

## Work Flow

The responsibility of the Department of Maintenance is to maintain and repair existing buildings, grounds, and vehicles belonging to SMCPS. The Director of Maintenance plans and assigns maintenance personnel to tasks in accordance with established work priorities, utilizing foremen for implementation and quality assurance. Currently, the department of maintenance utilizes a computerized maintenance management system software by M-Pulse Software, Inc. and utilizes the mobile client, work request, work management, scheduled maintenance, inventory, labor, and building/equipment asset modules of this software.

Work order requests are submitted by school sites and as a result of preventive maintenance inspections. The purpose of the work order request is to implement work requirements made by schools and resulting from inspections that enable the staff to direct, coordinate, schedule workloads, and to assist/implement emergency maintenance actions in the shortest time frame possible. All requests are reviewed and assessed for need and/or funding.

### **Work Order Request Process**

#### **Work Flow Inputs**

Primarily, the Department of Maintenance has three primary work flow inputs: Facility Work Order Requests, Planned Preventive Maintenance, and Inspection Results.

- Facility Work Order Requests are generated by designated facility staff; i.e., too hot/cold, leaks, moving assistance, minor alterations, etc.
- Planned Preventive Maintenance is generated by a pre-determined process. These are revolving tasks based on time intervals, the results of the last preventive maintenance inspection, how long a piece of equipment has operated, or seasonal environmental changes; i.e., annual fire alarm system testing, automobile service every 5,000 miles, roof inspections, and snow removal equipment servicing, etc.
- Inspection Results generate work order requests that are best described as predictive or proactive replacement, repair, renovation, or refurbishment

resulting from methodical observation, testing, operational verification, and inspections.

### **Work Order Request**

All three work flow inputs (Facility Work Order Requests, Planned Preventive Maintenance, and Inspection Results) are converted to work order requests created through a Computerized Maintenance Management System (CMMS). This enables the Department of Maintenance to track several aspects of work performance, improve our long-range planning, and ensure all work required or requested is addressed.

### **Work Order Request Categories**

Work order requests fall into three basic categories: emergency, urgent, and scheduled.

- Emergency - Affects any one of the life safety systems (fire alarm, fire suppression, or egress) and situations endangering or having the potential for endangering students or staff
- Urgent - Affects the environment within the facility that may cause a significant deviation from the teaching and learning objectives
- Scheduled - These work order requests are of a planned nature: moving assistance, installation or assembly of new equipment, addition or relocation of electrical receptacles, light fixture repairs, preventive maintenance, etc.

### **Work Order Flow**

Work orders are assessed upon receipt by the work order specialist. Emergency work orders are directed to the Director of Maintenance and the work becomes a priority. Urgent and scheduled work order requests are assigned to a building trades or engineering trade's foreman. The individual trade foremen prioritize, schedule, and coordinate material acquisition to complete each work order request. Work orders that are not emergencies are then prioritized in the following order:

- Work order requests that are defined as urgent (i.e., ADA related, hot/cold concerns, no electricity) without attention will lead to further faults
- Effects on the schools' educational needs (i.e., after school activities, relocation of learning materials or displays)
- Impact to the expected life cycle of the facility building systems

- Technical complexity of resolution (i.e., office relocation or additions involving multiple trade disciplines)

The balance of work orders are coordinated by location and schedule. This allows the trades to complete multiple work orders at the same location, minimizing travel time losses. Upon completion, a work order is closed, with related data annotated to include type of labor, time expended, material/service cost, and the date completed.

### **Work Order Request System**

Benefits gained by the use of the CMMS are:

- Provides direct liaison with the schools' administrators, building service staff, and the Department of Maintenance
- Reduces work initiation by telephone and electronically via e-mail, thus providing faster service and a more consistent execution
- Provides schools, foremen, and the Department of Maintenance with a minimum of paperwork while maintaining a history of each facility's repairs and their associated costs
- Provides feedback tracking information relative to reoccurring problems
- Enables supervisory staff to manage workloads
- Provides information to enable recording of job costs to assist management in future budget decisions, including planning of capital projects
- Assists in reaching objectives and meeting school system expectations
- Informational data from this system is used to assist in setting capital and operating budget priorities

## Department of Maintenance Workflow Information Chart

