

Stratio

Roadmap to Reliability: The Role of Bus Maintenance Software



In the rapidly evolving landscape of public transportation, where reliability is paramount, success depends on addressing industry challenges proactively.

To thrive in such an environment and meet government regulations, while providing excellent service to passengers, public transport operators should explore the implementation of predictive maintenance.

Broadly speaking, the industry has made significant improvements in terms of management and efficiency. This progress translates into the availability of solutions that simplify how operators monitor fleet conditions, schedule servicing and keep vehicles on the road for longer.

This article explores the capabilities of bus maintenance software and highlights the advantages of incorporating predictive maintenance technology into transport operators' processes.

Cost Savings and Cost Avoidance

One of the many benefits of predictive maintenance is its potential for cost savings and avoidance. By anticipating faults, operators can optimise maintenance scheduling and track maintenance tasks, resulting in a reduction of unexpected breakdowns and fewer costly emergency repairs.

By proactively monitoring the condition of critical components and systems, operators can ultimately extend the intervals between preventative



maintenance checks and parts replacements, leading to substantial savings.

Compliance Benefits

Ensuring compliance with safety regulations and service-level agreements is non-negotiable for public transport operators. To comply, operators must provide an efficient, safe and reliable transport service.

Predictive maintenance enables real-time monitoring of a vehicle's condition and allows operators to forecast maintenance needs, minimise downtime and optimise maintenance productivity, leading to increased service reliability. This, in turn, enhances passengers' experience. Commuters can rely on transportation services to run smoothly with fewer disruptions and delays as a result of a well-maintained fleet.

The reduction of lost kilometres due to mechanical failures, in particular, can help operators stay below the threshold set by their SLAs and avoid regulatory fines.

Optimised Maintenance Productivity

Efficiency in maintenance operations is crucial to ensure the smooth functioning of a bus fleet. It fosters a better allocation of resources and improves the work order and inventory management.

By relying on software to plan maintenance operations, teams can prioritise tasks based on urgency and importance, ensuring that the right vehicles get repaired and fixed, thus improving productivity. Furthermore, as repetitive tasks – such as odometer readings and fluid level checks – are automated, allowing maintenance teams to focus on higher-priority tasks.

Real-Time Data and Analytics

In the digital age, real-time data is invaluable. Predictive maintenance solutions allow operators to leverage data not just to anticipate faults before they occur, but also to perform diagnostics remotely, without having to recall a vehicle into the workshop.

Maintenance managers who rely on predictive maintenance report using the real-time visibility over their fleet to prevent unnecessary vehicle towings and overspending on emergency repairs. This type of

approach also speeds up the resolution of mechanical issues as engineers possess contextual information regarding the fault before they are physically examining the vehicle.

Why Predictive Maintenance Integration Matters: A Case Study with Arriva Czech Republic

Opting for a bus maintenance software is already a firm step to leave behind reactive maintenance. However, to achieve operational excellence, maximise cost savings and offer reliable services, the integration of a predictive maintenance technology is key. Stratio's predictive maintenance solution harnesses the power of data and AI to provide operators with predictive insights, preventing breakdowns, reducing unplanned downtime and ensuring optimal efficiency.

Arriva Czech Republic serves as an interesting case study for the successful implementation of predictive maintenance. By deploying Stratio's predictive maintenance solution, Arriva CZ has achieved a net savings in total operational costs of 0.7% per kilometre and is increasing the reliability of its service.

Arriva return on investment results

Benefits achieved per year

TOTAL OPERATIONAL COST SAVINGS

0,7% /Km

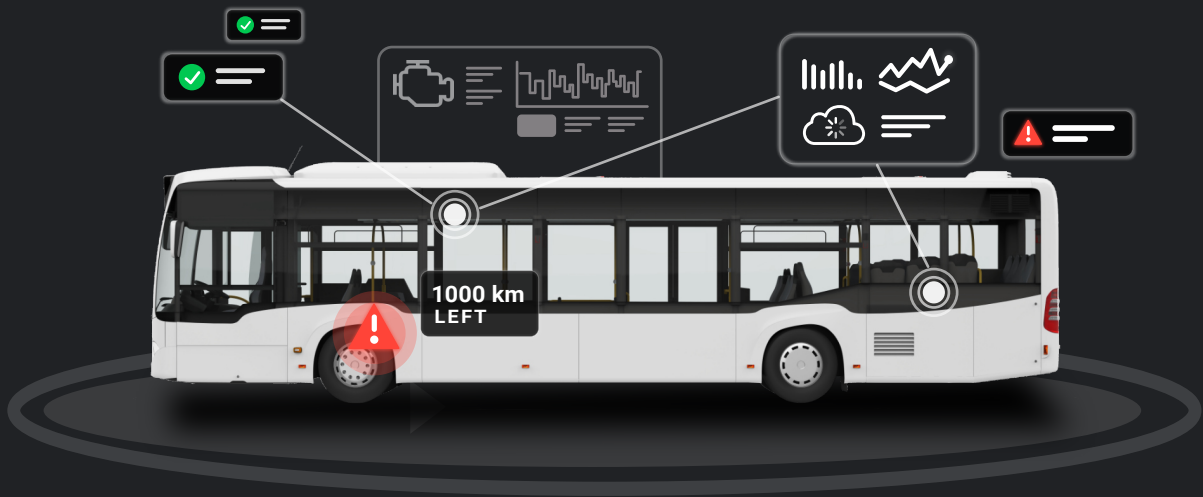
- ▼ 25% Spare fleet reduction
- ▼ 66,6% Towing reduction
- ▲ 13,5% Average time between failures (MTBF) increase
- ▼ 13,9% Engineering cost reduction
- ▲ 33,3% Planned vs Unplanned maintenance ratio
- 100% Engineering dead kms mitigation

You can find out more about how predictive maintenance can help your fleet by visiting www.stratioautomotive.com

stratio

Do you have visibility over your fleet?

Transport operators are using predictive maintenance to minimise unplanned downtime, reduce costs, and offer passengers a service they can trust.



learn more at stratioautomotive.com

stratio