## Pike County Career Technology Center



**Adult Education**

**Plan: Facility and Campus Improvement**

Maintenance Supervisor Tony Carter

Maintenance Staff Member Ben Skidmore

Maintenance Staff Member Keith Shaw

Superintendent Eric Meredith

Secondary Director Shon Tackett

Adult Education Director Lathe Moore

Equipment: An inventory list is maintained at the fiscal office.

**Maintenance Business Plan**

**Pike County Career Technology Center**

**175 Beaver Creek Rd.**

**Piketon OH 45661**

**Phone: 740-289-2721**

[**www.pikectc.net**](http://www.pikectc.net)

**A comprehensive maintenance plan was prepared and presented after the 2008-2009 building renovation and expansion project by SHP Leading Design/PointGuard®. This current plan is a continuation of that work.**

**SHP Leading Design/PointGuard®**

**4805 Montgomery Rd.**

**Cincinnati Ohio 45212**

**School District General Information**

District Name Pike County Joint Vocational School District

District IRN # 051375

Physical Address 175 Beaver Creek Rd. Piketon Ohio 45661-9114

**Building General Information**

Building Name Pike County Career Technology Center

Building IRN # 29934

Physical Address 175 Beaver Creek Rd. Piketon Ohio 45661-9114

Total Square Footage 136,455

Number of Floors 1

Site Acreage: 160 acres

Grades: High School and Adult

**Introduction**

A facility maintenance plan details the district’s strategy for proactively maintaining its facilities. An effective maintenance plan reflects and supports the vision and mission of the school. The development and implementation of this facility maintenance plan contributes to both the instructional and financial well-being of this educational institution and its community.

**Purpose**

The foremost purpose of the comprehensive maintenance plan is to protect and maintain the facilities. Essentially the maintenance plan can be described as addressing specific maintenance needs as outlined below:

1. **Preventative Maintenance** represents a planned and controlled program of periodic inspection, adjustment, lubrication, and replacement of components as well as performing testing and analysis. This typically includes reparable maintenance activities that maximize the reliability, performance, and lifecycle of building systems. Preventative maintenance occurs on no longer than an annual cycle and is typically done weekly, monthly, semi- monthly, semi-annually, and annually.
2. **Unplanned Maintenance** will fall into any of the four categories as defined below:
3. Reactive – unplanned maintenance of a nuisance nature requiring low levels of skill and correction. These problems are usually identified and reported by facilities users.
4. Emergency – unscheduled work that requires immediate action to restore services, to remove problems that could interrupt activities, or protect life and property.
5. Corrective – unplanned maintenance of a non-emergency nature involving a moderate repair or correction requiring skilled labor.
6. Support – the “service” that all departments must deliver. It includes supporting discussions and light customer activities that every office-style building demands. While not applicable to maintenance, it must be accounted for because it will always be a drain on maintenance staff resources. If it is not included and considered it will drain other estimated budgeting staff resources and leave the maintenance department short for true maintenance activities.
7. **Planned Maintenance & Repairs** are characterized by replacement of nominal components of a system such as the compressor of an air conditioning unit or the motor of a feed water pump. The maintenance activity is capital by definition but managed out of the operating budget in most cases. It involves major system-component replacement. For example, the HVAC component renewal factor accounts for the major motors and compressors that are replaced in a cycle shorter than the life of the whole HVAC system.
8. **Capital Renewal** represents the periodic replacement of major components or infrastructure systems at or near the end of their useful life. Repair work that ensures that the facilities will function at levels commensurate with the academic priorities and missions of the institution. Replacement of major mechanical components, a roof replacement project, or a brick tuck-pointing and repair project would all be considered examples of capital renewal projects.

**State and Federal Code and Procedure Compliance**

A key component to any comprehensive Maintenance Plan must be a focus on providing the type of environment that supports student success. Federal and state codes and procedures exist to ensure public school systems operate in a safe and conducive manner. Pike CTC will continue to assess important areas such as air quality, Jarod’s Law, MSDS policies and facility audits performed by local, state, and federal code compliance agencies. The Maintenance Supervisor will keep record of inspections and audits.

Overwhelming data exists relating enhanced student performance to a healthy and safe environment. Successfully addressing all issues raised in these areas will enable the district to provide a healthy and safe learning atmosphere for its students and staff.

**Budget**

The Treasurer puts forth annual and projected budgets which include the elements listed in this plan. The Superintendent and Board of Education approve the annual budget. The district has established a commitment in the past to funding the most critical of all budget recommendations of preventative maintenance and is prepared to continue its commitment and focus on funding a comprehensive maintenance and building plan.

**Personnel and Professional Development**

A Maintenance Supervisor will oversee all maintenance related activities and staff. The number of maintenance staff will be at a sufficient level to support the educational mission of the school.

In order to establish an effective comprehensive maintenance plan that will efficiently care for all preventative, planned, and unplanned maintenance the school will utilize an effective combination of in-house maintenance staff, right sourced contractors, and student program support. Professional development activities of staff at the Pike CTC, including the maintenance staff, are required and encouraged.

