



# PLANNING **ELECTRIC BUS OPERATIONS**

WITH THE MAIOR TRANSIT SCHEDULING SUITE

---



# ELECTRIC BUSES



around  
**670 gm**  
of CO<sub>2</sub> per km

emit roughly **50%** less **CO<sub>2</sub>**

compared to

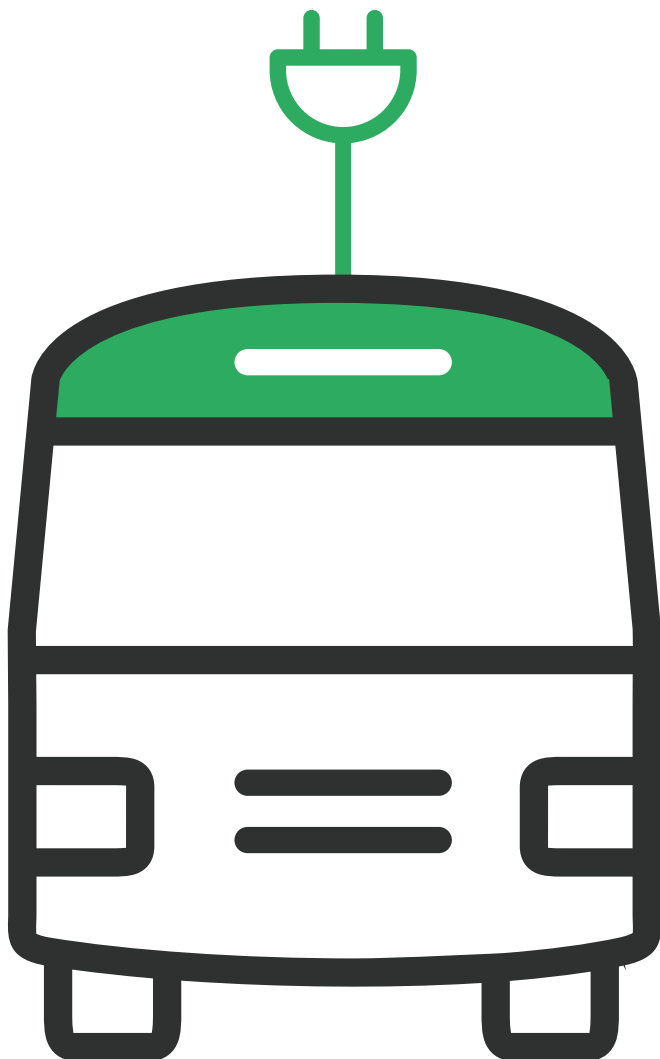


# DIESEL BUSES



# 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.

02

## HEALTHIER COMMUNITIES

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

03

## COST SAVINGS

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

04

## ENERGY EFFICIENCY

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

05

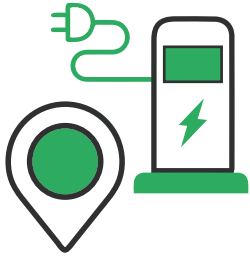
## NOISE REDUCTION

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

06

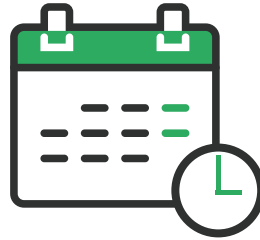
## REGULATORY REQUIREMENTS

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



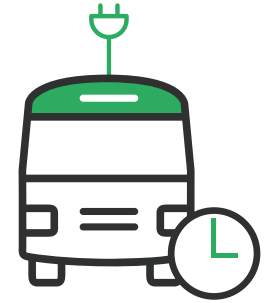
### **Design** the charging infrastructure

including in-depot and  
opportunity charge



### **Build Timetables** taking into account EV ranges

to determine if next trips  
can be performed

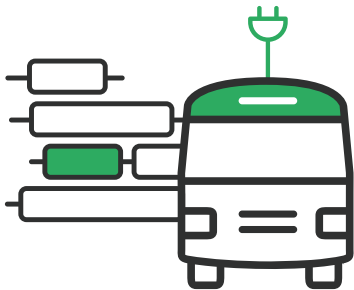


### **Prioritize EVs** to peak hours trips also to reduce pollution

while managing medium-long  
term procurement plan

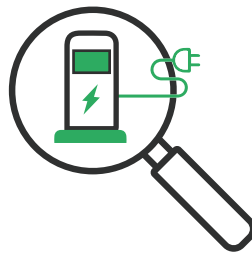


The MAIOR Transit Scheduling Suite  
for Electric Vehicles generates the best  
**optimized timetables, vehicles, and drivers  
schedules** while supporting daily operations



