

## **FAMU HOUSING FACILITIES CONDITION AUDIT SUMMARY AND DEFERRED MAINTENANCE PLAN**

In December 2017, Florida Agricultural and Mechanical University (FAMU) contracted with ISES Corporation to perform comprehensive Facility Condition Assessment (FCA) services for its housing facilities. This FCA effort included 30 buildings encompassing 861,858 square feet. These housing facilities include dormitories, apartment complexes, offices, and support space for the Housing Department.

The Facilities Conditions Needs Index (FCNI) is a 10-year need compared against the current replacement value of the building inventory. The total 10 year need for the buildings is just under \$49M with the average FCNI for the inspected housing buildings around 0.15, leading one to believe that these buildings overall are in fair to good condition. The campus has invested in newer construction (FAMU Village) and has renovated some its older dormitories (Young and Sampson halls) and that has paid off in an overall FCNI that is well below the national average of 0.24, there are still six buildings in the below average condition range. These are some of the older housing buildings in the portfolio.

While the overall FCNI is in the fair range for the total portfolio, 13 of the 30 buildings are in the poor category, suggesting that many of the buildings have systems that have reached the end of their useful lives. The unique problem with these 30 Housing buildings is that you have an uneven distribution of size and value between the Good and the Bad. So breaking the list down, FAMU Housing has 5 Excellent buildings (0.00-0.10), 7 Good buildings (0.11-0.20), 12 Fair buildings (0.21-0.30), and 6 Below Average buildings (0.31-.50). FAMU Village alone accounts for 37% of your total Square footage and 33% of total CRV. This building along with Samson and Young renovations have pushed the FCNI into the Good category.

### **Plan to address the deferred maintenance**

FAMU plans to use a multi-pronged approach in addressing its deferred maintenance. This will include construction of new housing facilities to replace the aging facilities, decommissioning and or demolition of some of the facilities, and finally developing a 10-year capital plan for renovation and upgrade of some of the existing facilities.

Currently, FAMU is moving forward with its participation in the Department of Education's Capital Financing program. This financing program is mainly developed to address facility needs at the HBCUs (historically black colleges and universities). Through this program, FAMU will build a new 700 bed housing facility (also known as Phase 1A). This housing replacement program will replace roughly 500 beds in the outdated facilities like Truth Hall, Palmetto North, and Paddyfote buildings, thereby leaving approximately 200 net new beds. Doing so, will reduce the 10 year FCNI need from \$49M to under \$25M, since the proposed buildings to be decommissioned (Truth Hall, Palmetto North, and Paddyfote buildings) themselves constitutes roughly \$24M in the overall needs. The 10-year total need will be still over \$21M in Gibbs, Phase 3, and Palmetto South and the rest in Village, Samson, and Young halls (as summarized in Table 1).

