

# FY 2012

University of Houston

Facilities Management

## CAPITAL RENEWAL PLANNING SUMMARY PROGRESS REPORT

From 2010 to 2012, Facilities Management (FM), in partnership with Academic Affairs and Administration and Finance has made great strides in quantifying and planning for the University of Houston Capital Renewal and Repair backlog as well as planning for the ongoing care of the physical facilities utilizing an integrated facilities management strategy (IFMS). IFMS is a strategy unique to UH, developed by our FM team, and is comprised of striving to achieve quality service stewardship in support of academic priorities, master planning, new construction, renewal capital and maintenance plans and effective space planning and utilization, all while balancing finite financial resources and community partnerships to leverage support and achieve desired outcomes. While in its infancy stages due to limited capital, IFMS guides the decision making and works to ensure each dollar spent advances the university mission. Successful organizations are built upon a clear established vision and sound planning, and are dependent upon having quality people, quality process and sound performance metrics. Utilizing IFMS will allow the Facilities Management team to establish, empower and engage the workforce and partner with the campus community in a way that allows the service strategy to be embraced, visible, transparent, measurable and sustainable.

# Table of Contents

- Capital Renewal Program Summary ..... 3
  - 1. Capital Repair and Renewal Planning – Report Introduction ..... 4
  - 2. Overview of CRDM Committee, Strategy, Budget and Expenditures ..... 4
    - Table 1. FY 2013 CRDM Allocation ..... 5
  - a. Overview of FY 2012 and 2013 Renewal Projects Funded using CRDM ..... 6
  - b. FY 2012 Projects and Expense Highlights ..... 6
    - i. Hilton College Life Safety Upgrades..... 6*
    - ii. Plant Chillers.....7*
    - iii. Wortham Theatre Sprinkler System.....7*
    - iv. Science and Research General Refresh.....7*
    - v. Shower and Eyewash Station Replacement.....7*
  - c. Additional Projects FY 2012.....7
- 3. FY13 Projects and Planned Expenses..... 8
  - a. Correcting State Fire Marshal Violations ..... 8
    - i. Science Life Life Safety Critical ..... 8*
    - ii. Cameron Building Envelope ..... 9*
    - iii. Library Sewer Remediation ..... 9*
    - iv. S&R 1 Fume Hood Leak Repairs ..... 9*
    - v. Wortham Theatre ..... 9*
- 4. FY 2014 Needs - Current Critical Backlog Priorities ..... 9
- 5. Infrastructure Master Planning..... 10
- 6. Capital Renewal Policy Development ..... 10
  - a. APPA Level Three Funding on New Campus Space..... 10

b.	FAMIS – in FY 2012/2013 .....	10
7.	Program Planning - Research, Classroom, Fire/Life Safety and Childcare .....	10
8.	Auxiliary Renewal Investments .....	11
a.	Campus Recreation and Wellness – FY 2012 .....	11
b.	Campus Recreation and Wellness -- FY 2013 .....	12
c.	Student Housing and Residential Life FY 2012 .....	13
	Facility Condition Assessment Data .....	14
	Table 3: FCA Categorical Information by Building .....	14
	Table 4: Buildings by Category Listed in Poor Condition in the FCA. ....	17
	Addendum A: Schedule for New and Future Facility Audits.....	18

## Capital Renewal Program Summary

There are several aspects in planning for capital renewal which includes ensuring that the physical plans support the university priorities. For FY 2012, the key areas of focus for renewal and backlog included:

1. Linking Directly to the Institution's Strategic Priorities
  - Research
  - Residential
  - Critical Life Safety – Research, Residual & Campus Wide
2. Understanding the Need to Make Facilities an Institution-Wide Experience (education, sustainability & learning)
  - Capital Renewal and Deferred Maintenance Committee
  - Infrastructure Master Planning
  - Capital Renewal Policy Development
  - APPA Level 3 Funding on New E&G Space
  - FAMIS Space & Work Management Implementation
  - Research, Childcare, Classroom Planning & Student Success
3. Auxiliary Planning – Capital Renewal Planning
  - Campus Recreation and Wellness Center
  - Student Housing and Residential Life
4. Ongoing Renewal Planning – Utilizing the Facilities Condition Audits (FCA)
  - Facilities Condition Audits
  - Audits of New Space - Future
  - Summary Report Timetable

# Progress Report

## ***1. Capital Repair and Renewal Planning – Report Introduction***

All priorities for capital renewal regardless of funding source are tied to the following institutional priorities: (1) Research, (2) Residential Campus & Student Success and (3) Campus Fire/Life Safety and Deferred Compliance Issues.

This report includes an analysis of prior and current capital renewal deferred maintenance (CRDM) budget and expenditures as well as presents the current facilities needs for the campus in preparation for the FY 2014 budget development process. To complete this analysis, prior year CRDM Committee allocation data was reviewed as well as the completed facilities condition assessment. This report will be structured as follows: 1) an analysis of prior and current year budget and expenditures as well as the committee philosophy about use of CRDM funds which has been developed in alignment with state guidelines governing the use of higher education assistance fund (HEAF) renewal dollars; 2) overview of types of projects funded by CRDM in FY 2012 and 2013; 3) an analysis of the current critical priorities; and 4) an overview of facilities condition assessment data.

