

# Space Standards and Projections

## Needs Assessment

The consulting team collected information from Cape Girardeau County which has been used to develop base line planning data. Information was collected through individual interviews, and national and regional information databases. The assembly of this information includes:

1. Historic County Population
2. Future County Population Projections
3. Current and Projected Personnel Counts by Department
4. Individual Interview Notes

Each department was evaluated for the current and projected staffing as well as file and ancillary functional needs. The following is a description of some of the areas with the most critical issues to be resolved.

### Courtrooms

The courthouses currently contain 5 courtrooms between the two buildings but 3 of the courts are very small and do not provide the space required for the way the courtrooms are currently used. Within the next 20 years it is projected that there may be as many as 6 judges needing courtroom space within the county. It is desired by the Judges that the courtrooms be consolidated into one building. This would have the benefit of allowing each of the judge's offices to be located in the vicinity of their courtroom. Currently the judges have to go back and forth between the two courthouses depending on what type of case is being tried. After discussing the current and anticipated courtroom usage it seems that keeping a mix of jury and non-jury courtrooms should work well for the County. Security within the courthouse needs to be addressed to make it a safe environment for the public and the staff.

Cape Girardeau county judges would like to be able to permanently assign one courtroom to each judge. This is a typical arrangement for a county of this size. As the County grows and more judges are added scheduling courtroom space may need to be considered.

The Juvenile Division has a desire to have a separate non-jury courtroom located at the juvenile center to facilitate the separation of juveniles from adults. This courtroom space would be used several days a week.

### Judges Chambers

There are currently 2 Circuit Judges and 2 Associate Circuit Judges based in Cape Girardeau County. In addition, there are 2 additional Associate Circuit Judges that hold court at least twice a week in the County. It is projected that there will be 6 judges based in the county full time. In addition space for a visiting judge should be provided.

### Clerk of Court

The Circuit Clerks are split between the two courthouses. Neither building has space for additional clerks or for additional file storage. The clerk's department is currently qualified by

the State to have 4 more staff than they have been funded for. Between this current shortfall and growth projections over the next 20 years nearly it is anticipated that more space is going to be needed in the near future. The Circuit Clerk herself has an office in each building and must split her time between them. This makes for very inefficient management and is a challenge to overcome. Consolidation of the courts into one building would allow the Clerk of Court to consolidate as well.

### **Public Defender**

The Public Defender's office is located adjacent to the jail with its own separate entrance. There is no additional space to accommodate any more staff. A plan for relocation to a larger office space will need to be considered.

### **Prosecuting Attorney**

Over the next 20 years the prosecuting attorneys department is projected to increase by 7. There is not any additional space to accommodate the anticipated growth.

### **Collector**

The Collectors office is very crowded with all of the staff in some of the smallest spaces of all of the departments. The counter area is inadequate to expedite service to the public during the busy tax collection season. If there were more counter space then more windows could be opened allowing for faster service. There is not any available space for growth. In addition, this department has one of the highest volumes of public needing to visit it and yet it is located in the back of the second floor of the building. Locating it on the main floor where the public can easily find it would be ideal.

### **County Clerk**

The Clerk's office handles all of the elections in the County. There is some space in the lower level for storage of the election booths and equipment but it is not enough space for everything. As the county grows more equipment will be needed. Currently equipment is also stored in the basement of a house in the park owned by the county. Ideally it should be stored in one location near the clerk's office and have access to a dock for loading and unloading equipment.

### **Jail**

The jail is currently operating at about 30 inmates over capacity. At some point additional bed space will either need to be purchased from another county or an addition will need to be made onto the jail. If a new courthouse is built adjacent to the jail it needs to be designed to allow for future expansion of the jail.

### **Security**

The main shortfall for security is the lobby security screening areas. There is not enough queuing space for the public to line up and they frequently have to stand in line outside of the building. In addition, trying to maintain security for both courthouses and the administrative buildings is costly. Consolidating the courts and other departments into one building with a single public entrance would reduce the number of bailiffs and security officers needed to secure the buildings.

Currently, inmates are walked across the street from the jail in chains. This is an unsafe way to transport inmates and is very staff intensive. If the courthouse could be located adjacent to the jail then a more secure path from the jail to the courtroom could be provided. This would make the public, staff, and the inmates all safer.

### **ADA Accessibility Requirements**

Throughout all of the facilities there are areas that do not comply with the American with Disabilities Act. Many of the public counter areas do not meet ADA. In addition, the courtrooms are not in full compliance with ADA requirements. The second floor courtroom and offices in the Common Pleas building are especially problematic. The Court Annex Building in Cape Girardeau does not have an elevator limiting access by the public to the law library and the Juvenile Division. A full assessment should be taken prior to remodeling any building to determine what shortfalls there may be and a plan for how to fix them should be made.

## **SPACE STANDARDS**

This Chapter provides a description of the various space standards and guidelines that are applied to the projected future numbers of agency personnel, trial courts and jail bed capacity and support functions needs in order to estimate the total probable space needs for each agency or department included in the study. From the projected personnel and functional needs (jail beds, court sets, support spaces, etc.) the approximate total building square footage size of both the current and future space need is derived. Space standards and professional practice guidelines provide an objective basis of uniform measurement of space expressed in square footage per person or per space use area. Such standards are useful to help assure:

- The most efficient use of county-owned and leased space;
- Uniformity and consistency among personnel in all departments and agencies;
- Uniformity and consistency in the allocation of space for support operations and equipment throughout all agencies and offices;
- A uniform basis for projecting space needs for personnel and equipment in order to logically plan for the acquisition of future building space; and
- A reasonable probable cost estimate of needed space.