TABLE 1		Non-Recurring				Total
Buildings to keep	Renewal Cost	Immediate	Critical	Non-Critical	Deferred Renewal	Non-Recur+Def.
Gibbs	\$ 7,996,679	\$ -	\$ 462,438	\$ 1,256,932	\$ 5,270,387	\$ 6,989,757
Ph3 162	\$ 2,861,287	\$ -	\$ 221,176	\$ 119,239	\$ 996,436	\$ 1,336,851
Ph3 163	\$ 2,775,593	\$ -	\$ 217,404	\$ 116,956	\$ 969,300	\$ 1,303,660
Palmetto Commons and Laundry	\$ 371,711	\$ -	\$ -	\$ 9,938	\$ 165,024	\$ 174,962
Palmetto South A	\$ 1,429,933	\$ -	\$ 321,540	\$ 177,619	\$ 437,001	\$ 936,160
Palmetto South B	\$ 2,227,246	\$ -	\$ 390,455	\$ 231,486	\$ 768,255	\$ 1,390,196
Palmetto South C	\$ 2,287,098	\$ -	\$ 362,747	\$ 381,117	\$ 972,976	\$ 1,716,840
Palmetto South D	\$ 1,776,315	\$ -	\$ 345,087	\$ 352,188	\$ 670,993	\$ 1,368,268
Palmetto South Commons	\$ 109,529	\$ -	\$ 7,651	\$ 8,024	\$ 58,637	\$ 74,312
Palmetto South Mech	\$ 17,009	\$ -	\$ 1,071	\$ 1,956	\$ 12,617	\$ 15,644
Palmetto South Mailbox	\$ 1,277	\$ -	\$ -	\$ 866	\$ 410	\$ 1,276
<b>Sub-total 1</b>	<b>\$ 21,853,677</b>	<b>\$ -</b>	<b>\$ 2,329,569</b>	<b>\$ 2,656,321</b>	<b>\$ 10,322,036</b>	<b>\$ 15,307,926</b>
TABLE 2: RENEWAL COST MATRIX		Non-Recurring				Total
Buildings with minimal deferred maintenance	Renewal Cost	Immediate	Critical	Non-Critical	Deferred Renewal	Non-Recur+Def.
Young	\$ 309,623	\$ -	\$ 39,097	\$ 84,746	\$ 51,023	\$ 174,866
Samson	\$ 612,286	\$ -	\$ 48,026	\$ 121,429	\$ 217,078	\$ 386,533
Village	\$ 2,138,820	\$ -	\$ 43,344	\$ -	\$ -	\$ 43,344
<b>Sub-Total</b>	<b>\$ 3,060,729</b>	<b>\$ -</b>	<b>\$ 130,467</b>	<b>\$ 206,175</b>	<b>\$ 268,101</b>	<b>\$ 604,743</b>

FAMU will therefore focus on the oldest facilities of Gibbs, Palmetto South, and Phase 3 in the deferred maintenance plan. These are also the buildings with the most concerns reported from the occupants. The non-recurring and deferred renewal need in these buildings is \$15M and the rest in the recurring 10-year needs. This cumulative needs of \$21M includes all the categories as identified in the ISES report (non-recurring critical and non-critical, deferred renewal, and the recurring needs). The table-2 summarizes the needs for these buildings based on the system or need category, for example accessibility, major building systems, exterior, interior, etc.

CATEGORY	Gibbs		Palmetto Phase III		Palmetto South			
	59	162	163	605	606	607	608	
ACCESSIBILITY	\$ 537,669	\$ 108,033	\$ 101,389	\$ 343,710	\$ 353,395	\$ 366,805	\$ 347,134	
EXTERIOR	\$ 918,773	\$ 270,401	\$ 276,518	\$ 103,521	\$ 219,714	\$ 259,153	\$ 122,452	
INTERIOR	\$ 1,684,161	\$ 526,878	\$ 512,225	\$ 228,846	\$ 431,465	\$ 599,864	\$ 513,060	
PLUMBING	\$ 1,149,609	\$ 153,198	\$ 153,198	\$ 59,216	\$ 106,588	\$ 142,118	\$ 106,588	
HVAC	\$ 1,530,281	\$ 111,048	\$ 110,207	\$ 285,730	\$ 446,486	\$ 75,743	\$ 24,995	
FIRE/LIFE SAFETY	\$ 956,354	\$ 1,008,538	\$ 959,365	\$ 253,462	\$ 439,115	\$ 566,467	\$ 439,115	
ELECTRICAL	\$ 1,206,134	\$ 482,207	\$ 461,707	\$ 155,447	\$ 230,483	\$ 276,949	\$ 222,970	
SITE	\$ 13,697	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
VERT. TRANS.	\$ -	\$ 200,985	\$ 200,985	\$ -	\$ -	\$ -	\$ -	
HEALTH/EQUIP.	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	
<b>Total</b>	<b>\$7,996,678</b>	<b>\$2,861,288</b>	<b>\$2,775,594</b>	<b>\$1,429,932</b>	<b>\$2,227,246</b>	<b>\$2,287,099</b>	<b>\$1,776,314</b>	<b>\$21,354,151</b>

Based on the criticality of these needs, we have developed a 10-year capital plan. Potential funding for these capital plan projects will come from the housing department's annual operating expense allocation and annual facilities renewal (special allocation). The table 3 summarizes the projects that would be addressed every year for the next 10-year with cross-referencing to the ISES categories.