## ***2. Overview of CRDM Committee, Strategy, Budget and Expenditures***

The University of Houston prior to FY 2012 allocated \$10M annually to capital renewal and backlog needs. The university since FY 2012 has allocated \$14.3 million annually to capital and deferred maintenance needs (Prior to FY 2010, a formalized process was not in place for allocations of these funds and the allocation process was largely left to the decision of the AVC/AVP, Plant Operations.) In the middle of FY 2010, in an effort to address outstanding audit issues as well as to bring expenditures and planning in line with the state governance rules related to HEAF, a new strategy was employed that 1) established the CRDM Committee, and 2) required that CRDM only be used for capital repair and renewal projects and required the establishment of an annual plan to set campus priorities. Prior to this committee's existence a decision had been made by the university in FY 2009 to allocate a significant portion of CRDM resources to the central plant project, totaling \$38 million over a six-year period. This decision has impacted the backlog of emergency renewal projects and impacted the ability to allocate CRDM to campus capital repair and renewal projects.

Planning transparency, cross-university collaboration, and consensus planning have been noted as critical success factors in the progress made to date as well as key elements of the committee's key values, which include unifying the UH reporting strategy with Facilities, Planning & Construction (FPC) space planning and achievement of the Texas Higher

Education Coordinating Board reporting requirements. Information regarding the CRDM committee, committee guidelines, expenditure reports and committee meeting minutes can be found at <http://www.uh.edu/plantops/about-us/committees/crdm/index.php>.

Due to funds that have been set aside out of the \$14.3M allocation for the Central Plant reserve, the CRDM Committee’s primary funding pool remains limited.

<b>P779321</b>	<b>FY09 CRDM Cooling Tower 5</b>	<b>\$ 6,605,000.00</b>
<b>P779342</b>	FY10 CRDM Cooling Tower 4 Replacement	\$ 2,970,000.00
<b>P779343</b>	FY10 CRDM Central Plant Renewal	\$ 5,225,000.00
<b>P779481</b>	FY11 CRDM Central Plant Renewal	\$ 4,996,670.00
<b>P779482</b>	FY12 CRDM Central Plant Renewal	\$ 5,903,107.00
<b>P779483</b>	<b>FY13 CRDM Central Plant Renewal</b>	<b>\$ 7,325,297.00</b>
<b>P779484</b>	FY14 CRDM Central Plant Renewal	\$ 5,378,122.00
	<b>Total CUP</b>	<b>\$ 38,403,196.00</b>

The current budget strategy for the CRDM Committee is focused on critical backlog renewal issues. The committee sets aside a portion of available funds for campus emergencies (25% of any reserve balance), as well as reserve funding for known campus repair and renewal critical backlog needs, either from the FCA or that were determined in a prior year where funding in that year was not yet available. After these set asides, the remaining funding is available for allocation to projects that the committee reviews at its recurring meetings. Funding requests can be submitted according to the HEAF guidelines and can be presented by the Colleges or Departments or through the sponsorship of the departments represented on the Committee.

[http://www.uh.edu/plantops/about-us/committees/crdm/CRDM\\_Guidelines.pdf](http://www.uh.edu/plantops/about-us/committees/crdm/CRDM_Guidelines.pdf)

The following table illustrates this practice in FY 2013:

**Table 1. FY 2013 CRDM Allocation**

FY13 CRDM	\$14,300,000.00
FY13 CRDM Central Plant Expansion	7,325,297.00
Cost centers Set up using FY13	5,094,043.63
Reserve for known needs	1,350,000.00
<b>Dollars Available For Committee Allocation</b>	<b>\$ 530,659.37</b>

### ***a. Overview of FY 2012 and 2013 Renewal Projects Funded using CRDM***

The highest physical investment and planned use of CRDM since 2009 has been the Central Plant expansion. Until FY 2014 the Plant will continue to be the largest renewal investment on the main campus. Aside from the Central Plant in these two fiscal years, the second largest building renewal investment is in life and fire safety systems. The following sections provide detail of these expenses by building. UH has established an initial five year renewal plan to support prior audit issues (from 2002 forward) and ongoing state fire and life safety project mandates and renewal needs that need to occur annually to ensure the ongoing safety and functionality of these systems.

FM has assisted Public Safety and the Fire Marshal in the development of an ongoing plan for meeting fire/life safety systems needed including implementation of a fire/safety life systems program plan. An initial two year plan has been drafted and FM has dedicated a project manager to coordinate and manage full time fire/life safety efforts due to the large amount of need. In addition FM has contributed \$800,000 in funds toward life safety efforts (non-CRDM) in FY 12 as part of the centralization and safety efforts. FM has also dedicated an additional 2 full-time employee's (FTE) to ongoing planned maintenance for fire/life safety systems. In addition, the UH Fire Marshal's office is also expanding its staffing model to support ongoing planning and projects and the FM Fire Alarm Shop and Minor and Planned Projects service area is dedicating full time staff to the life/safety efforts underway and planned maintenance needed for the future. Major capital, CRDM and operating funds combined resulted in a total fire/life safety investment in FY 2012 of \$12,342,624.09.

### ***b. FY 2012 Projects and Expense Highlights***

As an overview, in FY 2012, overall spending was used to correct fire life/safety concerns that were on the state fire marshal's list of outstanding items, exterior and interior academic and research building refreshes, correcting campus infrastructure issues, and replacement of large, failing infrastructure equipment, such as chillers. Projects ranged from a \$550 fume hood infrastructure repair to the \$1.7 million college fire/ life safety upgrade. Over 103 projects were completed for a total of \$8.3 million. The summary below highlights the top five largest projects funded using CRDM in FY12.

