

The Rising Tide of Facility Maintenance Costs: A Call for Optimization and Scheduler Planners

By Glenn Hodge

Introduction

The world of facility management is facing a pressing challenge: the ever-escalating maintenance cost. This upward trend, driven by a confluence of factors, is poised to continue in the coming years, with projections indicating an average annual increase of 5% over the next five years. This translates into an anticipated 25% surge in facility maintenance costs by 2028 compared to 2023.

A complex interplay of contributing factors lies at the heart of this escalating cost trajectory. The increasing intricacy of modern buildings and equipment demands specialized expertise and maintenance tools, amplifying the burden on maintenance teams. The aging workforce further exacerbates the situation, as organizations face the challenge of attracting and retaining skilled technicians in a highly competitive labor market.

While crucial for environmental stewardship, sustainability also contributes to rising maintenance costs. While commendable, energy conservation measures and waste reduction programs often require substantial upfront investments and ongoing maintenance expenses.

Industry-specific trends further influence facility maintenance costs. For instance, with its specialized medical equipment and stringent infection control protocols, the healthcare sector incurs higher maintenance expenses than other industries. Similarly, with their intensive production lines and specialized machinery, manufacturing facilities demand dedicated maintenance efforts.

In the face of these escalating costs, organizations must optimize their resources and leverage innovative tools to deliver maximum value. Enter the scheduler planner, a pivotal role in any maintenance organization.

The Case for Scheduler Planners

Organizations that implement scheduler planners directly impact the maintenance organizations' performance. Several studies have noted the following impacts of implementing scheduler planners in maintenance organizations:

Attribute	Min	Avg	Max
Maintenance Costs	-10%		-20%
Downtime			-50%
Productivity		+5%	
Asset Life		+10%	

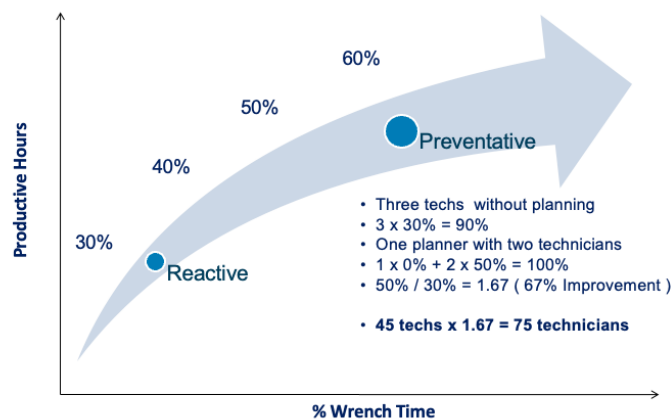
Some specific cost savings that can be achieved by utilizing a scheduler planner include:

- Reduced labor costs: Schedulers can optimize resource utilization, which can lead to a reduction in overtime pay and more efficient use of the workforce.
- Lower maintenance costs: By preventing equipment failures and extending asset life expectancy, schedulers can help reduce the overall maintenance cost.
- Improved productivity: By minimizing downtime and ensuring that equipment is operating at peak efficiency, schedulers can help to improve productivity and output.
- Reduced inventory costs: Schedulers can help optimize inventory levels, leading to lower storage costs and reduced risk of obsolescence.
- Improved safety: Schedulers can help prevent accidents and injuries by maintaining equipment correctly.

The impact of scheduler planners on downtime is staggering. When you consider that downtime has been reported to cost organizations more than \$420 per minute for small businesses and more than \$9,000 per minute for larger companies, maximizing your equipment and facility uptime is paramount; on another front, being able to increase the useful life of every one of your air handlers by 10% would be a significant capital savings over the lifetime of a building.

Let's take a moment to dig into this further. Typical organizations that do not have an active planning organization will have a high degree of reactive maintenance or, at best, low levels of planned maintenance. In reality, the technicians are busy with reactive work, and much of their time is spent in travel and other non-productive ways. Typical wrench time, time with tools in hand, for reactive maintenance is 25%-35%, and for planned maintenance is 55%-65%.

While working with a very large community college district, we helped them implement several TPM attributes (Total Productive Maintenance). After installing a new CMMS (Computerized Maintenance Management System), we analyzed their data to determine their wrench time. As we suspected from our observations, it turned out that it was in the low 20s percentage-wise. We used the illustration below to show how they could accomplish more work with the exact headcount by changing one position from a technician to a planner scheduler. The goal was to increase the wrench time from ~25% to approximately 50% in the first year.



In the example above, the scheduler planner replaced one technician and facilitated increasing wrench time from 30% to 50%. This represents a 67% improvement in wrench time. Other areas that were implemented through the support of the scheduler planner position:

- Implement a computerized maintenance management system (CMMS) to track wrench time and other maintenance data.
- Identify and prioritize non-wrench-time tasks and look for ways to eliminate or reduce them.
- Cross-train technicians to perform various tasks, which can help reduce downtime and improve efficiency.
- Use data analytics to identify trends and patterns in maintenance data, which can help to improve maintenance planning and scheduling.
- Invest in training and development for technicians to ensure they have the skills and knowledge to perform maintenance tasks effectively.

The District was at the start of a large capital improvement plan with many additional new buildings on almost every one of its campuses. The decision was easy after reviewing the data of their current wrench time and the model they could achieve with the implementation of scheduler planners. This was one of the significant parts of the project that led to 24 million dollars in realized savings over eight years due to better utilization of maintenance labor and reduced reactive maintenance.

Intangible Benefits

Besides the tangible benefits of the scheduler planner, there are intangible benefits. This position helps with the flow of work; they facilitate it in such a way as to keep the technicians busy doing what they do best: turning wrenches. The scheduler planner acts as a central hub. Here are some of the ways they improve the workflow and environment:

- Improved morale and job satisfaction among maintenance personnel: Schedulers can help to reduce stress and frustration among maintenance personnel by providing them with precise schedules and realistic expectations.
- Enhanced communication and collaboration: Schedulers can act as a central hub for communication between maintenance teams, operations personnel, and management.
- Improved decision-making: Schedulers can provide valuable insights to management by analyzing maintenance data and identifying trends.
- Improving Communication and Collaboration: Schedulers act as a central hub for communication between maintenance teams, operations personnel, and management. They facilitate the exchange of information, ensuring that everyone is informed about upcoming maintenance activities and potential disruptions.
- Ensuring Regulatory Compliance: Schedulers maintain compliance with industry standards and regulatory requirements related to maintenance activities. They ensure that maintenance schedules align with regulatory guidelines and that documentation is up-to-date.
- Supporting Continuous Improvement: Schedulers gather and analyze data on maintenance activities, identifying areas for improvement and optimizing processes. They contribute to continuous improvement initiatives by implementing better scheduling practices and resource allocation strategies.

Conclusion

Scheduler planners serve as catalysts for operational excellence, propelling organizations toward a future of enhanced productivity, reduced costs, and extended asset life expectancy. Organizations

can unlock value by embracing scheduler planners and adopting complementary practices, achieving sustainable growth and fulfilling their strategic objectives.

In our next article, we will discuss a plan to implement the role, the hurdles, and how to overcome them.