TABLE-3: HOUSING 10-YEAR DEFERRED MAINTENANCE PLAN

Year 1	Category	Projects/Tasks	Total
Gibbs Hall	Accessibility	Address the accessibility issues by upgrading interior door, restrooms, railing, etc.	\$537,669
Gibbs Hall	HVAC	Phase I - Commission Architect/Engineer to design new HVAC system and start demolition	\$500,000
Gibbs Hall	Fire/Life Safety	Phase I - Commission Architect/Engineer to design new fire sprinkler system and start demolition	\$200,000
Gibbs Hall	Exterior	Upgrade exterior glazing to thermal-pane systems and replace windowsills and trip as needed	\$918,773
Phase 3 - 163	Accessibility	Install door hardware and signage to comply with ADA standards and current building code.	\$101,389
<b>Year 1 Total:</b>			<b>\$2,257,831</b>
Year 2	Category	Projects/Tasks	Total
Gibbs Hall	HVAC	Phase II - Complete installation of upgraded HVAC system. Construction phase will displace student during project.	\$1,030,281
Gibbs Hall	Fire/Life Safety	Phase II - Install fire sprinkler system and start demolition	\$756,354
Phase 3 - 162	Accessibility	Install door hardware and signage to comply with ADA standards and current building code.	\$108,033
Phase 3 - 162	HVAC	Upgraded HVAC equipment and controls throughout building	\$111,048
Phase 3 - 162	Fire/Life Safety	Phase I - Commission Architect/Engineer to design new addressable fire alarm system and start demolition	\$150,000
Phase 3 - 163	Fire/Life Safety	Phase I - Commission Architect/Engineer to design new addressable fire alarm system and start demolition	\$150,000
Phase 3 - 162	Exterior	Replace pitched shingle roof and all wood trim	\$270,401
Phase 3 - 163	Plumbing	Upgrade and replace the existing bath/shower combinations and the kitchen sinks throughout	\$153,198
Phase 3 - 162	Plumbing	Upgrade and replace the existing bath/shower combinations and the kitchen sinks throughout	\$153,198
Gibbs Hall	Electrical	Phase I - Commission Architect/Engineer to design electrical distribution system upgrade replacing the older equipment/light fixtures	\$180,000
<b>Year 2 Total:</b>			<b>\$3,062,513</b>
Year 3	Category	Projects/Tasks	Total
Gibbs Hall	Electrical	Phase II - Complete installation and upgraded of electrical distribution systems and lighting fixtures.	\$1,026,134
Phase 3 - 162	Fire/Life Safety	Phase II - Complete installation of upgraded addressable fire alarm system	\$858,538
Phase 3 - 163	Exterior	Replace pitched shingle roof and all wood trim	\$276,518
Phase 3 - 163	Fire/Life Safety	Phase II - Complete installation of upgraded addressable fire alarm system	\$809,365
<b>Year 3 Total:</b>			<b>\$2,970,555</b>
Year 4	Category	Projects/Tasks	Total
