

 | TELEMATICS

CUSTOMER

CASE STUDY

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The system has helped us prevent a number of breakdowns, this can be seen in the stats from our first six months.

- Nathan Burge, Group Engineering Standards Manager

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About Us

MiX Telematics is a leading global provider of fleet and mobile asset management solutions delivered as Software-as-a-Service, or SaaS, to customers in over 120 countries. The company's products and services provide enterprise fleets, small fleets and consumers with solutions for efficiency, safety, compliance and security.

01

CUSTOMER

McGill's Buses

02

REGION

Scotland

03

INDUSTRY

Public Transport

04

CONNECTED VEHICLES

371

05

VEHICLE TYPES

Buses, coaches

06

CUSTOMER SINCE & SUBSCRIPTION

2021 | MiX 4000, MiX Rovi Mini, driver ID, MiX Vision AI

07

CUSTOMER WEBSITE

www.mcgillsbuses.co.uk/

McGill's Buses is driven towards improving vehicle maintenance and safety in partnership with MiX Telematics

Improving vehicle safety with foolproof data

McGill's Buses is the largest independently owned Scottish bus company operator that has made significant investments toward ensuring its fleet is modern and efficient. McGill's first implemented MiX Telematics' MiX 4000 across its fleet in 2021, with the goal of improving safety, driver behaviour and passenger comfort. After achieving this goal with a 55% reduction in harsh braking, a 95% reduction in speeding and improved driver scores, the company's engineering and MiX team found that they could get even more functionality out of the MiX solution to stay on top of vehicle maintenance.



Comprehensive data input equals improved vehicle maintenance

After implementing the MiX Rovi Mini alongside the existing MiX 4000, the company was able to identify crucial maintenance warnings so that vehicles can be repaired on time before they break down and reduce wear and tear for increased lifespan. In particular, the CAN diagnostics events from the vehicles helped to identify events such as engine oil level, engine pressure level, engine temperature, coolant level, battery voltage, and more. With these solutions in place, McGill's found several issues in their existing protocols within the first five months of using MiX Telematics' solutions.

One issue that arose was a vehicle that consistently reported low battery voltage, but never broke down or had any start-up problems. McGill's decided to do some testing and found that the batteries were failing. Although the vehicle hadn't yet broken down, it was only a matter of time before it did.

In that instance, the engineering team at the site understood that the MiX system was helping them pick up the faults before the vehicle broke down. Resolutions were found for every issue, improving the reliability of the data they received. In the first 2-4 weeks, the company found that McGill's Explore Dundee was seeing large numbers of low battery voltage warnings. Upon further investigation, a number of these were vehicles in depot. With this data, the company extended the depot geofence slightly, which in turn largely eradicated the alerts for vehicles that were in fact in the depot.

"The MiX solution has the trust of our engineering team by putting us on the front foot with vehicle maintenance and making us stay ahead of the curve." - Nathan Burge, Group Engineering Standards Manager



Results

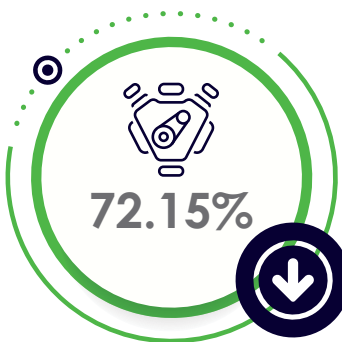
In 2022, the overall CAN diagnostic data from June to October showed a spike in August for low battery voltage and engine coolant temperature warnings followed by a stark reduction of these areas in August.

Reductions have been seen over several event areas, including:

Low battery voltage warnings reduced by:



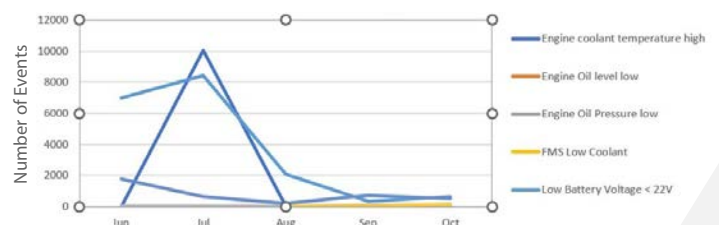
Engine coolant level (red) warnings reduced by:



Engine coolant level (red) warnings reduced by:

Since the implementation of the system across McGill's West & McGill's X Dundee, a number of preventative repairs have been carried out, solely identified by reports from the MiX Telematics system.

- **Battery Replacement** - several vehicles were reported for low battery voltage which led to battery tests being carried out, and bad cells being identified and rectified.
- **Coolant Systems** - a Citaro was repeatedly identified as low coolant level, upon inspection the coolant level was within requirements. Further investigation found corroded wiring and a faulty level sensor which otherwise would not have been identified without the vehicle breaking down.
- **Oil Level** - an instant alert was received by an engineering department alerting them to a vehicle with low oil level. This alert enabled them to contact the driver, attend to the vehicle and top up the oil, while also checking for any immediate leaks on the vehicle. Having found no leaks, the vehicle was put back to work and re-checked the following day to ensure there were no issues.



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www.mixtelematics.com/eu/