#### ***i. Hilton College Life Safety Upgrades***

The single, largest project funded through the allocation process was approximately \$1.8 million allocated for the academic portion of Hilton life safety. This project addresses critical life safety issues not corrected during the recent

hotel renovation, including sprinkler systems and underground water storage tanks and some building control challenges. Additionally, this project will correct a problematic lithocrete area in the hotel courtyard that is holding water. The non-academic portion of this project (total project approximately \$3.5 million) was funded by the college. Note that 52% of all expenses related to the Hilton College are E&G expenses and are eligible for CRDM Funding and the remaining 48% of those expenditures are required to be funded by the auxiliary component of the College/Hilton.

***ii. Plant Chillers***

Approximately \$830,000 was allocated to replace central plant chillers. One was replaced due to a prior-year freeze and an insurance claim has been filed and reimbursement may be pending.

***iii. Wortham Theatre Sprinkler System***

Approximately \$730,934.37 was allocated for the Wortham Theatre sprinkler system upgrade project, which is necessary prior to beginning the renovations of the Quintero Lab Theatre in advance of the Alley Theatre's residency during 2014-2015. This project includes construction of an outdoor pump room.

***iv. Science and Research General Refresh***

The restrooms in this high-traffic academic and research building are in poor condition and the committee approved an allocation of \$465,000 to upgrade and refresh the bathroom facilities in this building. Restrooms across campus due to age and limited renewal dollars remain a challenge for the university and are targeted for planned improvements in the 0- 5 year planning process as well as 6-10 year plan under development.

***v. Shower and Eyewash Station Replacement***

This \$365,000 project will replace non-functional shower and eyewash stations in seven research and academic buildings, including Engineering 1&2, SR1 & SR2, Houston Science Center, SERC and Armistead.

***c. Additional Projects FY 2012***

Additional projects to note that were in design or completed during FY 2012 included the temporary repairs to the M.D. Anderson sanitary sewer, which totaled \$31,800 and were necessary to prevent further sanitary sewage overflow into this facility. A permanent solution is being designed and will be completed this year. CRDM funds of

\$44,000 were allocated to clean up the exterior campus with the installation of nine Cougar notice posting zones on campus. These posting areas included Big Belly trash and recycling stations as well. Approximately \$105,000 was allocated to complete planned maintenance of fire hydrants on campus, as well as other fire/life safety needs that were not completed historically. A large-scale clean and re-fresh of the Fine Arts Building occurred over the summer and \$177,000 was allocated by the CRDM Committee to remove gates and comprehensively clean the entire facility and stairwells. The most noticeable impact of this effort is the large windows facing the Fine Arts parking area are now clean, where previously these windows, which were part of student art studios, were visibly dirty from outside the building. The remaining investments fall into broad categories such as emergencies, weather-related, or life safety, plumbing, utility infrastructure, HVAC, and electrical.

### ***3. FY13 Projects and Planned Expenses***

To date for FY 2013, there have been 21 projects that have been allocated funding for a total of \$5,094,043.63. The largest theme for this year's allocation continues to be upgrades to correct fire/life safety identified needs or historical violations. There are additional infrastructure projects included in these planned expenses, including building envelope work at the Cameron Building and an emergency fume hood leak that has pointed out a larger building duct work problem. The top-five projects for this fiscal year include:

#### ***a. Correcting State Fire Marshal Violations***

There were numerous State Fire Marshal (SFM) violations remaining from prior administration (2002) and in FY 2012, FM leadership worked with Public Safety to establish a five year capital plan to address all known violations as well as a planned maintenance program for the campus fire system needs in the future. In FY 2013, approximately \$1.3 million has been allocated from CRDM funds to correct fire/life safety violations noted by the SFM. A majority of these issues related to interior building doors, door hardware and stairwells and many of these projects were completed by 12/31/12 as this was the due date provided by the President in her letter to the SFM. In total, between major and minor capital and CRDM of \$5,730,000 in fire/life safety renewal investment is anticipated. Included in this amount were brick façade issues for Optometry which is estimated at \$895,000 and work is underway.

##### ***i. Science Life Safety Critical***

Items identified in the FCA study as category one (1) in all life science facilities (minus Old Science) are being addressed in a phased plan to address critical

life/safety infrastructure, fire and safety issues. The budget for this FY 2013/14 expenditure is \$920,000.

**ii. *Cameron Building Envelope***

Approximately \$344,000 was allocated for a Cameron Building Envelope Project. Cameron issues were identified in the FCA and include water infiltration, window, roof and envelope repairs. This was a building that was requested to be addressed as a priority by Academic Affairs. There is also a childcare auxiliary tenant within this facility.

**iii. *Library Sewer Remediation***

This work is finishing design and is budgeted for construction at \$300,000. This work is anticipated to occur to remedy long standing design issues in the library and prevent future flooding. Construction is anticipated in summer of 2013.

**iv. *S&R 1 Fume Hood Leak Repairs***

Approximately \$164,000 was allocated to correct an emergency fume hood leak, where a fume hood was leaking acids into the business office of S&R 1. There is a second phase study planned to address the failure fume hood/ventilation infrastructure within this facility and a phase capital plan is expected as a result of this study. Over \$32M in physical needs were identified in the FCA study for this facility.

