

**Unit Overview/Mission/Purpose**

Facilities Maintenance & Custodial Services is a service-oriented organization committed to meeting the needs of students, faculty, and staff. By providing clean, safe, and comfortable facilities, Facilities Maintenance & Custodial Services will create and maintain an environment conducive to the pursuit of the University Mission. Facilities Maintenance & Custodial Services recognizes the need to maintain the university in the most efficient manner possible while maintaining quality customer service.

**Staffing**

	FY16	FY17	FY18	FY19
# Full Time Staff	153	150	143	131
# Student Employee FTE	17	8	7	
FTE per mmsqft	43.5	42.7	40.7	37.3

**Success Outcome 1:**

Our goal would be to make efforts to meet standards to a level 3 Managed Care. (see appendix) Level 3: Managed care “Maintenance activities appear to be somewhat organized but remain people dependent. Equipment and building components are mostly functional but suffer occasional breakdowns. Service and maintenance call response times are variable and sporadic without apparent cause. Regulatory submittals and requirements typically meet submission dates, with some occasional short delays. Buildings and equipment are periodically upgraded to current standards and use, but not enough to control the effects of normal usage and deterioration.” APPA published standards (see appendix for additional details)

- APPA defines
- 1 = Showcase Facility
  - 2 = Comprehensive Stewardship
  - 3 = Managed Care
  - 4 = Reactive Management
  - 5 = Crisis Response

Currently we are managing to maintain at a level 4 reactive management.

**KPI 1.1**

**Data:** Preventative Maintenance vs. Corrective Maintenance

**Result:** 47% work being completed is Preventative Maintenance. This still falls within the Level 4 standard. See appendix

**Response/Action Plan:** Current staffing levels have greatly reduced the number of man-hours spent on each area. At this time we are striving to keep the Preventative Maintenance program going and not revert to a Level 5 where only crisis response is completed.

**KPI 1.2**

**Data:** Completion Percentage of Employee training

**Result:** Currently per our pervious standards we are 32% compliant, which falls within the level 4 standard. Staff have general awareness of code compliance regulations and life safety requirements. This is consistent with the current description of level 4 APPA standard. See appendix

**Response/Action Plan:** This is based on the previously developed training matrix by EHS. These standards are higher than that of the regulatory compliance. Current program was put in place, is currently being reevaluated to make sure of relevance of training. This will help to streamline the process to make sure vital trainings continue, without continuing to reduce the man-hours spent doing required tasks. Once complete we can get a base line.

**Success Outcome 2:**

Facilities Maintenance & Custodial Services continues to work to reduce the overall campus energy usage and annual spend. We manage the consumption by the operations and maintenance of our HVAC system, procurement of the best rate and utilization of the building automations system. FMS has realigned our Energy and HVAC departments are now jointly managed, and a dedicated person to manage our building automation system. The prioritization can be better managed to meet consumption goals for the university to be the best stewards of this resource.

**KPI 2.1**

**Data:** Overall campus energy consumption per squarefoot.

**Result:** 5% reduction from FY17 to FY18 (not weather normalized) - Energy consumption is dependent on weather, comparing energy usage per squarefoot for campus year over year is the most informational. This data will show which systems / building need the most attention. As this number increases it will allow our team to better manage our preventative maintenance efforts as well as prioritize any deferred maintenance by building/system. Industry standards are set by building type and the majority of our buildings are not just one type.

**Response/Action Plan:** With our energy/HVAC team working towards the same goal, this will allow the opportunity to continue to reduce energy usage. As we continue with this metric, it will become a predictive tool to show issues, prior to equipment failure.

**Concluding Remarks (optional):**

Facilities Operations is working hard to keep to and exceed the standards currently being set for the university. Current staffing levels and budget restraints make this goal increasingly more difficult. FMS management evaluates the facility based of the published APPA standards. Our data is submitted annually to APPA. Other metrics such as Maintenance cost per sqarefoot or FTE per squarefoot are measureable differences but lack concrete industry standards.

Level	1	2
Description	Showpiece Facility	Comprehensive Stewardship
Customer Service and Response Time	Able to respond to virtually any type of service, immediate response.	Response to most service needs, including limited no maintenance activities, is typically in a week or less
Customer Satisfaction	Proud of facilities, have a high level of trust for the facilities organization.	Satisfied with facilities-related services, usually complimentary of facilities staff.
Preventive Maintenance vs. Corrective Maintenance	100%	75-100%
Maintenance Mix	All recommended preventive maintenance (PM) is scheduled and performed on time. Reactive maintenance (e.g., spot relamping and adjusting door closers) is minimized to the unavoidable or economical. Emergencies (e.g., power outages) are infrequent and handled efficiently.	A well-developed PM program. PM is done at a frequency slightly less than defined schedule. Much reactive maintenance required from premature failures, high number of lamps burned out. Occasional emergencies caused by pump failure, cooling systems failures, etc.

