

School Facilities Management And The Role Of A CMMS

FOCUSED *on* FACILITIES



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Introduction

Public schools spend \$50 billion on maintenance and operations every year and represent the second largest sector for capital investment on infrastructure at \$49 billion. The majority of funding for districts comes from local communities. It is becoming more critical now than ever for districts to invest in long term sustainability with a focus on cost reduction and improved learning environments for students. In some areas of the nation, up to 25% of school facilities were in fair to poor condition during their last condition survey¹. This is attributed largely to the lack of funding from state and federal governments and is affecting low income districts the most.

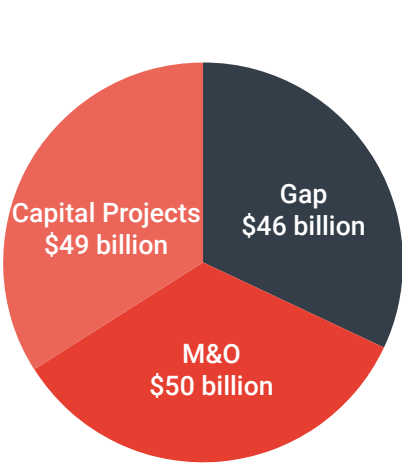
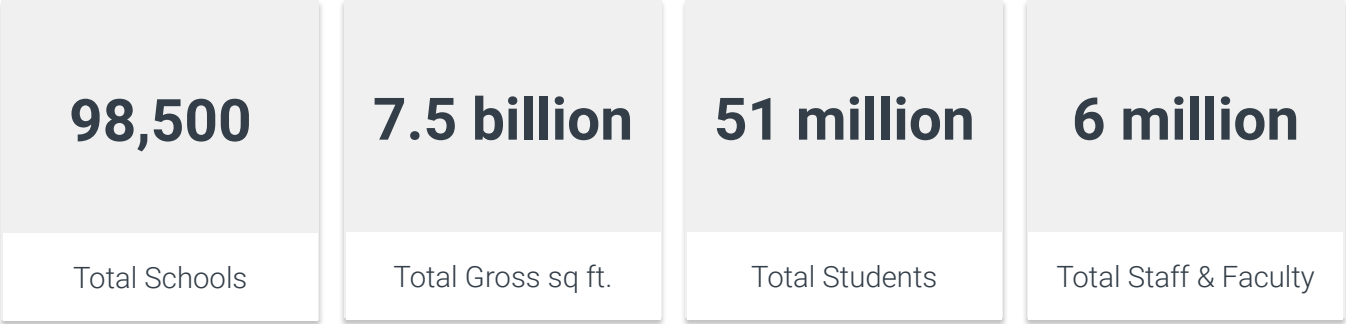
Growing deferment of critical maintenance and capital investment are leaving many districts in desperate need of renovation. Students and staff bear the burden of this in the form of poor indoor air quality and lighting, deteriorating facility assets, and reliance on outdated technology. It's a growing concern as the National Center for

Education Statistics reports an annual gap in required spending to sufficiently maintain and grow school facilities has reached \$46 billion annually.

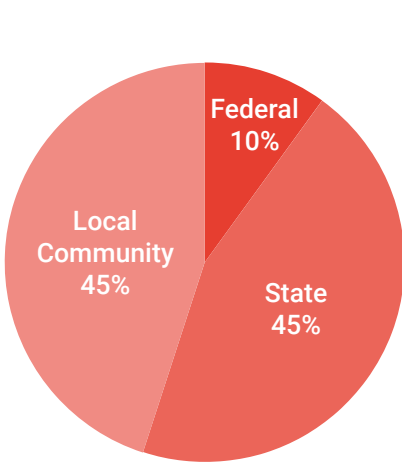
Fortunately, there is something you can do about it and it involves doing more with less and putting more emphasis on preventive maintenance. A comprehensive PM program will free up funds for schools to invest more in necessary capital projects. The path to implementing a PM program is difficult when facilities are in constant need of emergency repair. The first step is to get organized and the second is to prioritize. The best tool to help districts do this is a CMMS application.