In order to determine staffing needs, the figures below are the result of using the Zero-Based Budgeting web tool provided by the Ohio School Facilities Commission (OSFC). These figures represent the estimated hours needed to complete the different maintenance tasks.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | **TOTAL HOURS** | **PREVENTATIVE MAINTENANCE** | **PLANNED AND UNPLANNED REPAIRS** | **FTE****(1,784 HRS)** |
| ZBB | 2305.00 | 1140.82 | 1164.18 | 1.29 |
| IN-HOUSE STAFFING | 1147.83 | 798.57 | 349.25 | .65 |
| OUTSOURCING | 1157.17 | 342.25 | 814.93 | .64 |

**Right Sourcing**

The operation of any facility consists of planned and unplanned maintenance activities. Planned activities, while in the control of the maintenance organization, may pose widely varying demands on the facility’s organizational and maintenance staff. Multiple building components could simultaneously require a scheduled maintenance activity, resulting in more than 40 hours of work to be performed in the same week. Unplanned maintenance is outside the control of the facility’s staff and is likely to be in conflict with planned schedules.

In addition to the varying workload that is expected to operate a facility, there are variations in the skill sets of employees and available contractors. The advantage to using in-house employees is that they are familiar with the facility and occupants, which gives them the opportunity to learn how to best operate and maintain the facility through a combination of training and experience. If an in-house employees does not have the specific skills to perform a maintenance task, they must be trained and sometimes certified. The advantage to using independent contractors or contracted employees is that they can be hired to perform specific work or hired for specific skills to accomplish the work quickly and efficiently.

Managing a maintenance operation usually requires several competing needs and resources. One must decide which maintenance tasks will be performed throughout each day. And if the work will be performed with in-house staff or through an independent contractor. A recognized industry benchmark for outsourcing specific maintenance activities is found in the R.S. Means publication titled Facilities Maintenance and Repair Cost Manual. It cites statistical evidence that 70% of preventative maintenance is generally performed by in-house personnel, and the remaining 30% is completed by outsourcing. The same statistical studies indicate that the opposite is found for planned or unplanned maintenance. In other words 70% of the work in these areas is completed by outsourcing and 30% completed by in-house personnel. The sequence of work performed must be logical and consistent with priorities of safety and security. By developing rules or guidelines through right sourcing, these decisions can become systemizes and efficient.

1. One must analyze the work to be done. If the total ZBB maintenance workload is less than an adjusted employee work year (usually 2080 hours minus benefit time such as vacations, holidays and sick days - see breakdown in MBR, section 3.1, Table D) then it does not make sense to have an in-house employee because there is not enough work to keep the employee busy. The use of independent contractors to perform maintenance tasks that accomplish fractional “staff-years” of work should result in cost savings.
2. An analysis of specific maintenance tasks that require specialized skills should be performed, such as electrician, plumber, refrigeration mechanic. Many skilled trades require specialized certifications, or continuing education which can be very expensive for a school district to support. When the workload for specialized skills is less than one “staff-year”, and there are not options for multi-skilled work assignments, this work may be best performed by an independent contractor.
3. “High touch” or Low touch should be considered. High priority fixed schedule preventative maintenance work can be contracted when there are local contractors available who are familiar with the equipment and the work is competitively priced. This can free up in-house staff to perform customer requested work that varies widely in scope and frequency. Preventative maintenance work is often “unseen” while customer work is often recognized. Some refer to this low-touch vs. high touch activities. The high-touch work should be done by in-house employees who will develop relationships with teachers and administrators. Low-touch work may be done by contractors because it most often does not require interaction with the building occupants.
4. The same reasoning will also drive why contractors are sometimes used for planned repairs and usually used for capital renewal work. Contractors often have access to special tools or equipment for those long cycle activities, and seldom require interaction with the occupants. Due to the infrequency of planned repairs and capital renewal, these tasks are well suited for contractors because they can be scheduled in advance (away from the instructional calendar) and they tend to focus on a limited duration project such as equipment testing o replacement.
5. In the past, facility maintenance departments had few, if any, options for flexible hiring of contract labor. Nevertheless, “peak-shaving” has become a new best practice in this industry and it is here to stay. As the name implies, the practice of labor force “peak-shaving” involves staffing a certain trade or department at a level that falls short of the most demanding month in a given year. For example,

A common practice of hiring contract painters during the summer months in preparation for the new school, year is a form of “peak=shaving”. The basic idea is to hire just enough staff to insure that each full time equivalent (FTE) is fully loaded or busy all year long.

Another way of handling infrequent peaks in workload is to utilize contractors to assist the in-house employees with the completion of work. This is effective because contract work is easy to obtain, whereas work schedules cannot be shifted.

**Equipment and Supplies**

Maintenance equipment and supplies are necessary to effectively maintain the building and grounds and is reflected in the budget. Determinations regarding the equipment and supplies are made by the Building & Grounds Supervisor, Administrators, and Fiscal department. All purchasing is done through the district’s established purchasing policies and procedures.

PIKE COUNTY JOINT VOCATIONAL SCHOOL DISTRICT POLCIES AND PROCEDURES

SECTION D – FISCAL MANAGEMENT

SECTION F – FACILITIES AND DEVELOPMENT

**Requests for Building Repairs and Cleaning Supplies**

Requests for small building/classroom repairs and general purpose cleaning supplies should be made to the Maintenance Supervisor via this website:

<https://sites.google.com/pikectc.net/requestpage/homee>