**v. *Wortham Theatre***

Over \$350,000 has been allocated by the CRDM Committee to address capital and deferred maintenance in the Wortham Theatre to prepare for ongoing teaching and theatre needs as well as the Alley's residency. Funding was approved to support aged and necessary infrastructure for theatre operations to include electrical infrastructure improvements and renewal issues due to past flooring and pest related issues.

**4. *FY 2014 Needs - Current Critical Backlog Priorities***

There are a number of potential projects that are currently unfunded that have been noted as critical because they impact life/safety or the university's ability to meet the institutional priorities, such as research. These are presented in Table 2. These needs, as well as other considerations, will be reviewed by the CRDM Committee and prioritized for recommended funding in preparation for FY 2014 and beyond.

## ***5. Infrastructure Master Planning***

Infrastructure at the University was historically done as an add-on to new capital projects and current university infrastructure, internal and external to the facility, including utility and landscape infrastructure also required a full condition audit. In FY 2012, an audit was completed of all campus infrastructure and six component plans were completed by Facilities Management. The component plans are in the process of being reviewed, vetted and integrated into a full campus infrastructure master plan. The initial two year program draft for the integrated plan will be completed in FY 2013. This plan will be coordinated with other campus efforts and all synergies that can be gained through integrated planning will be recommended accordingly. City/area relationships will also require further development to address gaps between campus and city infrastructure with the greatest issues being related to utility infrastructure and roads.

## ***6. Capital Renewal Policy Development***

### ***a. APPA Level Three Funding on New Campus Space***

In order to prevent continued deferred maintenance issues on new space the university is now funding operational support at the APPA level 3 for day to day maintenance and custodial needs. To ensure the same level of capital reserve and support the UH Treasurer and Financial office is currently drafting a policy for planned renewal that is striving for a 2-3% set aside for E&G and Auxiliary space to ensure proper funding set asides for long term capital needs will be in place for new space. Currently space that was built and opened prior to FY 13 did not have these reserves or mandates in place. Guidelines and policy are currently in draft form.

### ***b. FAMIS – in FY 2012/2013***

FAMIS, a space and work management system was selected by the university to ensure that all space, facility and renewal data would be integrated and captured into one software and space management system. The initial installation and go-live was successfully completed in FY 13/14. The remaining modules including the facility condition FFA module will be implemented to allow for the integration of condition audit information to occur.

## ***7. Program Planning - Research, Classroom, Fire/Life Safety and Childcare***

Program managers for ongoing operations and renewal planning are being established in FY 2013. Facilities Management has dedicated Project Managers for these ongoing efforts as well as four FTE's to support ongoing classroom and research animal care needs. Two year

program and renewal plans are being established to support these critical university efforts and program plans will be published by summer 2013.

## **8. Auxiliary Renewal Investments**

In FY 12 two auxiliary areas within UH utilized the Facility Condition Assessment data to create capital plans. Plans were established and accepted for Campus Recreation and for Student Housing. Priorities for these auxiliary areas also included life safety, student and residential priorities. Each has established with the assistance of Facilities Management an initial five year capital investment priority plan.

### **a. Campus Recreation and Wellness – FY 2012**

The renewal planning for CRWC began by FM in FY 2011 with the completion of 14 remediation projects totaling \$672,000. They continued in partnership with Student Affairs in FY 2012 to address critical facility needs in support of student success efforts. In addition to the capital Improvements an additional \$188,153.84 was invested in renewal through operating dollars and the total F 2012/2013 planned expenditures related to renewal for CRWC will exceed \$1.6M.

<b>Project Name</b>	<b>Project #</b>	<b>Total Project Cost</b>
<b>CRWC Mold Remediation</b>	10762	\$ 7,112.36
<b>CRWC Pool Pak 1 &amp; 4 Actuator</b>	10444	\$ 5,040.62
<b>CRWC Way Finding Signage</b>	10852	\$ 14,032.81
<b>Aquatics Strategic Planning</b>	10762	\$ 29,150.00
<b>CRWC Swim Meet preparation</b>	10444	\$ 8,415.77
<b>CRWC Gym wood floor repair</b>	10444	\$ 6,273.08
<b>CRWC Pigeon Control</b>	10852	\$ 30,255.78
<b>MAC Court Repairs</b>	10762	\$ 11,743.37
<b>Wood Floor Refurbishing</b>	10672	\$ 116,546.29
<b>CRWC Rekeying/Card Reader install</b>	10762	\$ 99,689.68
<b>CRWC Racquetball court replacement</b>	10762	\$ 53,638.33
<b>CRWC Palm Tree Cleaning</b>	10762	\$ 3,423.80
<b>CRWC Pool Repairs &amp; Cleaning Svs.</b>	10762	\$ 32,860.00
<b>CRWC BB Hoop Maintenance</b>	10762	\$ 13,590.77
<b>CRWC Pool Pak 1&amp;4 Compressor</b>	10762	\$ 2,827.71
<b>CRWC Deep Cleaning</b>	10852	\$ 19,995.00
<b>CRWC Gym Divider Curtain Repairs</b>	10852	\$ 5,830.00
<b>CRWC Controls</b>	10762	\$ 153,016.77
<b>CRWC Chiller #2 Oil Change</b>	10762	\$ 1,146.30
<b>CRWC Boiler #1 Repair</b>	10762	\$ 5,480.00