Computerized Maintenance Management Systems (CMMS) allow school district facility teams to streamline day-to-day operations and control costs. They slowly shift district maintenance into a proactive state versus a more costly reactive one.

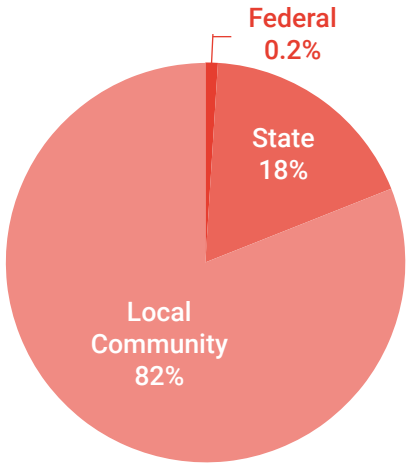
Nationwide Statistics ^{3, 4, 5}



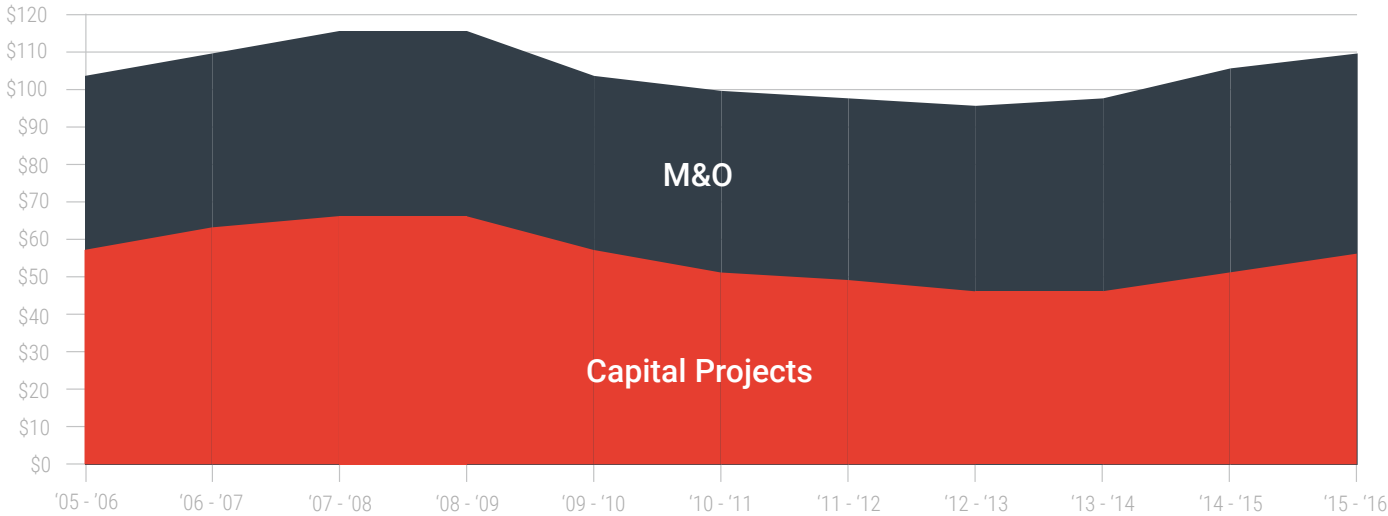
Yearly Spending vs Ideal Spending [\$145 billion]



School M&O Funding by Source



School Capital Project Funding by Source



Total School Facilities Spending (billions in current dollars) Per Year

Improve Learning Environments

Becoming more proactive with facilities maintenance will not only help your district financially, it ensures students are provided with the best environment for learning. Studies show a positive correlation between well-designed and maintained facilities and student achievement. Everyone is more comfortable and alert leading to higher performance from staff and students.