Gibbs Hall	Interior	Upgrade/replace doors, hardware, flooring, ceiling panels as needed and paint interior throughout	\$1,684,161
Gibbs Hall	Plumbing	Phase I - Commission Architect/Engineer to design plumbing distribution system	\$175,000
Phase 3 - 162	Electrical	Phase I - Commission Architect/Engineer to design new central emergency system with emergency generator for emergency system.	\$150,000
Phase 3 - 163	Electrical	Phase I - Commission Architect/Engineer to design new central emergency system with emergency generator for emergency system.	\$150,000
Phase 3 - 163	HVAC	Upgraded HVAC equipment and controls throughout building	\$110,207
Palmetto South A	HVAC	Phase I - Commission Architect/Engineer to design specification for new mechanical system throughout	\$42,000
Palmetto South A	Fire/Life Safety	Phase I - Commission Architect/Engineer to design fire alarm and fire suppression system throughout.	\$38,000
<b>Year 4 Total:</b>			<b>\$2,349,368</b>
Year 5	Category	Projects/Tasks	Total
Gibbs Hall	Plumbing	Phase 2 - Complete construction and installation of upgraded plumbing distribution system.	\$974,609
Phase 3 - 162	Electrical	Phase II - Install new central emergency system with emergency generator for emergency system.	\$332,207
Phase 3 - 163	Electrical	Phase II - Install new central emergency system with emergency generator for emergency system.	\$311,707
Phase 3 - 162	Vert. Trans	Replace hydraulic passenger elevator	\$200,985
Palmetto South A	HVAC	Phase II - Installation of upgraded HVAC mechanical system throughout	\$243,730
Palmetto South A	Fire/Life Safety	Phase II - Installation and upgrade of fire alarm and fire suppression system throughout.	\$215,462
Palmetto South B	HVAC	Phase I - Commission Architect/Engineer to design specification for new mechanical system throughout	\$67,000
Palmetto South B	Fire/Life Safety	Phase I - Commission Architect/Engineer to design fire alarm and fire suppression system throughout.	\$66,000
Palmetto South B	Accessibility	Update restrooms, kitchen, handrails, doors and hardware to current ADA standards and building codes.	\$353,395
<b>Year 5 Total:</b>			<b>\$2,765,095</b>
Year 6	Category	Projects/Tasks	Total
Phase 3 - 163	Vert. Trans	Replace hydraulic passenger elevator	\$200,985
Palmetto South A	Electrical	Phase I - Commission Architect/Engineer to design new emergency system with generator for emergency system.	\$24,000
Palmetto South B	Electrical	Phase I - Commission Architect/Engineer to design new emergency system with generator for emergency system.	\$35,000
Palmetto South C	Electrical	Phase I - Commission Architect/Engineer to design new emergency system with generator for emergency system.	\$50,000