<b>CRWC Chiller #2 Leak Repair</b>	10762	\$	5,748.00
<b>CRWC Boiler #1 Diagnostics</b>	10762	\$	6,845.10
<b>60 HP Pump and Motor</b>		\$	9,308.18
<b>CRWC Security Cameras</b>	10762	\$	49,263.09
<b>CRWC Boiler #1 Repairs</b>	10762	\$	17,559.03
<b>Boiler 2 Repairs</b>	10762	\$	19,655.76
<b>CRWC Cooling Tower Cleaning</b>	10762	\$	8,040.60
<b>Handicap Shower repairs</b>	10763	\$	3,248.00
<b>Settling Cracks - interior/Exterior</b>	10764	\$	18,270.88
<b>Dive Platform Repairs - Phase 1</b>	10765	\$	3,498.00
		<b>\$</b>	<b>761,505.08</b>

***b. Campus Recreation and Wellness – FY 2013***

Projects planned for FY 2013 for Campus Recreation continue to address backlog needs and will include over 20 remediation and planning projects with a value of just over \$2M. The largest investment in the FY 2013 plan will include over \$730,000 for Phase 1 renewal of the Cullen Recreation Fields. In addition, planning and design for FY 2014 for critical HVAC and Pool Pump Room needs will be a critical area of focus. Campus Recreation is currently a fully funded auxiliary plan.

The ongoing maintenance of campus recreation was centralized as of 9/1/2011 and great strides have been made in partnership with the new CRWC management team since this time. There is a comprehensive capital renewal plan in place through 2016 and it is aligned and reprioritized annually with Student Affairs Management.

***c. Student Housing and Residential Life -- FY 2012***

Student housing and residential life is challenged for capital renewal funds and the projects they completed in FY 2012 were essential in ensuring full occupancy, ensuring safety and business continuity.

<b>Project Title</b>	<b>Projected</b>	<b>Final Budget</b>
<b>Moody Tower Room Renovations</b>	\$	3,614,000
<b>Bates AC Repair</b>	\$	8,400
<b>AHU Taub Repairs</b>	\$	2,500
<b>Bathroom Pilot Design</b>	\$	17,525
<b>Taub Hall Sump Pump</b>	\$	28,652
<b>Calhoun Loft Security Upgrade</b>	\$	26,626
<b>Quad Mold Remediation</b>	\$	104,018
<b>Moody Tower Stairwell Mold Remediation</b>	\$	19,471
<b>Moody Tower Security Upgrades</b>	\$	146,300
<b>Staff Apartment Upgrade</b>	\$	4,650
<b>Apt ST-101 &amp; ST-1701 Refresh</b>	\$	-
<b>Housing FCA</b>	\$	30,900
<b>Moody Tower Elevator Upgrade</b>	\$	514,220
<b>TV Security Project</b>	\$	23,712
<b>Sanitary Line Repairs</b>	\$	141,451
<b>Quad Sump Pumps</b>	\$	73,458
<b>Calhoun Lofts Floods (2)</b>	\$	10,453
<b>Quad Renovations</b>	\$	1,904,786
<b>Quad Security Upgrades</b>	\$	219,293
<b>Calhoun Emergency Coil Replacement</b>	\$	85,642
<b>Cougar Village Security Door</b>	\$	43,979
<b>CV Elevator Upgrade</b>	\$	326,757
<b>Calhoun Compactor replacement due to mis-sizing by FPC project</b>	\$	25,874
<b>C-Store Renovation</b>	\$	26,564
<b>Quad Control System Repair</b>	\$	1,001,309
<b>RLH Laundry Room Refresh</b>	\$	29,413
<b>Computer Room Conversion</b>	\$	17,621
<b>Ground Floor Renovation</b>	\$	500
<b>Subtotal Current Projects (Renovations)</b>	\$	8,448,076

## ***Facility Condition Assessment Data***

In addition to the known needs identified by Facilities Management during the course of operating the buildings on campus, the recently completed Facility Condition Assessment also provides information that can be used to understand our facilities and prioritize building needs based on use. This building analysis initially studied 74 buildings on campus, with a secondary phase of facilities occurring in phase 2. The firm who studied these buildings divided each of the campus buildings into three categories, based on their assessment: Excellent, Fair and Poor. Twelve percent of the buildings studied were classified as Excellent, 13.5% were classified in Fair condition and 76% were classified in Poor condition. The data is summarized in the following Table 3.

***Table 3: FCA Categorical Information by Building***

<b>Building Category</b>	<b>Count</b>
<b>Excellent</b>	9
<b>Fair</b>	10
<b>Poor</b>	56
<b>Total</b>	74

The facilities not included in the initial phases are noted below with why they were not included. In addition, small outbuildings and storage sheds were eliminated from the study.

- University Center – Under Full Construction For Renovation
- Welcome Center – Due to New Construction Status
- Center for Public Broadcasting – Auxiliary scheduled for FY 2013
- Stadium – Demolished in FY 2013
- Y Building – Demolished in FY 2013
- ERP – Not part of main campus audit @ current

While not in the additional assessment, Hoffeinz, Athletics Alumni, Calhoun Lofts, and Cougar Village 1 were all completed in supplemental condition assessments and are current.

New university renewal policy will require all new facilities to have FCA's completed 9 months post occupancy to ensure all warranty issues are captured prior to the warranty period expiration as well as setting baseline capital plans for future years. The schedule for updates will occur every 3 years with 1/3 of the campus rolling every 3 years with FCA updates to existing audits to ensure ongoing accuracy of data. The schedule for new and future facility audits is attached to this report in addendum A.