CMMS applications will make sure health and safety tasks are completed on schedule preventing facilities from becoming health risks. All schools should have an environmental health program to further mitigate risk. Some common health hazards include:

Poor indoor air quality can occur when ventilation becomes blocked, wet materials start to grow mold, humidity levels are high, and when there is excessive use of toxic chemicals.

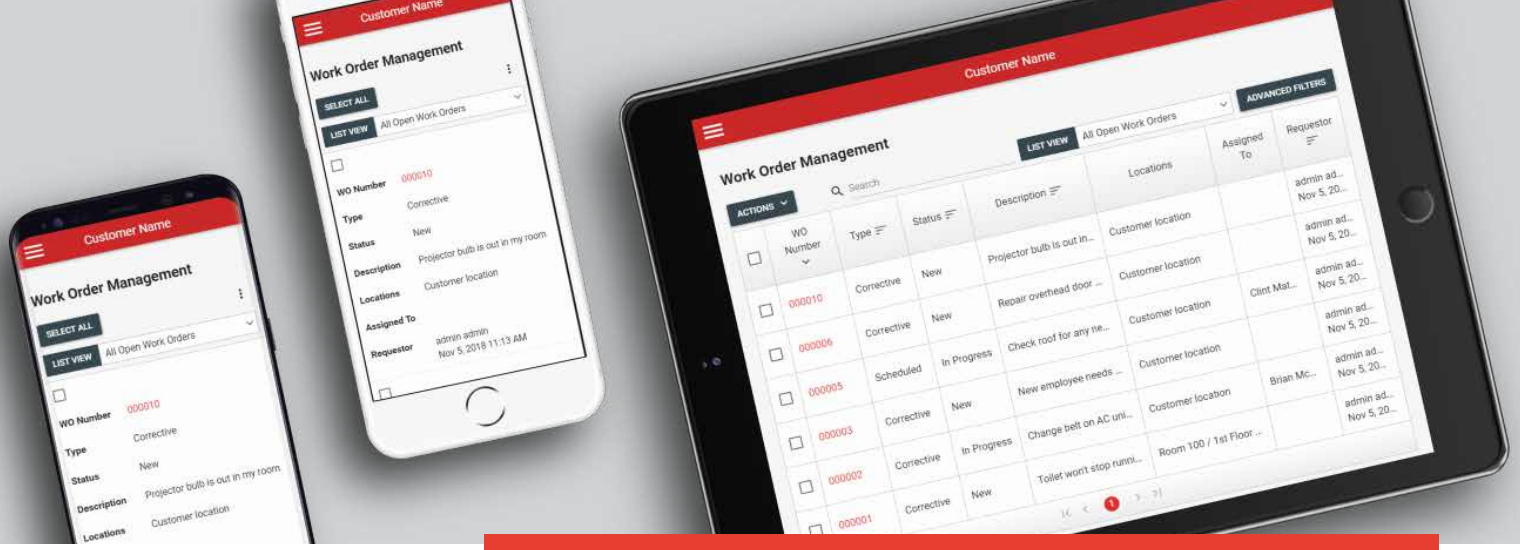
Poor water quality from high levels of lead and other harmful particles, chemicals, or bacteria. Water quality is regulated by the Safe Water Drinking Act.

Poor light quality can reduce students focus, alertness, and ability to retain information in the classroom.

Asbestos in older facilities can be harmful if the proper precautions aren't taken to keep the fibrous material from becoming airborne.

Waste management best practices help reduce landfill waste and preserve the two million acres of land that school districts are responsible for.





The Role Of A CMMS

Facilities management software can be a manager's greatest asset. It captures data from day-to-day activities and offers an organized way of accepting, approving, and distributing maintenance tasks. Reports that used to take days to compile, can be done in seconds with facility management software and gives you instant insight into the status of your operation.

CMMS software built specifically for schools will have the following main components, each providing a unique solution to specific problems you face everyday.

Work Request System

The backbone of any facility management software is the work request system. This feature allows users to submit work requests to the facilities department. Requests are funneled into a single interface to be managed and are automatically logged and assigned work order numbers. These systems provide an organized way of communicating what needs to be done and allows you better manage work loads.

