly, but as officers, evidence technicians, and lab technicians drop off and process articles stored one to a locker, the resulting electronic trail of who has accessed each locker helps the department maintain control of sensitive items.

Anticipating future needs has, of course, always defined planning, but the accelerated pace of technological change affects many more areas of facilities than ever before. Everyone knows about the challenges and costs of bringing fiber to a site, and most are probably aware of the issues involved in adding bandwidth to allow for videoconferencing and a flood of data storage—but even still, many designers who have tackled police buildings failed to anticipate and plan for the rise in importance of computer forensics.

An even more recent development in forensics is the need for RF shielding in areas in which data is removed from electronic equipment in evidence, as well as storage for same. Many planners will recall a time when in-house reference manuals existed that laid down procedures for the design of these specialized spaces, but the pace of change now is such that these manuals are out of date by the time they reach the printer.

Study Hard

For a planning firm with experience in the building type, it is not unusual for the needs assessment to be able to pinpoint an initial construction budget based on the city's stated goals for the building project. But each city responds differently to the data they receive, and the resulting back and forth, with building components added or removed, made larger or smaller, and all the different permutations of how different city agencies and public safety divisions interact, is one of the fascinating aspects of performing studies.

It is only after you have studied the community's growth and have agreed on a logical plan that encompasses square footages that make sense, that you can begin to design a facility that truly meets a department's needs. What you quickly see is there are many possible solutions, and the ultimate design is always interesting to watch take shape. It might be totally different from what anyone imagined at the beginning of the process, but planned with sensitivity and foresight, the "right" building for the community emerges every time.

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