Regulatory Compliance	Highly trained staff or contracted services provide for full compliance for required and recommended OSHA, EPA, and life safety requirements at the best business practices level. Independent department/group with funding to support and develop campus programs with authority to make and implement changes. All required and recommended OSHA, EPA, and life safety programs training in place. Records are well organized and more than adequate to satisfactorily meet regularly scheduled third-party audits. Overarching management system in place or under development, tracking goals and achievements, including campus communication.	full awareness of OSHA, EPA, and life safety requirements, including outreach to the campus at large. Trained staff or contracted services provide for full compliance for required and recommended OSHA, EPA, and life safety requirements. Independent funding specifically provided to support and develop campus OSHA, EPS, and life safety programs. All required and recommended OSHA, EPA, and life safety programs training in place. Records are well organized and more than adequate to satisfactorily meet regularly scheduled third-part audits.
Aesthetics, Interior	Like-new finishes	Clean/crisp finishes.
Aesthetics, Exterior	Windows, doors, trim, exterior walls are like new.	Watertight, good appearance of exterior cleaners.
Aesthetics, Lighting	Bright and clean, attractive lighting.	Bright and clean, attractive lighting

Service Efficiency	Maintenance work is highly organized and focused. Calls are responded to immediately. Buildings and equipment are routinely and regularly upgraded, keeping them current with modern standards and usage.	Maintenance work is organized with direction. Calls are responded to in a timely manner. Buildings and equipment are regularly upgraded, keeping them current with modern standards and usage.
Building System's Reliability	Breakdown maintenance is rare and limited to vandalism and abuse repairs	Breakdown maintenance is limited to system components short of MTBF (mean time between failures)

Sustainability	<p>Established staff with funding specifically provided to support, develop, and document campus sustainability programs with authority to make changes and implement recommendations. Programs focuses on academic and administrative operations identifying alternate "sustainable" products or methods, and continued recycling of common materials such as paper, cardboard, plastics, metals, and purchasing of "green" and renewable products/materials. Multiple existing buildings certified to be operating at LEED operations and maintenance (O&amp;M) level. New construction/renewal work meets one of the four LEED certification levels. Greenhouse gas inventory aggressively managed with annual CO2 reduction provided through routine use of building heating/cooling systems controls, curtailment programs during low use, and planned projects replacing inefficient equipment or installing renewable energy systems.</p>	<p>Sustainability programs with responsibility assigned to a specific department and staff with additional funding for program development, implementation, and initial campus outreach. Program focuses on larger institutionally controlled operations identifying alternate "sustainable" products and continued recycling of common materials such as paper cardboard, plastics, and metals and purchasing of "green" and renewable products/materials. Some existing building operating at LEED O&amp;M level. New construction/renewal work contains majority, but not all, of LEED certification elements. Greenhouse gas inventory data collected and reviewed to project likely next year target and identify projects planned to continue reduction results. Energy conservation/reduction provided through routine use of building heating/cooling systems' controls, curtailment programs during low use, and planned projects replacing inefficient equipment.</p>
Facility Maintenance Operating Budget of % of CRV	> 4.0	3.5-4.0
Campus Average FCI	< 0.05	0.05-0.15

3	4	5
Managed Core	Reactive Management	Crisis Response
services available only by reducing maintenance, with response times of one month or less.	Services available only by reducing maintenance, with response times of one year or less	Services not available unless directed from top administration, none provided except emergencies.
Accustomed to basic level of facilities care. Generally able to perform mission duties. Lack of pride in physical environment	Generally critical of cost, responsiveness, and quality of facilities services.	Consistent customer ridicule, mistrust of facilities services
50-75%	25-50%	0%
Reactive maintenance predominates from systems failures, especially during harsh seasonal peaks. PM effort made based on available time and labor. The high number of emergencies (e.g., pump failures, heating and cooling system failures) causes reports to upper administration.	Labor is used to react to systems that are performing poorly or not at all. Significant time spent procuring parts and services due to the high number of emergencies. PM work consists of simple tasks and done inconsistently (e.g., filter changing, greasing, and fan belt replacement).	No PM performed due to more pressing problems. Reactive maintenance is the norm (e.g., doors won't lock, fans lock up, HVAC systems fail). Good emergency response because of skills gained from frequent failures. No status reporting, upper administration is tired to reading the reports.

