

Leader in autonomous vehicle technology and ride-hailing services



A leader in autonomous vehicle ride-hailing set out to expand its EV fleet across multiple U.S. cities. To support their rapid growth, the company needed robust charging infrastructure capable of handling some of the highest utilization rates in the industry. ABM partnered with the autonomous vehicle provider to deliver a scalable, resilient electric mobility solution—laying the groundwork for the next phase of their expansion.

CHALLENGE

The client’s expansion strategy called for the deployment of hundreds of EV charging units across three major metropolitan areas, each supporting 24/7 autonomous operations. The infrastructure had to withstand extreme utilization, maintain high reliability, and scale quickly to meet aggressive timelines. The company also required a partner with deep expertise in EV charging, power management, and operational resiliency—including the ability to integrate microgrid solutions and provide redundancy in case of power disruptions.

Quick Stats

Rapid deployments
Across three major cities

98%
Uptime with dedicated asset management

Sites built
For extreme utilization

Resiliency
Baked into design



SOLUTION

ABM collaborated with the client's engineering team to design a prototype site tailored for high-volume, around-the-clock fleet charging. The solution included:

- **Redesigning base operational standards** to optimize site layouts, power distribution, and interoperability.
- **Integrating infrastructure redundancy**, including provisions for temporary power and microgrid compatibility.
- **Sourcing, commissioning, and activating more than 100 EV charging units**—over 200 ports—through partnerships with leading original equipment manufacturers (OEMs).
- **Implementing Network Operations Center (NOC) monitoring** for asset management and rapid troubleshooting, with plans to expand coverage across the client's portfolio.
- **Developing proprietary EV modeling** to simulate high charger utilization and establish vehicle-specific charging curves.

BENEFITS AND OUTCOMES

The partnership delivered:

- **Smart charging facilities** capable of load balancing under heavy demand and activating backup power during disruptions, ensuring reliable performance.
- **Rapid deployment of charging infrastructure in three cities**, meeting the client's tight expansion timelines.
- **A hardware- and network-neutral approach**, supporting flexibility and future growth.
- **Dedicated ABM teams managing more than one-third** of the client's active charging units, achieving 98% uptime.
- **A scalable, future-proof platform** that positions the client for continued leadership in autonomous mobility.



"By engineering a resilient, scalable charging infrastructure, ABM helped the client accelerate their all-electric fleet expansion—ensuring reliable performance, operational flexibility, and readiness for what's next in autonomous mobility."

— Darren Dowdy
Director at ABM

ABM offers flexible hardware solutions, proprietary EV modeling to ensure uptime, and creative financing options to bring your vision to life with minimal capital investment. Discover more at [ABM.com/evfleets](https://www.abm.com/evfleets) or by calling **866.624.1520**.