5 steps to managing the unexpected with case management

Managing assets can result in two possible outcomes: the expected and the unexpected. Consider this example: The second-busiest transit network in the US was forced to announce a full-day shutdown, affecting more than 700,000 daily riders, for an emergency inspection of electrical components that malfunctioned and caused a fire on the tracks. As an asset manager, you understand that everything can fail, and that your role is to use planning and predictive maintenance, including case management, to manage failure at the least cost.

Here are 5 steps you can take to minimize the unexpected with case management.

1. **Initiate a case**

   While most organizations use work orders to document and correct problems, not all issues require an immediate fix. Sometimes an ongoing observation is indicated instead. For example, you or your inspector may notice a small crack in the road surface, some corrosion of a steel pipe, or some minor wood rot in a deck. Even though the anomaly doesn’t need repair now, you still want to track it to see how it develops over time.
The crack may worsen to the point that it forms a danger for traffic. The corrosion will likely continue and eventually impact the integrity of the pipe, potentially causing leakage or even an explosion. And as the wood keeps rotting, it may put people in danger if eventually the deck collapses. Open a case and you’ll be able to track the anomaly and institute corrective action when the time is right, instead of discovering it when it’s too late.

2

Gather data and investigate the facts

The type, complexity, and importance of the case will determine whether the data gathering and investigation step takes minutes, days, months, or even years. The facts may be recorded on a work order, if immediate follow-up action will be charged to a specific asset, or as an activity if you are simply conducting research rather than charging work to an asset. You’ll want to attach or link to all relevant items, such as work orders, project documents, purchase orders, photos, diagrams, and contracts. You may need other forms in some cases, such as when you are investigating a safety-related accident.
3 Determine the cause and analyze alternatives

The objectives in this step are to figure out the root cause, identify what’s needed to correct the problem, and determine how to prevent it from reoccurring. Enterprise asset management (EAM) software can reveal gaps in the data and help identify the right solution, as can other analysis tools such as Pareto analysis, cause-and-effect (fishbone) diagrams, and correlation. These visual tools help in brainstorming probable causes and breaking down data into categories that ultimately reveal the vital information at the heart of the issue in question.

4 Assess risk

Each alternative you might undertake to address the problem at hand has some risk associated with it, and it’s your job to understand the probability and impact of that risk. When it comes to asset management, all things are not created equal; it’s important to look at both the criticality of the things you work on, like assets, components, and parts, as well as the priority of the work being done. Were tasks undertaken because of an asset’s condition, its failure, some unusual event, or simply because it was time for maintenance? Some EAM systems have risk management modules to help score risk and make it easier to weigh the cost and risk of various alternatives compared to the associated benefits.

5 Test against management of change processes

Management of change (MOC) processes were originally introduced by OSHA specifically with respect to process chemicals, technology, equipment, and procedures. But since MOC “helps ensure that changes to a process do not inadvertently introduce new hazards or unknowingly increase risk of existing hazards,” it’s an excellent, cost-effective loss prevention process that you may want to implement, whether legally required or not. Testing your recommended actions via your MOC process can ensure that you are choosing a path that, instead of being a temporary fix, can become a long-term solution—one that will guard your organization against unnecessary risk exposure.

Learn more about Enterprise Asset Management (EAM) ›