



# 12.0 FACILITIES MAINTENANCE

*2020-30 CAMPUS MASTER PLAN UPDATE*

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# 12.0 FACILITIES MAINTENANCE INTRODUCTION

## INTRODUCTION

### NARRATIVE

Facilities Operations, a department in Facilities and Safety (F&S), maintains the University's facilities in order to support the academic mission of the University.

The operations and maintenance of campus facilities has a heavy impact on campus sustainability. The fixtures in the restrooms determine the amount of water that is consumed by the buildings. The efficiency of the equipment and lighting determines amount of energy that is consumed by the buildings. Finally, the timely maintenance performed on the equipment largely determines the environmental impact.

By establishing proactive routine, preventive, and planned facility maintenance programs, Facilities Operations (FO) will extend the useful life of all buildings and prevent premature capital outlay for their replacements.

Facilities Operations  
Mission

The Facilities Operations Mission is to support the University's collective impact through ensuring campus operations run smoothly while exceeding student, faculty, and staff service expectations. This is accomplished by providing cost-effective and reliable operations and maintenance to minimize interruptions and create a safe, comfortable, and clean campus for all, to facilitate and sustain an enhanced collaborative and successful research-based learning environment into the future for our students to grow, learn, and succeed.

### RELATED ELEMENTS

See 5.0 GENERAL INFRASTRUCTURE & UTILITIES, Solid Waste Sub-Element for Recycling.

### REGULATION

12.0 FACILITIES MAINTENANCE is an optional element that UCF has included in the Campus Master Plan since 1995.

Optional elements are permitted under BOG 21.212, but are not subject to review under Chapter 21.



## 12.0 FACILITIES MAINTENANCE GOALS, OBJECTIVES, & POLICIES

### GOALS, OBJECTIVES, & POLICIES

**GOAL 1: Implement planned and routine maintenance programs which will extend the useful life of all buildings and prevent premature capital outlay for building and systems replacement.**

**OBJECTIVE 1.1:  
Establish the  
acceptable use and  
capacity of each  
building.**

POLICY 1.1.1: The use and capacity of each building shall be determined by the Vice President for Administration and Finance and his or her staff. The Space Administration department shall maintain documentation on the use and capacity of all facilities in the UCF Space Report.

POLICY 1.1.2: The Vice President in charge of a facility desiring to change the use and/or capacity of that facility shall meet with the Vice President of Administration and Finance and his or her staff to determine if the proposed use is acceptable to the University.

**OBJECTIVE 1.2:  
Establish the desired  
level of performance for  
building components.**

POLICY 1.2.1: The exterior walls, windows, and doors of campus buildings shall be expected to last the life of the building, with maintenance as scheduled in Objective 1.3. Roofs shall be expected to last 20 years under normal weather conditions, with maintenance as scheduled in Objective 1.3 of this Element.

POLICY 1.2.2: The interior walls, floors, stairs, doors, windows, and frames of campus buildings shall be expected to last the life of the building, with maintenance as scheduled in Objective 1.3.

POLICY 1.2.3: The structural, plumbing, and electrical systems of campus buildings shall be expected to last the life of the building, with preventative maintenance as scheduled in Objective 1.3. HVAC systems are expected to last 15 years, and elevators are expected to last 20 years, with maintenance as scheduled in Objective 1.3.

POLICY 1.2.4: The exterior walls of buildings shall be brick or masonry, with a sealer and primer applied to a stucco finish. Exterior doors and window frames shall be metal.

POLICY 1.2.5: HVAC ducts shall not be internally lined with fiberglass or fibrous materials.

POLICY 1.2.6: Roofs shall be sloped and shall be single ply membrane, modified Bitumen, or standing seam, or other approved systems. Re-roofing projects shall consider spray-on polymer coatings with a 20-year warranty.

**OBJECTIVE 1.3:  
Establish a preventative  
maintenance schedule  
for campus facilities.**

POLICY 1.3.1: F&S shall be responsible for the operation, maintenance, and utilities campus buildings. F&S shall provide oversight for the operation and maintenance of auxiliary buildings per UCF Policy 3-106, Maintenance, Repair, and Housekeeping.

POLICY 1.3.2: All University entities shall follow UCF Policy 3-106, Maintenance, Repair, and Housekeeping, in coordination with F&S.

## 12.0 FACILITIES MAINTENANCE GOALS, OBJECTIVES, & POLICIES

### **OBJECTIVE 1.4: Establish priorities for maintenance and improvement projects.**

POLICY 1.3.3: Leased trailers on campus shall be the responsibility of the Vice Provost for Academic Affairs.

POLICY 1.3.4: The University shall ensure that all renovations, remodels, and newly-constructed buildings follow the UCF Design, Construction, and Renovation Standards, and all applicable codes.

POLICY 1.3.5: Exterior walls, windows, doors, and exposed metal structures shall receive routine maintenance every eight (8) years. Roofs shall receive routine maintenance every year.

POLICY 1.3.6: Interior walls shall be repainted, carpet shall be replaced, and suspended acoustical ceilings shall be replaced on an as-needed basis, as funding becomes available.

POLICY 1.3.7: HVAC systems shall receive monthly maintenance. Lab hoods and exhaust fans shall be maintained every six (6) months. Lab showers and eyewashes shall be tested quarterly. Backflow preventers shall be tested yearly. Electrical systems shall receive maintenance every five (5) years.

POLICY 1.3.8: Elevators shall receive a basic inspection monthly. Mandated changes shall be accomplished as funding becomes available. A renovation shall be completed once during the life of the elevator.

