

CASE STUDY

Mueve Fontibón, Concessionaire of TransMilenio S.A.



Driving Bogotá's eMobility Transformation with Smart Scheduling in One of Colombia's Largest Electric Bus Fleets

Bogotá is rapidly becoming a global leader in zero-emission mobility. With support from MAIOR, a Clever Devices wholly-owned company, Mueve Fontibón—an operator within Colombia's TransMilenio BRT system—has transformed its operations using advanced electric bus scheduling and resource optimization tools. The deployment of a smart planning solution ensures high-efficiency service delivery for a fleet of 172 fully electric vehicles, serving over 10 million passengers per year and setting a new benchmark for sustainable public transport in Latin America.

CHALLENGE

Electric fleets bring new layers of operational complexity—charging times, battery range, energy pricing, and depot logistics must be synchronized with passenger demand and route coverage. Mueve Fontibón needed a solution that could plan, simulate, and optimize every aspect of its fully electric service with precision and agility.

Summary



Customer

Mueve Fontibón, Concessionaire
of TransMilenio S.A.

Bogotá, Colombia

About Mueve Fontibón

- 172 fully electric buses
- Over 10 million yearly passengers
- 550 stops
- 1.5 tons of pollution eliminated and 3,200 tons of CO₂ avoided per year

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SOLUTION

Advanced Planning Tools for 100% Electric Operations

With Clever Devices' smart scheduling technology, Mueve Fontibón streamlined its entire planning cycle—from service design to real-time dispatching—ensuring the reliability and sustainability of its fully electric fleet. Key solution deployed:

- **MAIOR Suite:** A comprehensive planning and scheduling platform tailored for electric fleet operations.
 - **Network Design:** Calculates optimal charging cycles and aligns them with vehicle availability, depot capacity, and energy costs.
 - **Driver Scheduling:** Builds efficient and safe driver rosters that support onboard assistance systems and ensure driver satisfaction.

RESULTS

Smarter Charging, Seamless Operations

Mueve Fontibón ensures full fleet availability with optimized depot logistics. Charging schedules are designed around energy demand and charger availability, minimizing downtime and maximizing service delivery.

Rapid Implementation, Scalable Impact

Just six weeks after implementation, the MAIOR Suite allowed the operator to fully restructure its service plan—adapting to real-world electric fleet needs with flexible, data-driven scheduling.

Cleaner, Greener Mobility for Bogotá

With over 170 electric buses in operation and a depot equipped with 81 high-power chargers, Mueve Fontibón delivers reliable service while reducing emissions and supporting Bogotá's long-term climate goals.

MAIOR COLLABORATION

Clever Devices is proud to support Bogotá's electric revolution, through its wholly-owned company, MAIOR. In partnership with Mueve Fontibón, we provide the planning intelligence that powers Colombia's largest zero-emission fleet. Our technology helps operators like Mueve adapt to the unique demands of electric transit—ensuring performance, sustainability, and future-ready mobility for millions of passengers every year.