UNIVERSITY OF HOUSTON SYSTEM
ADMINISTRATIVE MEMORANDUM

SECTION: **General Administration** **NUMBER:** **01.B.09**

AREA: **Facilities and Physical Plant**

SUBJECT: **Capital Facilities Life Cycle Renewal**

---

1. PURPOSE

The purpose of this document is to establish a policy for reserving funds for future facility planned renewal for new capital projects and to establish the requirement for developing a funding source for the established capital program. This funding reserve will enable each System University to support the Life Cycle Renewal of new facilities, thus reducing the future backlog of facility deferred maintenance, bolstering the reliable operation of the System University's diverse and new investment portfolio of building assets and maximizing the assets life cycle. This reserve, combined with additional Association of Physical Plant Administrators (APPA) Level 3 funding for general and preventive maintenance, will result in establishment of an acceptable level of funding for the System University's physical assets.

2. DEFINITIONS

2.1. Asset: Real property that the System University owns, the service life of which may be materially extended by Capital Renewal. The definition of asset can be for a major building component or the building itself.

2.2. Asset Life Cycle: The period of time between the initial conceptual design through design, construction, operation, maintenance, renewal and ultimate disposal of an asset.

2.3. Capital Improvement: A process that enhances the operation, reduces the operating costs, or materially extends the service life of a facility. Capital Improvements are less significant improvements than Life Cycle Renewals, but may be combined within a larger Life Cycle Renewal effort in order to achieve cost efficiency and lower the impact on the occupants and users of the facility. Facilities re-adaptations and energy efficiency retrofits are an example of a Capital Improvement project.

2.4. Capital Renewal Budgeting: A business process that aligns the capital asset base with the System University's programmatic and academic requirements. The process integrates financial, maintenance, facility and capital program management systems to create a comprehensive picture of the value, funding requirements, future liabilities and life cycle of the University's assets.
A Capital Renewal Budget considers three types of physical capital expenditures:

a. expenditures related to changes in capacity or capability,

b. functional requirements,

c. or renewal of existing assets.

2.5. Capital Renewal: A building program which entails a wide assortment of repairs to and replacement of such components as roofing, heating and cooling systems, conveying systems, other specialized building systems, structure, and the building envelope. Interior finishes may also be considered for Life Cycle Renewal funding.

2.6. Capital Repair: A repair expected to extend the service life of the facility or its systems.

2.7. Current Replacement Value: The amount that an owner or insurer would have to pay to replace an asset at the present time.

2.8. Deferred Maintenance: The degree to which spending on routine repair and maintenance falls below what is required to achieve the building component's intended service life.

2.9. Disposal: The process which occurs when a facility has effectively reached the end of its service life and can no longer be sustained by means of an affordable maintenance and Life Cycle Renewal effort. Disposal may involve the sale of the asset (off-campus assets) or its decommissioning and demolition.

2.10. Education & General (E&G) Facilities: Buildings that are used for instruction, research, public service, or other activities that derive from and support the System University's primary role and mission.

2.11. Facilities Condition Audit (FCA): A process which assesses a building's structural and systems condition and assigns a Facility Condition Index. A FCA is used to report the health of major equipment, systems and facilities and where they are in their life cycle and what intervention is needed and how soon – maintenance, refurbishment or planned replacement.

2.12. Facility Condition Index (FCI): The sum of the identified deficiencies (in dollars) divided by the estimated Current Replacement Value of the building. The FCI is used to establish priorities for project funding. It may also be used to determine if reinvestment should occur at all. The recalculation of the FCI should be updated, at a minimum, everythree years as the cycle of updates occurs for a particular set of assigned buildings.

2.13. Life Cycle Renewal: The final step in a maintenance program, which has enabled the most cost effective use of a facility. Life Cycle Renewal usually applies to the base components of a facility, not to the replacement of the entire facility.

2.14. Non-Education & General (non-E&G Facilities): Auxiliary or other System University facilities whose primary purpose is not instruction or research and whose activities are not funded by state dollars.

2.15. Obsolescence: A loss in value due to reduced desirability and usefulness of a facility resulting from outdated design and construction.

2.16. Planned Maintenance: A process that improves or preserves the appearance and functionality of an asset, is performed at planned intervals and is normally funded by the operating budget.

2.17. Preventive Maintenance: A process that is performed on an asset to support continuing operation at its optimum efficiency. Preventive maintenance work must be completed at regular intervals; if neglected, dramatic and costly asset failures may result.