When reviewing the buildings by category, the laboratory and research facilities on campus appear to be the building type in poorest condition with the highest cost for priority 1 needs, followed by the residential facilities. These facilities have high priority 1 needs. A summary of those facilities is included in Table 4.

The intention of the FCA is to understand current condition and backlog as well as total university renewal need. The FCA is the physical need of the structure assuming it will continue in its current use. Change of use will change the need and assessment estimates. Capital renewal priorities are a balance of (1) Life/Safety, (2) Business Continuity and (3) University Priorities. It should be noted that there was an FCA Pilot Planning Project completed in FY 2012 and the programmatic need of a College is anticipated to add 50-60% to total need and should be calculated into all evaluations and budgets as a pre-programming assumption.

The facilities scored at requiring more than 50% or more of their current replacement value will require review by Administration prior to continued investment. Several facilities in this rating are anticipated for future demolition. This review is anticipated to occur by Senior Management in FY 13/14 with the following decisions at a higher level to be made and communicated to the Colleges in order to allow them to properly plan for and target future investments in their programs and facilities.

1. Deconstruction and no continued investment
2. Limited investment (life/safety/environmental)
3. Maintain @ current state (keep at current condition through ongoing investment at current funding level)
4. Full re-investment or repurposing
5. Build new or lease space
  - a. Establish interim process for investments and target investments on facilities by Colleges where investment is planned to ensure

- b. Prioritize Colleges for the following actions and schedule into future planning cycles
  - i. Compile physical needs data into an initial renewal plan focused on Life Safety and Maintenance Critical Needs (all colleges)
  - ii. Balance short term requests based on functionality, academic plan and business continuity – program additions to be considered where College/Provost support is available
  - iii. Prioritize and plan College requests within College

**Table 4: Buildings by Category Listed in Poor Condition in the FCA**

	Sum of Priority 1	Sum of Priority 2	Sum of Priority 3	Sum of Priority 4
<b>Administrative</b>	\$13,863,300	\$60,852,250	\$104,879,600	\$101,571,020
<b>Athletics (non-recreation)</b>	172,000	2,031,950	5,889,750	4,934,450
<b>Auxiliary Other</b>	2,145,000	992,000	9,232,600	1,099,920
<b>Classroom</b>	507,500	1,770,000	2,734,750	3,546,000
<b>Classroom/Administration</b>	-	155,100	319,000	120,000
<b>Classroom/Laboratory</b>	1,598,800	12,404,000	31,386,300	28,854,300
<b>Greenhouse</b>	546,000	2,802,000	15,733,550	8,961,600
<b>Health Facility</b>	9,000	37,500	25,500	3,000
<b>Laboratory, Research</b>	7,000	527,000	604,500	278,500
<b>Library</b>	4,762,500	21,124,250	14,096,350	24,219,200
<b>Storage</b>	300,000	358,000	1,061,250	269,500
<b>Student Life/Residential Housing</b>	17,000	139,200	189,700	84,800
<b>Theater</b>	3,707,000	18,135,750	20,659,500	27,573,900
	91,500	375,500	2,946,850	1,625,850

Note: While there is direct correlation between critical priorities and total need, there are some variances due to the assumptions utilized by the FCA consultant that invasive work required on building systems (like ductwork) will occur simultaneously in future years. While it appears that condition may require it to be phased in, component plans similar to past life safety projects are due to limitations in funding. Wherever possible, full renovations similar to the University Center are the preferred means to address total physical needs.

