

Pennsylvania State System of Higher Education Facilities Manual

Volume VI Facilities Planning

Facilities' planning is a continuous process to ensure that adequate facilities are available to meet mission requirements. Board of Governors Policy 2000-02 requires each university to "develop and maintain a Capital Facilities Planning and Programming Process for determining capital facilities requirements." Planning normally begins with preparation of an inventory of assets for comparison with mission requirements.

Buildings and Structures

Mission requirements for buildings and structures for institutions of higher education have been categorized according to a systematic taxonomy by the National Center for Education Statistics for comparative purposes nationwide. The State System of Higher Education has adopted the Center's postsecondary education facilities inventory and classification manual with appropriate modifications for recording and maintaining the State System's facilities inventory data. The State System's version of the manual, *Facilities Inventory and Classification Manual*, is contained in Appendix VI-A-1.

During the summers of 1993 and 1994, each university, branch campus, and Dixon University Center were inventoried by contract with the Pennsylvania State Institutional Engineering Advisory staff using the manual. The resultant data, with corrections, as justified, form the basis for the State System's official inventory of facilities. The replacement cost for each facility is determined by multiplying the gross square footage of the facility times the square foot cost (contained in Appendix VI-A-1, Supplement #2) for each type of facility times an area cost factor and a multiplier for design and contingency costs. This data has been used in the State System's allocation formula beginning FY 1995/96.

Using comparisons of national data, the universities of the State System of Higher Education and state-related institutions of the Commonwealth of Pennsylvania, the State System developed the space planning guidelines contained in Volume VI-B. These guidelines serve as an allowance of required facilities by category of facility for State System universities. The inventory data collected in Appendix VI-A is compared with the space planning guidelines to determine facilities excesses and deficiencies. Deficiencies may be satisfied by using excesses in another facility category or by programming new facilities according to Volumes IV, or V and VII, as appropriate.

University master plans are prepared according to the provisions of Volume VI-C to determine the site location, architectural style, and time frame for programming the new facility based on the university's mission and strategic plans.

Condition audits are conducted or estimated using the life cycle procedures specified in Volume VI-D. Condition audits form the basis for determining maintenance projects addressed in Volume III and for programming repair or renovation facilities projects in an auxiliary or capital appropriations budget request, as addressed in Volumes V and IV, respectively. Condition audits and life cycle requirements, as specified, are updated annually as part of the capital facilities budgeting process.

Planning for projects which are required to be processed differently than the standard procedures specified for all projects is addressed in Volume VII-E. Planning for official residences, historic facilities, and projects for compliance with statutory requirements may require special funding and, therefore, are addressed as special projects in Volume IX.

During FY 1997/98, the System, in conjunction with West Chester University of Pennsylvania, began developing an electronic database to record facilities inventory and space guideline planning data. The System's facilities database architecture is shown in Figure VI-1. In March 1998, the System began recording building inventory and space guideline data. It is intended to include pictures of each building with single line floor plans for the building inventory data in the future. The System's Capital Facilities Planning and Programming Process (CFP³) Committee will continue to develop the manual for recording infrastructure inventory and real estate inventory data portions of the facilities database.

Infrastructure and Land Improvements

In 2000, the System initiated a process through the Capital Facilities Planning and Programming Process Committee to inventory the infrastructure and land improvements constructed on System real property. Using the Means, other estimating resources, and actual cost experiences, the infrastructure and land improvements were categorized into component parts. Universities, at least annually, update their inventory in the PASSHE facilities database. Figure VI-A-2 provides a copy of the spreadsheet and a description of each category of infrastructure and land improvements included in the inventory. To keep the inventory manageable, no attempt was made to capture every pipe size, light standard, etc., found in the Means or other cost estimating guides or programs, but groupings of reasonable sizes and generic types of items were used with a reasonable cost and life span to estimate the value of the infrastructure and land improvements found on System campuses.

Continuous Updating

The buildings, structures, infrastructure, and land improvements must be considered works in progress since inventories change frequently to support the System's educational mission. The Capital Facilities Planning and Programming Process Committee meets periodically to address needed changes in the inventory and space guidelines.