Preventive Maintenance Scheduling

Most management systems will offer the ability to schedule maintenance tasks for a later time or on a recurring basis. Scheduling criteria can be based on a calendar schedule or, in some cases, vendors will offer scheduling based on run-time for mechanical assets. In order to standardize work, systems will allow procedures to be attached to PM work orders. Procedures outline the individual actions required to complete tasks.

Inventory Management

Facility maintenance software tracks the usage of maintenance spares and consumables (belts, hoses, filters, etc.). Most offer a way of cataloging on-hand spares, vendor information, and setting up reorder points. Some offer barcoding options. Spares are assigned to work orders as they are used and costs are tracked to determine inventory costs over time.

The Role Of A CMMS Cont.

Asset Management

Assets can include anything from facility assets (boilers, HVAC, generators, vehicles etc.) to district fixed assets (desks, chairs, projectors, computers etc.). CMMS software will catalog assets, allowing users to record demographics such as make, model, and serial number. Assets can be added to work orders, have PM schedules created against them, and can be assigned to faculty or staff. Work orders are logged against each asset as they are generated.

Facility Scheduling

A handful of systems will offer a way for school administrators to manage facility space requests by internal and external groups. Requests can be submitted to book district facilities and grounds for events such as pep rallies, boy scout meetings, and after school sports. Some common features include automated conflict checking, calendar views to see events for specific locations, and the ability to compare location availability.

Reporting

Reporting is one of the most valuable pieces to any facility management system. This feature allows users to create detailed work order, labor, inventory and asset reports to make better decisions for their district. Most software will have a dashboard of analytics and the ability to customize reporting to meet the needs of each school.

Mobile

Using mobile devices for business is becoming more common and the trend is slowly making its way into facilities departments. In a recent survey, 82% of facility managers and 68% of in-house maintenance technicians use a smartphone for professional purposes². Software vendors will typically offer either a native application (an application that downloads to a device from an “app” store) or a web application (an application accessed through a web browser) that adapts to different devices and screen sizes.



TIP

Other things to consider..

- Ability to customize the software
- Ease-of-use and adoption
- Cost (setup, training, and subscription)
- Plans that require you to buy more than you need
- Quality of support



Selecting A CMMS For Your District

Selecting facility software can be difficult given the extensive number of vendors. The important first step is to consult all stakeholders in the district before looking at vendors. After gathering the “requirements” from each stakeholder, you’ll have a better idea of what features the software needs to have. Stakeholders could be teachers, administrators, maintenance crews, IT employees and others who might be involved in the implementation.

Vetting Software Vendors

1. Summarize all requirements in a list. A few points that might come up in your stakeholder meetings include:

- Self hosted vs. cloud hosted
- Budget for a system
- Support and training needs
- Customization needs
- Reporting needs

2. Research possible vendors using a search engine or recommendations from other districts. When searching online, be sure to use some of the keywords from your requirements. Ex. “web-based school facility software.” The more specific your search queries are, the easier it will be to find vendors that are a good fit for your district. You can also try software listing sites such as **www.capterra.com** or **www.softwareadvice.com** to locate possible vendors. To avoid being burdened with calls and emails, narrow your selection set to a few viable options for your district.

3. Once you’ve found a few promising vendors, reach out to them. Most will provide a way to request demos, get pricing, or sign up for trials. Demonstrations are usually conducted online. Actually seeing the software is the best way to know if it’s going to work for your needs.

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From-the-ground-up

At Q Ware, we think a “one size fits all” attitude towards CMMS design and installation just doesn’t work. Our solution starts with a facility’s unique needs and way of working and then it grows from there. We believe that this works well for our districts and empowers them to maintain excellence.

“I’m a big proponent of Q Ware because I’ve seen what it can do. It can turn a good department into a great and forward thinking department.”

— **Chad Hunt**, Facility Manager and Athletic Director
Naples Central School District

Maintain Excellence

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