

» Success story

**Temperature monitoring &
air conditioning maintenance** »
on school buses



» NYCSBUS monitors temperature

on 10 school buses thanks to an IoT solution

Every summer, thousands of New York City students, including those with special needs, rely on school bus transportation to attend summer courses. As a result, proactive **air conditioning maintenance** is essential to **ensure a consistently comfortable temperature** inside these buses throughout the season. In light of these challenges, **NYCSBUS**, a non-profit organization dedicated to providing school bus transportation services, has entrusted to **GEOTAB**, **DIDCOM**, and **ELA Innovation** to address **temperature monitoring within their fleet of 10 school buses**. The goal is to analyze how **ambient temperatures** fluctuate under various operational conditions and to provide optimal comfort levels for passengers. To achieve this, NYCSBUS has integrated a pilot of temperature monitoring solution on 10 buses, deployment that included **15 Blue PUCK T EN12830** and **Blue PUCK RHT** Bluetooth temperature sensors.

Thanks to this **connected temperature monitoring solution**, NYCSBUS has **successfully enhanced the passenger experience by ensuring efficient air conditioning performance**.

» The key players



IoT sensor manufacturer



Telematics solution integrator



Tracker & platform provider



NYC School Bus Umbrella Services

End-user

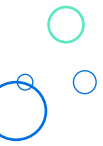


« It has been an absolute pleasure working with the team! NYCSBUS implemented Didcom BLEG Gateway and Bluetooth temperature sensors. The deployment was really easy and it was great to see everything work out of bus. »

Varun Adibhatla, Head of Data Science & Analytics at NYCSBUS

» The client requirements

- ✓ To monitor the temperature in real-time along the trip
- ✓ To detect an HVAC system failure
- ✓ To ensure passenger comfort and avoid service complaints



» The equipment

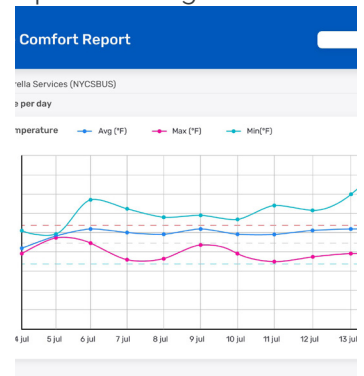
- ✓ Blue PUCK T EN12830 and Blue PUCK RHT⁽¹⁾
- ✓ Didcom BLEG Device
- ✓ Didcom Temperature Comfort Report (Big Data)⁽²⁾
- ✓ Geotab G09 Device⁽³⁾
- ✓ MyGeotab platform



» Modus Operandi



From a technical point of view, the temperature monitoring solution is based on **Bluetooth Low Energy** technology. Every bus is equipped with 1 to 2 **Blue PUCK T EN12830** or/and **Blue PUCK RHT** Bluetooth temperature sensors, installed in the front and back of the vehicle to **monitor temperature variations** across different zones within the bus. Temperature log records are acquired through Didcom BLEG and transmitted in real-time via the Geotab G09 device, which then transmit all data to the MyGeotab platform for comprehensive monitoring and analysis.



All the data collected is used by NYCSBUS to **create preventive maintenance strategies, ensuring optimal air conditioning system performance across their entire fleet.**

» The results

- ✓ Enhanced fleet visibility
- ✓ Optimal passenger experience
- ✓ Real-time monitoring on the air conditioning performance
- ✓ Agilizing maintenance and repair times

» The advantages

- ✓ Reliability and high accuracy of data
- ✓ Streamline maintenance and repair times
- ✓ Quick and easy installation of sensors