

PLANNING ELECTRIC BUS OPERATIONS

WITH THE MAIOR TRANSIT SCHEDULING SUITE

ELECTRIC BUSES





compared to



DIESEL BUSES

ELECTRIC BUSES FOR A SUSTAINABLE SOLUTION FOR MODERN CITIES

Public transit agencies are increasingly turning to electric buses as a sustainable solution for modern cities. The adoption of electric buses offers other compelling advantages such as; cost savings, energy efficiency, and less noise pollution, making them an attractive option for cities aiming to build cleaner, healthier, and more sustainable transportation systems.



01

ENVIRONMENTAL SUSTAINABILITY

Switching to electric buses and trains reduces transportation agencies' carbon footprint, aiding climate change mitigation.

HEALTHIER **COMMUNITIES**

Electric buses enhance public health by cutting harmful pollutants, vital in crowded urban areas where air quality affects well-being.

COST **SAVINGS**

Electric buses offer long-term savings in operating and maintenance expenses as technology advances and costs decrease.



ENERGY **EFFICIENCY**

Electric buses are more energy-efficient than diesel, make better use of energy resources and dramatically cut overall energy consumption.



NOISE REDUCTION

Electric buses are guieter than traditional diesel buses, reducing noise pollution in urban environments and contributing to more peaceful and livable communities.



REGULATORY **REQUIREMENTS**

By adopting electric buses, transportation agencies can demonstrate compliance with environmental regulations and contribute to meeting emissions reduction targets.



Design the charging infrastructure

including in-depot and opportunity charge



Build Timetables taking into account EV ranges

to deterimine if next trips can be performed



Priortize EVs to peak hours trips also to reduce pollution

while managing medium-long term procurement plan



The MAIOR Transit Scheduling Suite for Electric Vehicles generates the best optimized timetables, vehicles, and drivers schedules while supporting daily operations



Optimize EV Blocks integrating preconditioning and charging times

while considering the extisting EV infrastructure



Monitor the state of charge (SoC) and the charging station availabilities

when working on vehicle scheduling



Optimize Duties to match EV tasks, like plug-in and plug-out

while checking any qualifications that are required

SCENARIO MODELING

To help you plan your electric bus service future, the MAIOR Transit Scheduling Suite includes key features to evaluate the impact of switching to an EV fleet in terms of resources and costs.

The integrated Scenario Modeling Tool for EV both simplifies the transition to a fully e-fleet and eases the management of mixed fleets operations.

This innovative tool allows you to create, modify, analyze, and compare trips and schedules as the number of your electric vehicles increases.





Simulate Route Electricfication

to evaluate vehicle needs at the early stage of the planning process



Create Scenarios

with different charging stragtegies to find the charging plan that best ensures electricity costs reduction



Ensure

the correct vehicle block assignments are made accounting for vehicle energy capacity and depth of discharge limits

SIMPLIFY THE TRANSITION AND EASE THE MANAGEMENT

EV PARAMETERS MANAGEMENT

The **MAIOR Transit Scheduling Suite** allows public transit agencies to manage the necessary information to configure the system parameters for efficient electric vehicle operations.



Designing the EV infrastructure **placing charging stations** at depots, terminals, or parking areas



Managing pantographs, quick-charging, plug-in charging, or overnight stations



Dealing with different battery types, characteristics, and degradation



Automatically assign plug-in and plug-out activities



Adhering to charging station capacity limits



Considering **battery** preconditioning time



MANAGE ALL YOUR ELECTRIC BUS PARAMETERS **IN A SINGLE PLACE.**



THE MAIOR TRANSIT SCHEDULING SUITE TO PLAN E-BUS FLEET OPERATIONS



SCHEDULE A DEMO TODAY

MAIOR SUITE PLANNING. SCHEDULING. OPERATIONS

The MAIOR Suite is a powerful and integrated solution that simplifies and optimizes your service scheduling process to ensure that you create reliable service in the most economical and efficient manner possible.

Schedule a demo today



www.cleverdevices.com

Clever Devices, Ltd. 1-516-433-6100 In U.S. and Canada 1-800-872-6129 Part Number MAIOR-003 ©2024 Clever Devices, Ltd.