POLICY 1.4.1: F&S shall identify and prioritize maintenance and improvement projects on an ongoing basis and maintain a master list of prioritized Critical Deferred Maintenance projects. As funding becomes available, F&S shall determine appropriate strategies to make corrections. Subsequent to inspections, the inspecting party shall input maintenance and preventative work orders in the Computerized Maintenance Management System (CMMS) for follow-up action.

POLICY 1.4.2: In the first quarter of every year, a designated number of buildings shall be inspected for possible deficiencies.

POLICY 1.4.3: FO shall maintain buildings using a CMMS capable of addressing preventive maintenance items by issuing work orders on a scheduled basis. This system shall identify scheduled service, maintenance and inspection of mechanical systems, life safety systems, and building components. Building cleaning maintenance shall be based on task assignments for daily, semester, or annual project work.

POLICY 1.4.4: FO, in conjunction with Housing and Residence Life, shall identify and prioritize major repair and renovation projects for residence halls on campus. Corrections shall be made as funding becomes available.

POLICY 1.4.5: Immediate building-related threats to the health, safety, or welfare of students, faculty, or staff shall receive immediate attention. Threats may be identified by the State Fire Marshal, Environmental Health and Safety, the UCF Police Department, FO, Facilities Planning and Construction, or others.

## 12.0 FACILITIES MAINTENANCE GOALS, OBJECTIVES, & POLICIES

**OBJECTIVE 1.5:  
Establish a schedule for  
eliminating deficiencies  
relating to current  
standards.**

POLICY 1.4.6: Buildings scheduled for major interior renovations shall not receive minor interior improvements within twelve (12) months prior to the renovation, with the exception of correcting health and life safety concerns.

POLICY 1.5.1: At least 90 percent of E&G facility-related life safety code violations shall be corrected within 90 days of being identified, as funding becomes available.

POLICY 1.5.2: A minimum of two (2) buildings every year for the next 10 years shall be re-roofed, as funding become available.

POLICY 1.5.3: Fire code violations shall be corrected within one (1) year of being identified, as funding becomes available.

POLICY 1.5.4: Building code violations shall be corrected within one (1) year of being identified, as funding becomes available.

POLICY 1.5.5: All asbestos abatement shall be completed, as funding becomes available.

POLICY 1.5.6: All lead-based paint in buildings to be renovated shall be identified and removed, as funding becomes available.

## DATA & ANALYSIS

### Facilities Maintenance

#### NARRATIVE

Deferred maintenance is maintenance, system upgrades, or repairs that are deferred to a future budget cycle or postponed until funding becomes available.

Regularly-scheduled preventive maintenance not only prevents sudden and unexpected equipment failure, but also reduces the overall life-cycle cost of the building.

#### Building Condition Assessments

Since 2012, the University has contracted with the ISES Corporation to benchmark and detail the condition of its E&G facilities. On a triennial basis, Facilities Condition Assessments are performed on each E&G building. Categories inspected include exterior structure and roof system, interior structure, ADA accessibility, energy/water conservation, health, fire/life safety, HVAC, electrical, plumbing, and elevators. This ongoing assessment helps the University prioritize and perform the most critical repairs in a cost-effective manner, therefore helping to avoid the accumulation of deferred maintenance on campus. These reports have become an invaluable tool when renovating existing buildings.

#### Capital Planning and Deferred Maintenance Management System

Additionally, the University has implemented a Capital Planning and Deferred Maintenance management system. As an add-on to the current Enterprise Asset Management system, this module will function seamlessly with the work order system, enhancing the facilities condition assessment data into a “living database” of actual asset conditions.

#### Prioritizing Building Issues

Issues regarding SREF<sup>1</sup>, life safety codes, ADA compliance, hazardous materials (including asbestos, lead-based paints and other environmental or hazardous materials), roof management, and energy efficiency are prioritized and addressed as funding becomes available.

#### NEW CONSTRUCTION PLANNING

All University buildings must have proven engineering designs in accordance with the UCF Design, Construction, and Renovation Standards, so that they can be integrated into the existing campus maintenance programs.

#### OPERATIONS AND WORK FLOW

Since 2015, FO has added over 60 standard operating procedures (SOPs) to refine workflow processes and facilitate high service levels, performance standards, and repeated quality.

#### Zone-based Maintenance

FO adopted a zone-based maintenance approach in 2013, and has been refining its operations ever since. In addition to the day-shift building maintenance, FO subsequently created night-shift preventive maintenance and inspection teams. These teams have achieved over

<sup>1</sup> State Requirements for Educational Facilities (SREF)

99% compliance with planned life safety inspections and the routine preventive maintenance program. This hybrid approach allows day-shift maintenance teams to focus on routine maintenance, while night-shift teams focus on critical life safety or environmental control systems, ensuring that proactive inspections and maintenance do not disrupt the student experience.

Maintenance Management System

AiM<sup>2</sup> is a Computerized Maintenance Management System (CMMS) that is used for work and asset management.

## Housekeeping

### **NARRATIVE**

**A functional building.**

**An attractive campus.**

**A clean environment.**

Our mission is to create a safe, functional, clean, efficient, and attractive living and learning environment. We focus on providing routine cleaning of facilities and housing, cleaning and recycling for campus events, special delivery or services, and recycling services. Our staff will also inventory and stock supplies such as toilet paper in every building to maintain daily operations.

Services include:

- Cleaning classrooms, hallways, and offices
- Cleaning restrooms
- Replacing paper towels and soap
- Cleaning out recycle bins and trash cans
- Vacuuming, sweeping, mopping, waxing, and refurbishing floors
- Cleaning windows
- Scheduling regular pest control

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<sup>2</sup> AiM is a product of AssetWorks