

## USE CASE

# Air conditioning preventive maintenance to bring comfort temperature on school transport services on New York City

## NYC School Bus Umbrella Services



### NYC School Bus Umbrella Services

NYCSBUS (New York City School Bus Umbrella Services Inc.) is a not-for-profit corporation that provides school bus transportation services to New York City public and private school students, the majority of whom have special needs, operating approximately 800 school bus routes with a staff of approximately 1,800 people from five locations with a budget of \$160 million.

NYCSBUS' goal is to radically improve student bus transportation by innovating in all areas and by providing unprecedented transparency in bus operations to school districts as efficiently as possible.

### The Challenge

Every summer, thousands of New York City kids are transported for the summer school schedule, which also includes transportation for special needs students, therefore air conditioning maintenance in a preventive manner is key to bring everyday comfort temperature on school buses.

When air conditioning systems do not perform optimally in the summer, passengers can be subject to uncomfortable conditions. NYCSBUS were interested in monitoring temperature conditions within their school buses fleet to study how ambient temperatures change under different operating conditions and provide comfort temperature for passengers.





## The Benefits

NYCSBUS can generate a baseline of air conditioning performance as a reference to ensure the optimal performance and identify the vehicles that are performing below the baseline defined, **this brings the maintenance team a great logistics solution to prioritize air conditioning repairs.**

- + Monitoring temperatures along the trip
- + Analyzing air conditioning performance
- + Agilizing maintenance and repair times

**Bluetooth sensors integration is a practical and agile solution to provide operation visibility to the Fleet Managements team.** NYCSBUS can now provide an optimal passenger experience providing optimal performance air conditioning on school buses along every route being traveled on their fleet across the city of New York.



## The Solution

**Didcom partnered with NYCSBUS to integrate a pilot of temperature monitoring solution on 10 buses,** deployment that included 10 Didcom BLEG and 15 bluetooth sensors.

Every bus received 1 to 2 bluetooth sensors, installed in the front and back of the vehicle to monitor the variable temperature in different zones within the unit. **All the data collected is being used by NYCSBUS to create preventive maintenance strategies to ensure optimal air conditioning system performance along the fleet.**



## Technology Development and Integration

### Didcom

- + Didcom BLEG Device
- + Bluetooth temperature sensors
- + Temperature Comfort Report (Big Data)

### Geotab

- + G09 Device
- + MyGeotab platform

### NYCSBUS

- + Implementation
- + Data analysis
- + Maintenance strategy





"It has been an absolute pleasure working with the Didcom team! NYCSBUS implemented Didcom BLE Gateway and bluetooth temperature sensors. The deployment was really easy and it was great to see everything work out of the box.

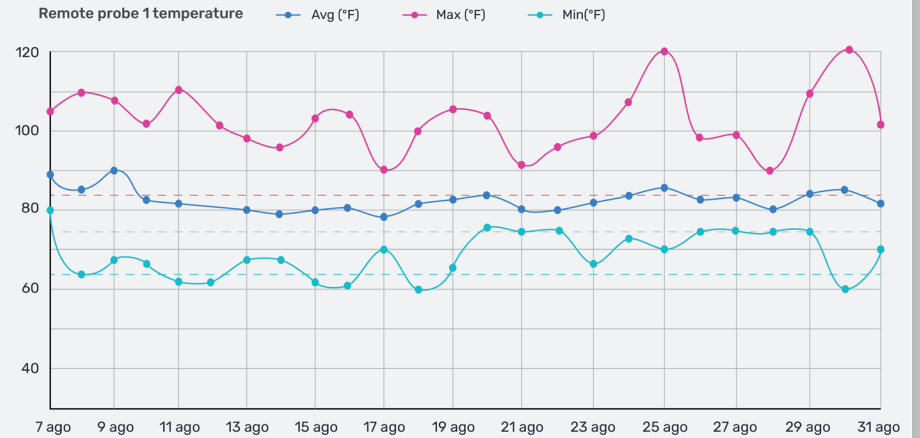


-Varun Adibhatla, Líder de Ciencia de Datos & Análisis en NYCSBUS

The Didcom team was very organized and prepared a detailed project plan to keep us on track. They also provided us with analytics support by recommending different ways of visualizing temperature data to help us extract valuable information. All in all a great experience!"

### Temperature Comfort Report

Device 7 ago 2022 -31 ago 2022



## Let us create a success story with your project!

Didcom can help you integrate telematics solutions to supervise and ensure the air conditioning performance and comfort temperature in the passenger transport fleets in the face of climate change and heat waves affections around the world.

