

November 15, 2010

Supporting Components for the UH Physical Master Plan

1. Facility Condition Audit

- a. The goal of this program is to create a high level assessment of each building on the University of Houston Main Campus. This would be base-lined wherever possible off the 2001 building audit reports with updates made as needed to assessments based on current conditions.
- b. How will this be done? The facilities condition assessment (FCA) will be the document used to communicate physical deficiencies to the users. A walkthrough survey will identify the subject property's physical deficiencies, and recommend various systems, components, and equipment that should be observed by the field observer (architect) and reported in the facilities condition report.
- c. Report will provide the initial baseline for creating capital priorities for the existing physical assets of the university that once aligned with the academic priorities will help to establish maintenance and renewal priorities for the 10 year capital plan as well as establish backlog inventories for future projects.
- d. The scope of this work will be accomplished in two (2) phases.

*Phase One (1) - will consist of five buildings: (1) S&R1, (2) S&R2, (3) Cullen Engineering Buildings and (4) Health Science Center (Auxiliary)

*Phase Two (2) - will assess the remaining 73 building

2. Other tasks performed simultaneously

- a. Inventory of current approved equipment on campus (research)
 - b. Determine load and emergency power needs (sufficient or not)
 - c. Infrastructure Master Plan Component Development (see schedule below)
 - d. Data gathering on maintenance structures, staffing and expenditures in preparation for CB report – must also report on planned and ongoing maintenance
- ✚ Capital Planning Recommendations will be ranked and categorized at a high level using the below rankings, for which project summaries and estimated construction totals will be provided.
- Priority 1 – Currently Critical (Immediate) (Life Safety or Structural)
 - Priority 2 – Potentially Critical (One year)
 - Priority 3 – Not Yet Critical (2-5 years)
 - Priority 4 – Recommended (6-10 years)

3. Data Classifications

Three classifications, 1) facility adaptation, 2) deferred maintenance and 3) capital renewal / planned maintenance projects will be used to guide recommendations and categorize data to match new CB categories for tracking maintenance needs and expenditures.

- A. Facility Adaptation: Expenditures required adapting the physical plan to the evolving needs of the institution and to the changing codes or standards. These are expenditures beyond normal maintenance. Examples include compliance with changing codes, facility alternation required by changed teaching or research methods, and improvement occasioned by the adoption of modern technology.
- B. Deferred Maintenance: Refers to expenditures for repairs which were not accomplished as part of normal maintenance or capital repair and that has accumulated to the point that the facility deterioration is evident and could impair proper functioning of the facility. Costs estimated for deferred maintenance projects should include compliance with applicable codes even if such compliance requires expenditures beyond those essential to affect the repairs. Deferred maintenance projects represent catch up expenses.
- C. Capital Renewal/Planned Maintenance Projects: A subset of regular or normal facility maintenance which refers to major repairs or replacement/rebuilding of major facility components (e.g. roof replacement at the end of its normal useful life is capital repair; roof replacement several years after its normal useful life is deferred maintenance)

4. PLAN SCHEDULE & OTHER PLAN COMPONENTS

	Infrastructure and FCI Plan	Days	Start Date	Completion
1	Facilities Conditions Assessment	328 days	9/8/10	10/1/11
2	Utility Survey (Documentation of existing utilities)	185 days	9/27/10	3/30/11
3	Water, Sanitary, Storm, Detention	222 days	1/9/11	8/18/11
4	Roadway Master Plan	273 days	11/1/10	7/31/11
5	Landscape (includes sidewalks & irrigation components)	272 days	9/6/10	6/4/11
6	Chilled Water, Condensate and Steam Capital Improvement Plan	81 days	8/23/10	11/11/10
7	Electrical Master Plan	81 days	10/2/10	12/21/10
8	Integrated Physical Plan (Draft Schedule) – all components & new construction	206 days	5/25/11	12/31/11

2010 Definitions - Maintenance Expenses

Deferred maintenance or critical deferred maintenance has no limit on the number of categories, and can rest in one category or all categories. The following list describes each category of deferred maintenance expense.

- **Architectural:** estimated deferred maintenance expense for the architectural structure (foundation, walls, ceiling, roof, etc.) of the building
- **HVAC:** estimated deferred maintenance expense for the heating, ventilation, and air conditioning systems in the building
- **Plumbing and Electrical:** estimated deferred maintenance expense for the plumbing and electrical systems in the building
- **Legislative and Mandated:** requirements such as ADA, asbestos abatement, PCB removal, underground storage tank removal, CFC reduction, Texas Water Commission requirements, hazardous waste, recycling, historical buildings, or other mandated requirements
- **Safety:** estimated deferred maintenance expense for the safety items in the building
- **Other:** estimated deferred maintenance expense that is not associated with any of the types of deferred maintenance listed above.

2011 Definitions: Reporting capital and Operating Expenses

- **Critical Deferred Maintenance** – Any deferred maintenance that if not corrected in the current budget cycle places its building occupants at risk of harm or the facility at risk of not fulfilling its functions.
- **Deferred Maintenance** – The accumulation of facility components in need of repair or replacement brought about by age, use, or damage for which remedies are postponed or considered backlogged that is necessary to maintain and extend the life of a facility. This includes repairs postponed due to funding limitations. Deferred maintenance excludes on-going maintenance, planned maintenance performed according to schedule, and facility adaptation items.
- **Facility Adaptation** – Includes facility improvements and changes to a facility in response to evolving needs. The changes may occur because of new programs or to correct functional obsolescence. This category is sometimes referred to as Capital Renewal.
- **Planned Maintenance** – A systematic approach to repairing or replacing major building subsystems including, but not limited to roofs, HVAC, electrical and plumbing systems, which have predictable life-cycles, to maintain and extend the life of the facility. This category is sometimes referred to as Facility Renewal or Capital Repair. Planned maintenance is normally funded by an institution's capital budget.
- **On-going Maintenance** – Routine upkeep to include, but not limited to, the lubrication of moving parts, checking electrical systems, and patching of roofs. Failure to attend to these tasks may result in accelerated deterioration of facilities and increases the likelihood of extensive emergency repairs. On-going maintenance is normally funded by an institution's operating budget.