<p>General awareness of OSHA, EPS, and life safety requirements, including institutional responsibilities. Adequate staff time or contracted services provide compliance for routine OSHA, EPA, and life safety requirements. Funding specifically identified but as a portion of responsible department's budget. OSHA, EPS, and life safety programs, training and records adequate to pass audit/inspection action.</p>	<p>Some awareness of OSHA, EPA, and life safety requirements, including institutional responsibilities. Part-time staff or contracted services used to address OSHA, EPA, and life safety issues as they arise. Funding not specifically identified but assumed to be part of responsible departments' budget. Partial OSHA, EPA, and life safety programs developed with minimal training.</p>	<p>Little or no awareness of OSHA, EPA, and life safety requirements, including institutional responsibilities. OSHA, EPS, and life safety programs management is unassigned or assigned as a collateral duty without pertinent training. Funding provided only to avoid potential fines for noncompliance.</p>
<p>Average Finishes.</p>	<p>Dingy finishes.</p>	<p>Neglected finishes.</p>
<p>Minor leaks and blemishes, average exterior appearance</p>	<p>Somewhat drafty and leaky, rough-looking exterior, extra painting necessary.</p>	<p>Inoperable windows, leaky windows, unpainted, cracker panes, significant air and water penetration, poor appearance overall.</p>
<p>small percentage of lights out, generally well lit and clean.</p>	<p>Numerous lights out, some diffusers, secondary areas dark.</p>	<p>Dark, lots of shadows, bulbs and diffusers missing, cave-like, damaged, hardware missing.</p>



<p>Maintenance work is somewhat organized, but remains people dependent. Call response is variable and sporadic, without apparent cause. Buildings and equipment are periodically upgraded to current standards and use, but not enough to control to effects of normal usage and deterioration.</p>	<p>Maintenance work is somewhat chaotic and is people depend. Calls are typically not responded to in a timely manner. Normal usage and deterioration continues unabated, making buildings and equipment inadequate to meet present use needs.</p>	<p>Maintenance work is chaotic and without direction. Calls are never responded to in a timely manner. Normal usage and deterioration continues unabated, making building and equipment inadequate to meet present use needs.</p>
<p>Building and systems components periodically or often fail.</p>	<p>Many systems unreliable. Constant need for repair. Backlog of repai needs exceeds resources.</p>	<p>Many systems nonfunctional. Repair instituted only for life safety issues.</p>

<p>General awareness of sustainability programs with responsibility assigned to a specific department for funding, development, and implementation. Program focuses on larger department-controlled operations for recycling of common materials such as paper, cardboard, plastics, metals, and purchasing of "green" and renewable products/materials. No existing buildings operatin at LEED O&amp;M level. New construction/renewal work contains some, but not all, of LEED certification elements. Greenhouse has inventory data collected and reviewed with general reduction goal but without specific CO2 targets. Energy conservation/reduction provided through routine use of building heating/cooling systems' controls, and periodic projects replacing inefficient equipment.</p>	<p>Some awareness of sustainability programs with responsibility assigned to a specific department, without any expectations other than responding to issues that may develop. Program focuses on larger department-controlled operations for recycling of common materials such as paper, cardboard, plastics, matals, and purchasing of "green" and renewable products/materials. No existing building operating at LEED O&amp;M level. No requirement for LEED certification elements to be considered for new construction/renewl work. Greenhouse gas inventory data collected with general reduction as a goal but without specific targets. Energy consevation/reduction provided through sporadic use of building heating/cooling systems' controls and occasional projects replacing inefficient equipment. Renewable energy systems not considered or in place.</p>	<p>Vague awareness of sustainability programs. Campus sustainability effort reflected through the use of "green" products. No existing buildings operating at LEED O&amp;M level. No requirement for LEED certification elements to be considered for new construction/renewal work. No greenhouse gas inventory data collected. Energy conservation/reduction program consists of sporadic projects installing replacement, higher efficiency equipment. Renewable energy systems not considered or in place. Solid waste reduction provided through recycling of easily captured items such as paper and cardbaord.</p>
<p>3.0-3.5</p>	<p>2.5-3.0</p>	<p>&lt;2.5</p>
<p>0.15-0.29</p>	<p>0.30-0.49</p>	<p>&gt;.50</p>