### **Optimize EV Blocks** integrating preconditioning and charging times

while considering the existing  
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

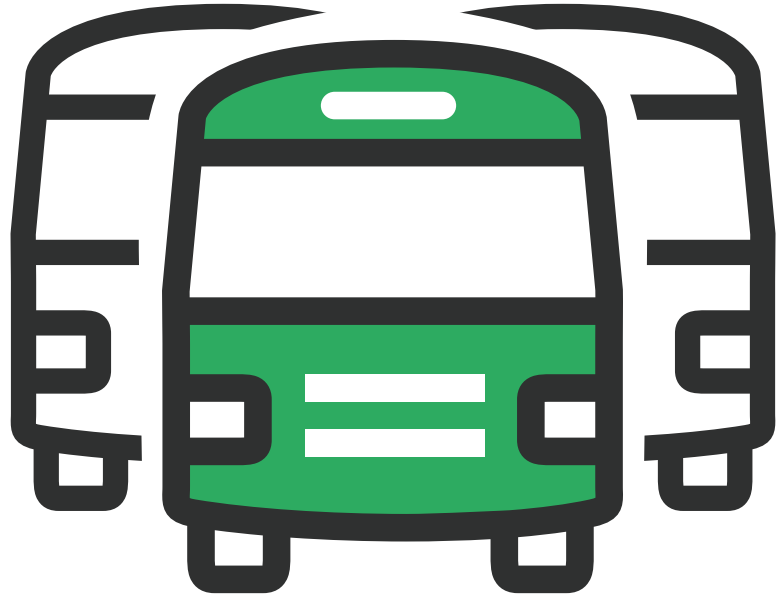


## SCENARIO MODELING

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 Electricification

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



### Create Scenarios

with different charging strategies 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



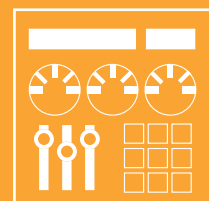
Adhering to **charging station capacity limits**



Considering **battery preconditioning time**

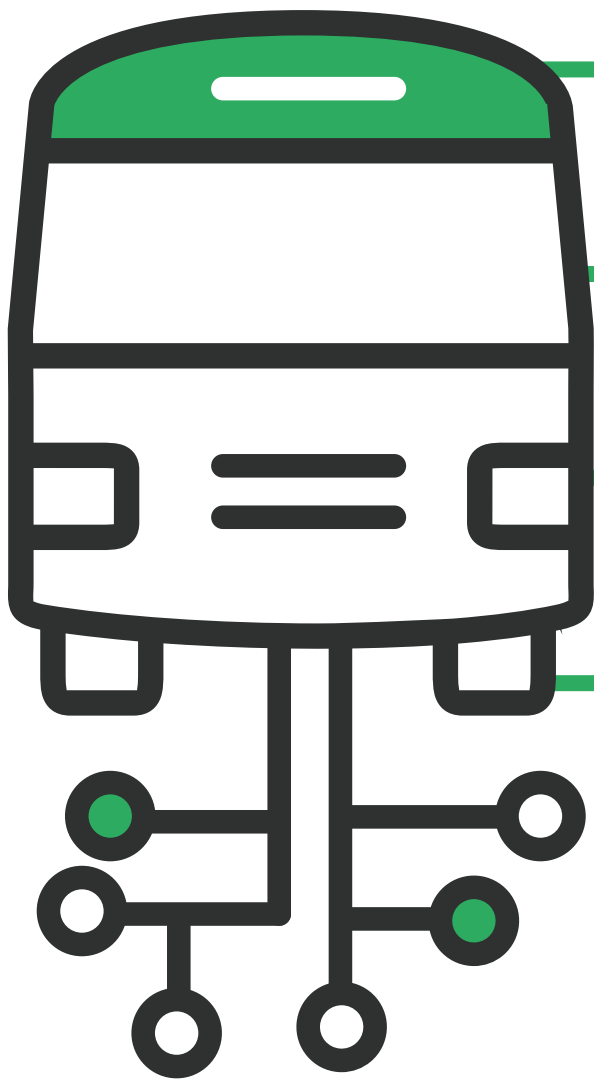


MANAGE ALL YOUR ELECTRIC BUS PARAMETERS  
IN A SINGLE PLACE.





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



## For Public Transportation Authorities and Operators

Offering urban, suburban, or shuttle operations



## Designed for Mixed Fleets

For diesel, fuel, hybrid, and electric vehicles



## For Smooth EV Integration

Helping you easily include new EVs in your operations



## At No Extra Cost

All features are embedded in the MAIOR Transit Scheduling Suite

**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](#)

