CURE EV RANGE ANXIETY WITH AI-ENHANCED REAL-TIME FLEET SCHEDULING AND DYNAMIC ROUTING

With an increasing number of all-electric field service fleets, the demand for EV charging points remains high. With a focus on the consumer market, retailers and housebuilders are driving the roll-out effort. 2026 saw the UK's EV charging points number around 90,000. However, outside of major hubs, fleets find long waits from 'slow' chargers, high prices, and even charging deserts. Dynamic fleet scheduling and rules-based routing enhanced with algorithmic support is the solution to range anxiety. This is how operators cut costs and manage routing for ICE, mixed, and 100% EV fleets.

Choosing the right vehicles for your fleet means balancing cost, reliability, and suitability for the tasks required – all with an eye to minimise downtime. Fuel management and route planning then crosses between fleet managers and dispatchers. Whilst strategies to monitor and reduce fuel use (such enforcing speed limits and promoting efficient driving techniques) are firmly rooted in traditionally fuelled fleets, moving to all-electric is no different.

Range anxiety is the fear that an electric vehicle (EV) may run out of power before reaching a destination or a charging station. EVs have a limited range and can only travel a certain distance on a single charge (on average 200-300 miles). 'Charging deserts' don't respect your dispatch requirements, and fleets now face new operational pressure. Field service operators may avoid taking long trips or refuse to service geographic areas where there are no charging stations. Operatives may avoid an EV's features, such as air conditioning or heating, or limit the use of vehicle-powered equipment, such as air compressors or welding tools.

The solution: AI-Enhanced scheduling and tour planning for EV fleets

Simple route planning from A to B cannot account for rules and restrictions, such as vehicle weight, actual time-of-day driving speeds, and critically, charge range. The solution is a dynamic scheduling platform that calculates appointments and their geocoded routes into optimised tour planning.

With 10 jobs and one vehicle, there are over 3.6 million possibilities for routing. A professional fleet tour planning system, such as VISITOUR, uses a high-performance algorithm to produce an efficient fleet plan in a matter of seconds. It will consider all specified restrictions.

Therefore, real-time fleet scheduling groups jobs into vehicle tours and determines the optimal order in which they should be completed.

Complex routing problems solved: How does optimised routing for EV fleets work?

A dispatch manager receives a job ticket. This may be reactive or cyclical. VISITOUR identifies the geocoded location, operative skills and spare parts, with availability (plus any company SLAs and escalations). The system will then produce narrow, cost-optimised

appointment options with their routing; embedding range restriction and break times to visit charging points.

Real-time also means saying goodbye to batch (or overnight) processing of jobs. With Webfleet EV fleet management and VISTOUR, if jobs overrun, a field operative becomes unwell, or an emergency job is logged, in-day scheduling and routing will be re-optimised, live.

Once jobs are completed, operatives use their mobile device to notify VISITOUR. The system then provides them with their next job route and automatically notifies the next appointment with ETA data. The customer can use Webfleet EV fleet management to track the live location of the operative on a map.

Solvares Field Service develops award-winning AI-enhanced scheduling, dynamic route optimisation and mobile job management solutions that enable digital transformation to achieve all-new levels of productivity and customer engagement. Customers range from 50 to 1000s of operatives, scheduling for maintenance, repairs, inspections, surveyors, housing officers and more.

Meet the power of Webfleet EV fleet management and field planning software FLS VISITOUR. Choose an average of 2 hours of less driving time per operative, plus cost savings, high employee productivity, and balanced workloads. Make the move to an electric fleet with solutions to remove range anxiety.

This technology transforms the performance of your field service and to prove this claim and your business case we offer a free proof of concept. Firstly, a test to compare how you scheduled work historically with how VISITOUR could have scheduled the same appointments with the available operatives. Secondly, through a no-commitment try-before-you-buy live trial/pilot system.

https://solvares-fieldservice.com/en/solutions/ai-route-planning/