This chapter explains the basis for estimating total space need based on the progression from functional use spaces or areas to complete divisions, sections, departments or agencies that make up a total projected building space need. This chapter summarizes the guidelines and space estimating standards and the method of their application for the different functional components and spaces needed in a government and judicial center; summarizes the existing space currently occupied by each department; and recommends an estimating standard per staff or unit for each agency or department to use as a variable in projecting total space needs.

### **NET SQUARE FEET**

Estimating the amount of useable area or floor space needed to provide an appropriate environment capable of supporting any type of function or accommodation involves the application of space allocations and in some cases space standards to the operational requirements of the functional

component (e.g., office, rest room, jail cell, equipment closet, gymnasium, etc.). These standards, guidelines and specific space allocations that become an estimating standard for a particular project are expressed as “net useable square feet,” or NSF. The origins of the guidelines and standards presented in this section vary. For some types of construction, commonly used space standards exist. In office environments, for example, manufacturers of office furniture systems use recommended space standards for cubicle and office sizes. The size of public toilets can usually be derived from building codes and ADA accessibility requirements. However, standards for a conference room, a cafeteria, a queuing area, etc., do not exist formally, but a combination of “best practice” guidelines and common sense can yield estimates from which a total office, agency and ultimately an entire building space need general estimate or a detailed architectural space program can be developed. Many large urban counties and cities in the United States have developed and adopted their own local space planning standards that are useful in creating uniform conditions for comparable office spaces.

Note that the space planning standards for the Cape Girardeau County space study are based upon a combination of typical space size requirements as well as existing office or department areas available. These guidelines or standards are applied across all departments and vary based on the number of staff by position description. Administrative space standards based on the U.S. General Services Administration standards, similar standards from other counties, and Treanor Architects professional planning experience are the basis for projected net square feet requirements.

In every building, some function(s) (usually the overall mission) establishes the “form.” In a courthouse or judicial center, the litigation space (courtroom) establishes the most prominent form of the building. Since a judicial center is far more than a place of litigation, the actual space required for courtrooms is less than the critical support spaces. Standards for courtrooms, hearing rooms, and other spaces directly related to the courtroom are derived from the National Center for State Courts (NCSC), the United States Court Design Guide, and Treanor Architects court planning experience.

Law enforcement and detention facilities have multiple and complex operational and spatial requirements. Offices, workstations, conferencing areas do not differ significantly from non-public safety situations; however, “non-desk space” requirements including evidence and property storage, classroom and physical training, and operational staging areas have unique functional requirements. All levels of staff must be provided with adequate space to carry out their responsibilities safely and effectively. Although there are no space standards that relate solely to sheriff operations, the experience of similar type agencies offers guidance in assessing local requirements.

For jail or adult detention facility space requirements, minimum standards by the American Correctional Association (ACA) are normally used. Consequently, the ACA 4<sup>th</sup> Edition Performance Based Standards for Adult Local Detention Facilities is the nationally recognized standard that should be followed by Cape Girardeau County in jail areas space projections. In the event of a future lawsuit against the County that could include a challenge to a jail’s physical space conditions, compliance with ACA physical plant standards have historically been upheld by trial courts as providing safe, reasonable and humane conditions of confinement.

## **DEPARTMENTAL GROSS SQUARE FOOTAGE**

In a needs assessment, the size of individual spaces is not the focus but rather the total allocation of space needed for all spaces for all staff positions for an entire office or department to be able to function properly. For example, a number of specific offices may each need 100 net useable square feet (NSF) in their interior dimensions, but the total space needed to join the offices together in a logical functioning office or working area requires additional floor area for interior partition walls and circulation space between offices. That extra space need is known as departmental gross square footage (DGSF).

Using data provided by Cape Girardeau County, Treanor Architects calculated the amount of existing DGSF currently occupied by each department and/or division to include Office (staff driven), Courtroom, and Other (non-staff driven) spaces. The amount of DGSF used varies by department based upon an understanding of the types of spaces within the department and the amount of circulation space required. Treanor Architects adopted an office DGSF per staff allocation for each department/division based on: (1) a review of the NSF standards used for Cape Girardeau County; (2) the existing allocation of office space per staff; (3) private and professional practice standards and (4) Treanor Architects planning experience.

## **BUILDING GROSS SQUARE FOOTAGE**

*Building gross square feet* (BGSF) is the sum of all assignable (DGSF) spaces, plus non-assignable spaces needed to include: organizing a number of sections, divisions or departments into a unified layout with inter-area circulation corridors; exterior wall thickness; vertical circulation between floors and horizontal circulation between separated building components; and distributed mechanical/electrical closets. A BGSF factor is applied after the addition of all the DGSF components to yield a final estimate of the full spatial impact of each component of the building. Building grossing factors can range from 15% to 60%+ depending on the building's functions and overall design conditions. In general, the more subdivisions (rooms) or public spaces required within a building, the higher the grossing factor, which is also true at the departmental level. As such, a building with predominately individual rooms will require a higher grossing factor than a building with predominately large free-flowing open spaces.

## **SPACE NEEDS PROJECTIONS**

Projections of future space needs are based on both present conditions and other factors to include present space deficiencies, projected staff growth, planned or anticipated functional or operational changes, and space standards based on generally accepted planning and design guidelines and/or Treanor Architects experience in similar projects. These estimates in turn provide a planning basis for examining alternative development strategies and building concepts and thus determining preliminary estimates of construction and project costs.

Space projections by department/division are provided in the following pages that can be used for preliminary planning estimates, concept layouts and related preliminary project capital cost estimates to analyze what alternative building solutions may be most appropriate for new and/or remodeled county facilities.

The following documents the current and future space needs for each department.