ADDENDUM A

Schedule for New and Future Facility Audits

**FM Facility Condition Audit Planning Sheet**  
**February 2013**

<b>BUILDING NO.</b>	<b>BUILDING NAME</b>	<b>GSF</b>	<b>Physical Reinvestment needed (CRV)</b>	<b>LAST AUDITED</b>	<b>NEXT AUDIT SCHEDULED TO BEGIN</b>	<b>BEGIN PLANNING DATE</b>	<b>ESTIMATED AUDIT PLAN COST</b>
106	Tex. Learn.&Comp.Ctr. Annex	17,186	18%	January-12	January-15	April-14	\$ 1,203.02
116	Safety,Human Factors&Ergo.Lab	5,777	21%	February-12	February-15	May-14	\$ 404.39
500	Bayou Oaks Apartments	175,590	22%	August-11	November-14	February-14	\$ 12,291.30
501	Roy G. Cullen	54,079	73%	January-12	January-15	April-14	\$ 3,785.53
502	Science Building	61,713	51%	December-11	December-14	March-14	\$ 4,319.91
503	Technology Annex	43,402	54%	January-12	January-15	April-14	\$ 3,038.14
504	Child Care Center	14,506	42%	August-11	January-15	April-14	\$ 1,015.42
505	J. Davis Armistead	129,138	22%	December-11	December-14	March-14	\$ 9,039.66
507	C. W.Mitchell Ctr.for the Arts	65,271	32%	January-12	January-15	April-14	\$ 4,568.97
508	College of Technology Building	61,935	35%	January-11	January-14	April-13	\$ 4,335.45
509	M. D. Anderson Library	539,589	11%	January-12	January-15	April-14	\$ 37,771.23
514	Fire & Life Safety - Storage	230	28%	January-12	January-15	April-14	\$ 16.10
516	Ezekiel W Cullen	136,820	33%	January-12	January-15	April-14	\$ 9,577.40
517	Cullen Performance Hall	40,943	37%	December-11	December-14	March-14	\$ 2,866.01
518	Calhoun Lofts	550,981	1%	August-11	December-14	March-14	\$ 38,568.67
519	Dept. of Pub. Safety-UH Police	15,900	12%	January-12	January-15	April-14	\$ 1,113.00
520	Reb.& John Moores Sch.of Mus.	181,914	8%	January-12	January-15	April-14	\$ 12,733.98
522	Campus Recreation &Wellness Ct	283,390	8%	August-11	January-15	April-14	\$ 19,837.30
523	Science &Engineering Annex	12,034	60%	January-12	January-15	April-14	\$ 842.38
524	Student Service Center 1	36,629	75%	January-12	January-15	April-14	\$ 2,564.03
525	UH Health Center	11,789	57%	January-12	January-15	April-14	\$ 825.23
526	Student Service Center 2	4,373	95%	January-12	January-15	April-14	\$ 306.11
527	EHRM1	1,809	50%	January-12	January-15	April-14	\$ 126.63
528	Leroy and Lucile Melcher Hall	180,991	18%	January-12	January-15	April-14	\$ 12,669.37
529	Sci.& Engr. Classroom Building	36,071	3%	January-12	January-15	April-14	\$ 2,524.97
531	Hofheinz Pavilion	189,804	38%	November-11	November-14	February-14	\$ 13,286.28
532	Susanna Garrison Gymnasium	69,892	12%	January-12	January-15	April-14	\$ 4,892.44
533	Melcher Gym/Charter School	60,481	14%	November-12	November-15	February-15	\$ 4,233.67
534	Fred J. Heyne	70,284	25%	December-11	December-14	March-14	\$ 4,919.88
535	EHRM2	1,490	59%	January-12	January-15	April-14	\$ 104.30
536	Leroy&Lucile Melcher Ctr.forPB	77,226	6%	January-12	January-15	April-14	\$ 5,405.82
537	Bates Law	85,497	32%	November-11	November-14	February-14	\$ 5,984.79
538	Teaching Unit 2 Building	87,384	35%	November-11	November-14	February-14	\$ 6,116.88
539	Max Krost Hall	36,076	40%	November-11	November-14	February-14	\$ 2,525.32
540	John M.O'Quinn Law Library	54,942	21%	November-11	November-14	February-14	\$ 3,845.94
542	South Park Annex	30,873	32%	January-12	January-15	April-14	\$ 2,161.11
543	G.D.Hines Coll.of Architecture	151,653	7%	January-12	January-15	April-14	\$ 10,615.71
545	Sci. & Eng. Research Center	155,124	3%	December-11	December-11	March-14	\$ 10,858.68
547	Philip Guthrie Hoffman Hall	130,149	31%	January-12	January-15	April-14	\$ 9,110.43
548	Athletics Maint. Building	822	8%	December-11	December-14	March-14	\$ 57.54
549	Graduate School of Social Work	63,519	23%	January-12	January-15	April-14	\$ 4,446.33
550	Science and Research 1	214,496	46%	August-11	August-14	November-13	\$ 15,014.72
551	Science and Research 2	169,758	17%	August-11	August-14	November-13	\$ 11,883.06
552	B.Keeland Jr. Design.&Expl.Ctr	9,338	2%	January-12	January-15	April-14	\$ 653.66
553	Welcome Center&Parking Gar.	545,968	1%	January-12	January-15	April-14	\$ 38,217.76
560	UH-DPS Parking Enforcement	2,297	26%	January-12	January-15	April-14	\$ 160.79
562	A. D. Bruce Religion Center	21,503	79%	December-11	December-14	March-14	\$ 1,505.21
563	Cougar Village 1	291,038	3%	November-11	November-14	February-14	\$ 20,372.66
564	Lamar Fleming, Jr.	117,115	57%	December-11	December-14	March-14	\$ 8,198.05

**FM Facility Condition Audit Planning Sheet  
February 2013**

567	University Center Satellite	38,657	12%	January-12	January-15	April-14	\$ 2,705.99
568	J.Dart Jr.Ctr.forStd w/DisAbil	6,000	10%	January-12	January-15	April-14	\$ 420.00
572	General Services Storage Building	10,614	26%	January-12	January-15	April-14	\$ 742.98
573	Alumni Center	19,839	3%	November-11	November-14	February-14	\$ 1,388.73
574	Athletic Center	208,909	6%	December-11	December-14	March-14	\$ 14,623.63
578	Agnes Arnold Hall	162,347	45%	January-12	January-15	April-14	\$ 11,364.29
579	Cullen College of Engineering I	225,107	13%	August-11	August-14	November-13	\$ 15,757.49
580	Engineering Lecture Hall	5,152	64%	August-11	August-14	November-13	\$ 360.64
581	Cullen Coll of Engineering 2	108,349	21%	August-11	August-14	November-13	\$ 7,584.43
584	Moody Towers Residence Halls	292,840	125%	August-11	November-14	February-14	\$ 20,498.80
585	General Services Building	180,557	26%	January-12	January-15	April-14	\$ 12,638.99
586	Isabel C. Cameron	34,136	35%	January-12	January-15	April-14	\$ 2,389.52
587	Stephen Power Farish Hall	126,147	56%	August-11	August-14	November-13	\$ 8,830.29
588	Charles F. McElhinney Hall	70,564	49%	January-12	January-15	April-14	\$ 4,939.48
589	Fine Arts Building	130,860	14%	January-12	January-15	April-14	\$ 9,160.20
590	C.Hilton Coll.of Hotl.&Res.Mgt	379,242	14%	January-12	January-15	April-14	\$ 26,546.94
593	Univ of Houston Science Center	123,149	40%	August-11	August-14	November-13	\$ 8,620.43
594	Engineering Edu. Resource Ctr.	1,731	32%	January-12	January-15	April-14	\$ 121.17
596	Computing Center	19,070	42%	February-12	February-15	May-14	\$ 1,334.90
598	Clinical Research Services Ctr	25,182	19%	January-12	January-12	April-14	\$ 1,762.74
<b>Subtotal</b>	<b>(69 facilities)</b>	<b>7,510,717</b>					<b>\$ 522,706.87</b>

