



SmartCity by Schneider Electric: Mobility Solutions

Reducing traffic and improving
network management

By 2050, the world's urban populations will nearly double and cities will comprise 70 percent of the population, creating megapolis and megacorridors. As they do, transportation systems will be impacted — increasing traffic congestion, threatening safety, wasting commuter time and valuable fuel, and impacting the environment. In many areas, these problems already exist due to tightening budgets and aging, overloaded infrastructure.

To optimize their networks — helping to meet the demand for better mobility, higher quality public transportation and improved traffic flow — many state and regional transportation authorities, city agencies and metropolitan planning organizations around the globe are relying on Schneider Electric's integrated and innovative mobility solutions.

Traffic management solutions

Schneider Electric delivers real-time visibility across the entire transportation network — helping users manage operations and assets in an integrated way. This supports fast, coordinated decisions that solve common traffic management issues and unanticipated congestion in an environmentally friendly way. Using its detection, data analysis, adaptive algorithms and advanced simulation tools, operators can...

- Predict traffic jams before they happen — keeping ahead of potential congestion, as well as informing drivers of alternate routes, parking possibilities and public transportation options.

- Identify and solve local traffic problems, control access to city areas, safely manage tunnels and bridges, and alert drivers to parking and congestion troubles.
- Enable intermodality and modal-shift policies for optimized mobility needs.
- Support successful congestion and emergency management strategies by leveraging intelligent transportation system assets.

Electric vehicle charging infrastructure solutions

Electric vehicles (EVs) are expected to be a key part of daily transportation — provided drivers have access to safe and easy recharging. Schneider Electric offers efficient EV charging solutions for SmartCities, providing complete solutions for public infrastructure and parking management. These solutions combine payment and energy management functions intended for roadside parking, covered car parks, and similar applications. Through inclusion of EV solutions, operators can...

- Support driver needs while helping to reduce the world's global footprint.
- Verify users with RFID authentication and payment options.
- Reduce the need for on-site staff with remote monitoring and management capabilities.
- Help decrease energy waste, reduce greenhouse gas emissions and combat global warming.
- Optimize car charging by linking it to power supply capacity.

Tolling and congestion charging solutions

Schneider Electric helps maintain smooth traffic flow while ensuring accurate, effective collections. Users can charge specific fees for certain types of vehicles traveling through city centers at particular times. Its best-in-class, turnkey tolling solution handles 2,500,000 vehicles per day worldwide and offers an unmatched uptime rate of 99.9 percent. It collects tolls 24/7 from all users — registered or not — with 99.9 percent accuracy. With its fast, rich Web-based displays, enhanced ease of use, and ability to quickly process and act on large volumes of data, operators can...

- Improve efficiencies by processing nearly five times as many vehicles as conventional cash toll lanes and double the throughput of a dedicated E-ZPass lane.
- Reduce maintenance costs by using secure, video-based remote monitoring and electronic toll collection — streamlining processing from in-lane to back office.
- Minimize traffic jams and emissions by managing traffic entering specific areas based on peak usage, allowing drivers to travel at free flow speeds.

Integrated mobility management solutions

Schneider Electric allows municipalities to maximize all resources and infrastructures — guaranteeing best mobility policies and supporting traveler decisions. Through coordination of agencies, it can improve traffic and public transportation management and increase driver safety. Its secure and reliable collection, consolidation, storage, analysis and dissemination of real-time, predictive and alternative-options mobility data allows operators to...

- Help commuters make better decisions with world-class visualization of current and anticipated travel situations, plus traffic and transit alerts.
- Enable advanced incident detection and management — both for real-time and forecasted situations.
- Improve network resiliency by allowing operators to readjust signals, reroute traffic, adjust public transportation schedules and inform drivers of parking availability.

- Ensure coordinated decisions with a single, complete information-bus between the advanced traffic management center and all related agencies.

Transit management solutions

Transit is key to quality of life. Public transportation networks not only accommodate a city's access and mobility needs, but also help reduce congestion and improve air quality. Schneider Electric's integrated platform maximizes efficiencies for all modes of public transportation. By providing real-time status information through a consolidated platform it enables managers to:

- Maximize throughput by effectively and efficiently coordinating metro, tramway and bus arrival/departure times.
- Ensure faster commute times by prioritizing transit to minimize delays at intersections and along congested roads.
- Create a complete central office for control and management of rail station systems and communications networks.
- Provide superior service and assistance for transportation assets across the network.
- Develop realistic simulations for training and emergency planning purposes.

Rely on proven solutions

Our SmartCity Mobility solutions are at work in cities around the world to help manage and optimize transportation systems — meeting growing demand safely and sustainably. Contact us to learn more about a solution configured to serve your current operational and anticipated management needs.



Schneider Electric SmartCity
SmartCities for a Sustainable World