	A	B	C	D	E	F
1	<b>PHYSICAL PLANT TRAINING MATRIX</b>					
2	<b>Title</b>	<b>Custodial Services</b>	<b>POM</b>	<b>Grounds</b>	<b>To Schedule Training</b>	<b>Training Frequency Required</b>
3	Aerial Lift	NO	YES (all employees)	YES (all employees)	See Note 1	every 2 yrs
4	Ammonia Use (Ice Room)	NO	YES (water treatment staff and HVAC personnel on approved list)	NO	See Note 1	annual
5	Asbestos Awareness	YES (all employees)	YES (all employees)	NO	See Note 2	annual
6	Bloodborne Pathogens	YES (all employees)	YES (all employees)	YES (all employees)	See Note 1	annual
7	Chlorine Use	NO	YES (water treatment staff)	NO	See Note 1	annual
8	Cold Weather Injury Prevention	YES (Recycling Coord.)	YES (all employees)	YES (all employees)	See Note 2	annual
9	Confined Space	NO	YES (all employees)	YES (all employees)	See Note 1	annual
10	Contractor Safety & Health	YES (supervisors)	YES (all employees)	YES (all employees)	See Note 1	annual
11	EHS Orientation	YES (all employees)	YES (all employees)	YES (all employees)	See Note 2	one time
12	Electrical Safety	NO	YES (Qualified Electrical Workers)	NO	See Note 3	annual
13	Electrical Safety Awareness	pending	pending	pending		
14	Fall Protection - Working at Heights	NO	YES (all employees)	YES (all employees)	See Note 1	annual
15	Forklift Safety & Operation	YES (Recycling Coord. And Custodial Leads)	YES (all employees)	NO	See Note 6	every 3 yrs
16	Grinding Safety	NO	YES (all employees)	YES (all employees)	See Note 4	n/a
17	Hazard Communication	YES (all employees)	YES (all employees)	YES (all employees)	See Note 1	annual
18	Hearing Conservation	NO (unless specficcially identified)	NO (unless specficcially identified)	YES (all employees)	See Note 5	annual
19	Heat Stress	YES (Recycling Coord.)	YES (all employees)	YES (all employees)	See Note 2	annual
20	Lab Safety Awareness	YES (all employees) <b>Will get with hazard Communication training</b>	YES (all employees) <b>Will get with hazard Communication training</b>	NO	n/a	annual
21	Ladder Safety	YES (all employees)	YES (all employees) <b>Will get with Fall Protection training</b>	YES (all employees) <b>Will get with Fall Protection training</b>	See Note 2	annual
22	Lockout	NO	YES (all employees)	YES (all employees)	See Note 1	annual

	A	B	C	D	E	F
23	Powered Industrial Trucks ( <b>other than Forklift Safety &amp; Operation</b> )	pending	pending	pending	See Note 9	every 3 yrs
24	<b>Title</b>	<b>Custodial Services</b>	<b>POM</b>	<b>Grounds</b>	<b>To Schedule Training</b>	<b>Training Frequency Required</b>
25	Respiratory Protection	NO (unless specifically identified)	YES (designated employees)	NO (unless specifically identified)	See Note 1	annual
26	Scaffolding	NO	YES (all employees)	YES (all employees)	See Note 1	annual
27	Spill, Prevention, Control, and Countermeasures (SPCC)	NO	YES (all employees)	NO	See Note 2	annual
28	Stormwater Management	YES (all employees)	YES (all employees)	YES (all employees)	See Note 2	annual
29	Underwater Diving Operations	NO	Yes (designated employee)	NO	See Note 7	TBD
30	Waste Management	YES (all employees)	YES (all employees)	YES (all employees)	See Note 2	annual
31	Welding Safety	NO	YES (all employees)	YES (all employees)	See Note 8	TBD
32						
33						
34	Note 1 - Contact EHS to schedule classroom training					
35	Note 2 - Visit EHS website training page to take on-line OR contact EHS to schedule classroom training					
36	Note 3 - Electrical training for qualified electrical workers includes courses provided by Ohio BWC Division of Safety and Hygiene as well as basic first aid/CPR/AED training provided by various sources as required by university Electrical Safe Work Practice document. Contact EHS for assistance with scheduling BWC courses if					
37	Note 4 - No formal; training required. Information on grinder safety available from EHS website occupational safety page. Available for distribution by Plant supervisors to Plant personnel who use grinders.					
38	Note 5 - Currently only required for Grounds. Other areas and/or tasks of concern (i.e., those equal to or exceeding 85 decibels) must be submitted to EHS for training requirement evaluation.					
39	Note 6 - Includes both on-line and classroom training. Visit EHS website training page to take on-line portion. EHS will contact you after on-line is complete to get the classroom portion.					
40	Note 7 - Name of employee(s) who performs underwater diving operations for pool maintenance, or other reasons, must be submitted to EHS for training requirement evaluation.					
41	Note 8 - Welding training provided by off-site vendor as needed.					
42	Note 9 - Inventory of Plant owned and/or operated powered industrial trucks (vehicles used for transportation in tunnels, golf carts, etc...) must be developed and submitted to EHS for training requirement evaluation.					