2.18. Renewal Set Aside: An initial annual amount equal to 3% of the Current Replacement Value of a building except for parking structures which will be 1%. This amount will be reevaluated at minimum every three years as part of the Facilities Condition Audit cycle for assigned facilities.

2.19. Repair Work: A process that restores to operation a building component that has failed. Repairs typically do not significantly extend the expected service life of the building.

2.20. Total Project Cost: The total sum required to construct a new building or major renovation, or to repair or procure a major building component, inclusive of feasibility studies, design and engineering fees, testing fees, bond and insurance costs, reimbursable expenses, administrative costs, project contingency, and closeout costs. The cost of a project's initial FCA shall be included within the Total Project Cost.

3. CAPITAL RENEWAL REQUIREMENTS

3.1. Facilities Condition Audit

A. All new facilities will be required, in the third year post substantial completion, to undergo an independent, third-party Facilities Condition Audit (FCA) to establish a baseline capital plan in order to effectively plan for annual and ongoing needs.

B. The most current FCA baseline data will be updated on existing facilities on a rolling basis every three (3) years.

3.2. Renewal Program Management

A. Renewal is a core component of a strategic facilities plan. Given the finite amount of life cycle renewal funds available, these funds are directed only to projects of highest priority.

B. Using the most current FCA baseline data, each System University will prioritize the renewal needs utilizing the following categories of needs:

1. Critical – Current Year

2. Potentially Critical – 1 Years

3. Not Yet Critical – 2 to 5 Years

4. Long Term – 6 to 10 Years

3.3. Business Plan Requirements

A. Non-Education and General Space: The owner of the proposed building or building being considered for renovation must submit a business pro forma to the University of Houston System Office of Finance for review. The pro forma must include an expense line item for a Capital Renewal set aside to accumulate funds for future capital repair or life cycle renewal. The project's identified available funds after meeting Total Project Cost expenses and renewal set aside must be sufficient to pay the debt service (if applicable) plus a 15% cushion.

B. Education and General Space: For E&G Spaces, the System University is considered the building owner. On new construction or renovation of Education & General facilities in which the State of Texas is appropriating all of the debt service, neither a business pro forma nor the 15% identified available funds cushion is applicable. However, a Capital Renewal set aside is applicable to these projects and will be included in the annual capital renewal budgeting process of the System University.

C. Each System University will utilize the FCA data to present annual recommendations of capital renewal project needs to the System University executive leadership during the annual BOR report on deferred maintenance.

4. RENEWAL SET ASIDE FUNDS MANAGEMENT

Each System University will develop written procedures to provide for renewal set aside funds and the use of such funds. An annual report must be submitted at the same time as the annual BOR report on deferred maintenance to the System CFO verifying the set aside funds and account health.

5. LIFE CYCLE RENEWAL PLAN

5.1. Within three months after a building's substantial completion, a specific Life Cycle Renewal plan will be established for the facility by each System University.

5.2. This plan will form part of the campus-wide integrated facilities management plan and will ensure that the building Life Cycle Renewal program is documented and can be implemented in accordance with University priorities.

6. FACILITY OBSOLESCENCE, RE-ADAPTION OR DISPOSAL

6.1. A time is reached eventually in the life of the facility asset when it is not practicable to continue investing capital funds in the asset. Increased maintenance and repair (patching) is typically then implemented to keep the facility operational until the services supported by the asset can be relocated. With the onset of obsolescence, no further investments should be made pending asset disposal.

6.2. In the case of real property, the requirement for disposal is signaled by a disproportionate or excessive FCI and/or a threshold cost to address capital needs that are normally greater than 50 percent of the Current Replacement Value of the facility. Disposal will be considered in the event that continued operation of the facility presents an unacceptable financial and liability risk to the University. The recommendation of investment, full investment and re-adaptation, limited investment, or non-investment and disposal will be made by Facilities Management to the University's executive leadership team during the annual capital planning process.

6.3. The final decision will be managed and documented as part of the capital planning process and will become documented in the five year plan in which the decision and investment or decommissioning/demolition is to occur.

7. REVIEW AND RESPONSIBILITY

Responsible Parties: Senior Associate Vice Chancellor for Finance

Associate Vice Chancellor for Administration

Associate Vice Chancellor for Facilities/Construction Management

Review: Every five years

8. APPROVAL

Approved: _____
Senior Vice President for Administration and Finance

_____
Chancellor

Date: _____