**FM Facility Condition Audit Planning Sheet**  
February 2013

<b>New &amp; Renovated Buildings Post 2011</b>							
<b>BUILDING NO.</b>	<b>BUILDING NAME</b>	<b>GSF</b>	<b>SUBSTANTIAL COMPLETION</b>	<b>INITIAL AUDIT DATE</b>	<b>NEXT SCHEDULED AUDIT DATE</b>	<b>BEGIN PLANNING DATE</b>	<b>COST ESTIMATE</b>
497	Cougar Woods Dining	25,265	June-12	March-13	TBD	February-13	\$ 1,768.55
499	Classroom Buisness Building	147,524	July-12	April-13	TBD	February-13	\$ 10,326.68
506	Jack J. Valenti School of Communication	36,220	July-11	May-13	TBD	February-13	\$ 2,535.40
544	Michael J. Cemo Hall	34,402	October-11	May-13	TBD	February-13	\$ 2,408.14
546	East Parking Garage	499,260	November-09	May-13	TBD	February-13	\$ 34,948.23
565	University Center Renovation	187,337	November 2013 (Phase 1)	April-14	April-17	July-16	\$ 13,113.59
565	University Center	187,337	November 2014 (Phase 2)	April-15	April-18	July-17	\$ 13,113.59
576	Science Teaching Laboratory	106,743	December-12	September-13	TBD	June-13	\$ 7,472.01
592	Health & Biomedical Science Center	181,462	October-12	July-13	TBD	April-13	\$ 12,702.34
597	Stadium Parking Garage	750,695	August-12	May-13	TBD	February-13	\$ 52,548.68
710	Small Business Development Ctr	28,652	Not Audited	TBD	TBD	TBD	\$ 2,005.64
<b>Subtotal</b>	<b>(11 facilities)</b>	<b>2,156,246</b>					<b>\$ 152,942.84</b>
<b>Future New Facilities</b>							
<b>BUILDING NO.</b>	<b>BUILDING NAME</b>	<b>GSF</b>	<b>SUBSTANTIAL COMPLETION</b>	<b>INITIAL AUDIT DATE</b>	<b>NEXT SCHEDULED AUDIT DATE</b>	<b>BEGIN PLANNING DATE</b>	<b>COST ESTIMATE</b>
TBD	New Stadium	634,000	August-14	May-15	TBD	February-15	\$ 44,380.00
TBD	Garage A1	500,000	August-13	May-14	TBD	February-14	\$ 35,000.00
TBD	Cougar Village 2	291,000	July-13	April-14	TBD	January-14	\$ 20,370.00
TBD	Cougar Place Replacement	316,000	July-13	April-14	TBD	January-14	\$ 22,120.00
TBD	New Pharmacy Building	198,000	2016	TBD	TBD	TBD	\$ 13,860.00
TBD	CMAR - Future Engineering Building	120,000	March-15	December-15	TBD	September-15	\$ 8,400.00
<b>Subtotal</b>	<b>(6 facilities)</b>	<b>2,059,000</b>					<b>\$ 144,130.00</b>
<b>Planned Facilities for Decommissioning or Deconstruction</b>							
<b>BUILDING NO.</b>	<b>BUILDING NAME</b>	<b>GSF</b>	<b>Physical Reinvestment needed (CRV)</b>	<b>INITIAL AUDIT DATE</b>			<b>Demolition Estimate (based on 2016)</b>
554	Biology Greenhouse	604	90%	December-11	Recommend for Demolition		
555	Law Residential Hall	45,556	181%	August-11	Projected for demolition Year TBD		\$ 740,407.00
556	Settegast Residential Hall	39,933	162%	September-11	Projected for demolition Year TBD		\$ 804,799.00
557	Bates Residential Hall	48,462	182%	October-11	Projected for demolition Year TBD		\$ 764,603.00
558	Taub Hall	54,045	180%	November-11	Projected for demolition Year TBD		\$ 840,015.00
559	E.E. Oberholtzer	76,864	148%	December-11	Projected for demolition Year TBD		\$ 1,737,840.00
502	Old Science	61,713	51%	August-11	Being Decommissioned by 12/2013 - future FCA needs TBD		\$ 150,000.00
523	Science and Engineering Annex	12,034	60%	January-12	Projected for Future Demolition - Timing TBD		TBD
<b>Subtotal</b>	<b>(8 facilities)</b>	<b>338,607</b>					<b>\$ 5,037,664.00</b>