CASE EXAMPLE:

Mine Mobile Fleet – Maintenance Program Re-alignment

2024

IDENTIFY THE PROBLEM

The client was struggling with poor performance by their mobile maintenance group. There was a widely held belief that the site had not adequately staffed the team to perform the necessary maintenance. Compounding matters, a new fleet of Battery-Electric Vehicles presented an element of the unknown to the site.

APPROACH

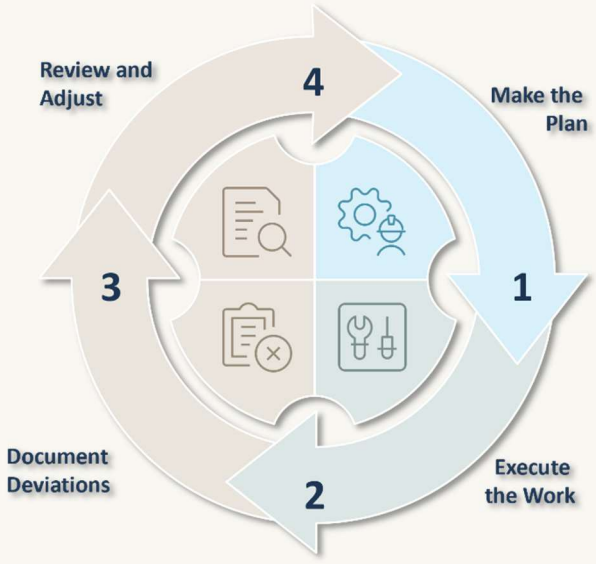
Our team performed a comprehensive review of their data to compare it against the perceived reality.
We examined the most current available data and provided a breakdown of the types of maintenance being performed, reasons maintenance was not being completed and an analysis on potential record-keeping errors which were skewing the data.
Finally, we made recommendations on best-practices for both executing the scheduled work and correcting poor past-practice for recording discovery work.

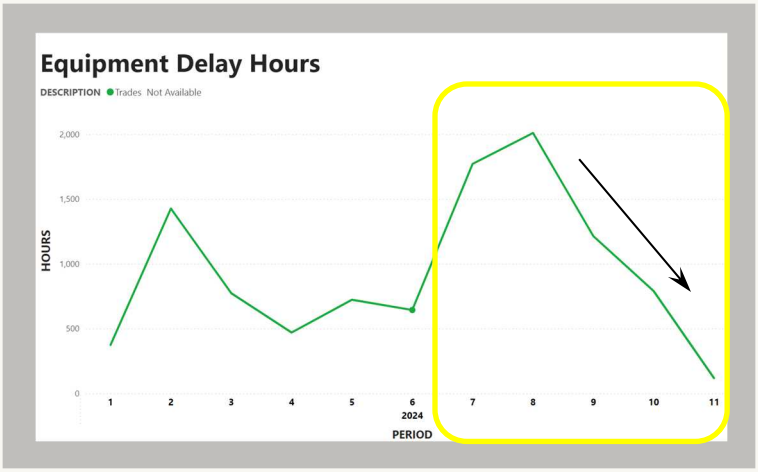
RESISTING FACTORS

- The site lacked direction on recording and tracking maintenance metrics.
- Supervisors had limited training on the maintenance workflow. Mostly peer-to-peer training.
- Challenging site conditions, with limited shop space, required a modification from previously held understanding of maintenance ideology.
- Broken links between the Computerized Maintenance Management System (CMMS) and the crew scheduling tool needed creating data mismatches

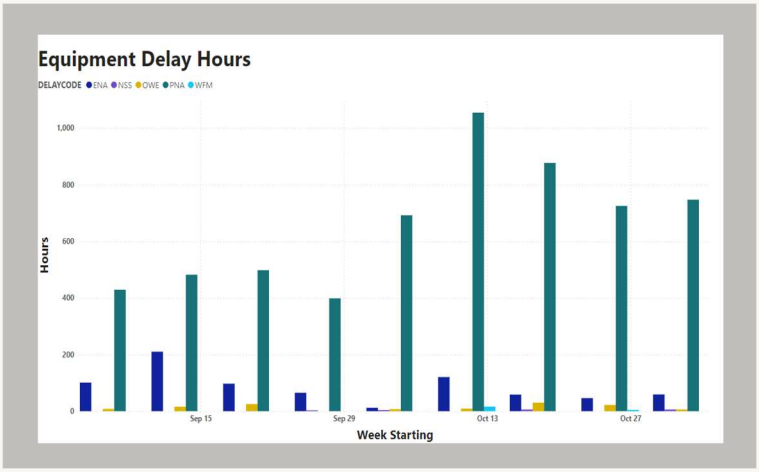
METHODS

- The first priority was to find accurate data. Based on our evaluation, we could see trends in application of breakdown codes and follow-up maintenance which were providing inaccurate feedback to management.
- By analyzing the data and re-interpreting it based on the feedback we had received from front-line supervision, we were able to demonstrate that far more breaks in schedule were occurring than the management team was realizing.
- Because of failures in the naming convention and limited error-checking, proper records for breakdowns were not being captured and this needed to be corrected.
- We worked with the group's IT team to correct the deficiencies and re-establish past indices that had long been used to monitor maintenance performance.
- Performed detailed walkdown of existing Preventative Maintenance plans. Found nearly all inspections were taking more than 200% longer than plan.
- Corrected discrepancies between CMMS work allocation and the hours being transferred to the time-management program in use.
- Conducted training with the team to ensure alignment across all levels. Provide rationale and gain buy-in on the process.
- Follow the process and lead the KPI Review process as a means of handing off to the site owner.
- Report on findings and provide input on approach adjustments as the program began running as expected.





Trades not available reporting trend to near zero hours.



With accurate reporting, we found Part Availability was the leading contributor to equipment repair delays.

OUTCOMES

By refocusing the client's team and clearly explaining the importance of accurate reporting to drive change, we uncovered the core challenges faced by the maintenance teams. Initially, there was a misconception that the trade teams were understaffed. However, data quickly revealed that the critical issue lay with spares and inventory availability on site.

Armed with this evidence, the client assembled a team to improve their "Bill of Materials" catalogue in the CMMS and identify essential inventory requirements. This effort addressed the delays and downtime caused by missing components, as highlighted by the trades.

To further support the client, we collaborated with Original Equipment Manufacturers (OEM) to align inventory strategies. Together, we identified which components could be maintained in local OEM warehouses, alleviating the client's inventory costs while ensuring part availability. This plan minimized equipment delays caused by supply shortages.

As the client continues to optimize their local inventory, they are already experiencing reduced maintenance delays and improved equipment availability.