Palmetto South D	Electrical	Phase I - Commission Architect/Engineer to design new emergency system with generator for emergency system.	\$34,000
Palmetto South B	HVAC	Phase II - Complete construction and installation of HVAC mechanical system.	\$379,486
Palmetto South C	HVAC	Installation of HVAC mechanical system.	\$75,743
Palmetto South B	Fire/Life Safety	Phase II - Complete construction and installation of fire alarm system and fire suppression system.	\$373,115
Palmetto South B	Plumbing	Phase I - Commission Architect/Engineer to design plumbing distribution system	\$16,000
Palmetto South A	Plumbing	Phase I - Commission Architect/Engineer to design plumbing distribution system	\$9,000
Palmetto South C	Fire/Life Safety	Phase I - Commission Architect/Engineer to design fire alarm and fire suppression system throughout.	\$84,970
Palmetto South D	Fire/Life Safety	Phase I - Commission Architect/Engineer to design fire alarm and fire suppression system throughout.	\$65,867
Palmetto South A	Exterior	Replace pitched shingle roof, exterior trim, and gutter systems	\$103,521
Palmetto South B	Exterior	Replace pitched shingle roof, exterior trim, and gutter systems	\$219,714
Palmetto South C	Exterior	Replace pitched shingle roof, exterior trim, and gutter systems	\$259,153
Palmetto South D	Exterior	Replace exterior metal doors and hardware.	\$122,452
Palmetto South A	Accessibility	Update restrooms, kitchen, handrails, doors and hardware to current ADA standards and building codes.	\$343,710
<b>Year 6 Total:</b>			<b>\$2,396,716</b>
<b>Year 7</b>	<b>Category</b>	<b>Projects/Tasks</b>	<b>Total</b>
Palmetto South A	Electrical	Phase II - Complete construction and installation of emergency system with generator for emergency system.	\$131,447
Palmetto South B	Electrical	Phase II - Complete construction and installation of emergency system with generator for emergency system.	\$195,483
Palmetto South C	Electrical	Phase II - Complete construction and installation of emergency system with generator for emergency system.	\$226,949
Palmetto South D	Electrical	Phase II - Complete construction and installation of emergency system with generator for emergency system.	\$188,970
Palmetto South B	Plumbing	Phase II - Complete construction and installation of upgraded plumbing distribution system.	\$90,588
Palmetto South A	Plumbing	Phase II - Complete construction and installation of upgraded plumbing distribution system.	\$50,216
Palmetto South C	Fire/Life Safety	Phase I - Commission Architect/Engineer to design fire alarm and fire suppression system throughout.	\$481,497
Palmetto South D	Fire/Life Safety	Phase I - Commission Architect/Engineer to design fire alarm and fire suppression system throughout.	\$373,248
Palmetto South D	Accessibility	Update restrooms, kitchen, handrails, doors and hardware to current ADA standards and building codes.	\$347,134
<b>Year 7 Total:</b>			<b>\$2,085,532</b>
<b>Year 8</b>			
Palmetto South A	Interior	Upgrade and replace cabinets, case work, interior doors and hardware.	\$228,846
Palmetto South B	Interior	Upgrade and replace cabinets, case work, interior doors and hardware.	\$431,465
Palmetto South C	Interior	Upgrade and replace cabinets, case work, interior doors and hardware.	\$599,864
Palmetto South D	Interior	Upgrade and replace cabinets, case work, interior doors and hardware.	\$513,060
Palmetto South C	Plumbing	Phase I - Commission Architect/Engineer to design plumbing distribution system	\$21,318
Palmetto South D	Plumbing	Phase I - Commission Architect/Engineer to design plumbing distribution system	\$15,988
<b>Year 8 Total:</b>			<b>\$1,810,541</b>
<b>Year 9</b>			
Palmetto South C	Plumbing	Phase II - Complete construction and installation of upgraded plumbing distribution system.	\$120,800
Palmetto South D	Plumbing	Phase II - Complete construction and installation of upgraded plumbing distribution system.	\$90,600
Gibbs Hall	Site	ADA assessable workways and entrances	\$13,697
Palmetto South C	Accessibility	Update restrooms, kitchen, handrails, doors and hardware to current ADA standards and building codes.	\$366,805
Phase 3 - 162	Interior	Upgrade and replace cabinets, case work, interior doors and hardware.	\$526,878
Palmetto South D	HVAC	Replace HVAC mechanical equipment and exhaust fans in restrooms throughout	\$24,995
<b>Year 9 Total:</b>			<b>\$1,143,775</b>
<b>Year 10</b>			
Phase 3 - 163	Interior	Upgrade and replace cabinets, case work, interior doors and hardware.	\$512,225
<b>Year 10 Total:</b>			<b>\$512,225</b>
<b>Grand Total:</b>			<b>\$21,354,151</b>

Also, note that some of the minor items in the Palmetto South supporting buildings like mailbox, laundry etc. will be addressed through the annual operating expense allocation. FAMU has 10-year cumulative needs of about \$3M in the Village, Samson, and Young buildings. Majority of these (\$2.4M) are in the 10-year recurring category. To address the needs for these buildings, the housing department's annual operating expense allocation will be utilized.

Finally, FAMU will be utilizing some of its CITF (Capital Improvement Trust Funds) for the demolition of the current closed facilities. In addition, we are currently developing a plan for the demolition of the facilities that will be replaced upon the opening of the new dorms.