



World of Smart City
Capabilities



Today, people are more connected with each other, their environments, and the world than ever before. As technology evolves, cities have emerging opportunities to better leverage data from connected infrastructure and citizens to ensure a safer, more efficient and sustainable future—one where data drives effective city management and provides an improved and integrated user experience for the city's residents.

**Now with TransCore and ST Engineering connected,
we're connecting cities like never before.**

As global market leaders in Smart Mobility, TransCore and ST Engineering are collaborating to offer a robust portfolio of smart city technologies that help cities tackle urbanization and mobility challenges.

Together, we aim to help design the cities of tomorrow with our AI-powered Smart Traffic Management, Smart Parking and Charging, Smart Sustainable Infrastructure, and Smart Metro solutions.

How can we help make your city more intuitive?



Smart Traffic Management

Solutions to manage increasing traffic volume, incident response time, safety, and travel time reliability

Adaptive Traffic Signal Control (ACDSS)

ACDSS automatically adjusts signal timing to accommodate changing traffic conditions, help keep intersections clear, and keep drivers moving.

Centralized Emergency Vehicle Preemption (CEVP) & Transit Signal Priority (CTSP)

With CEVP, first responders avoid more stop lights to arrive on scene faster, often when seconds or minutes can be critical.

CEVP uses existing traffic signal and dispatch infrastructure to identify emergency vehicles. Then, CEVP preempts signal patterns—making sure emergency responders arrive at more green lights. Because the solution takes advantage of existing infrastructure, installation and maintenance are quick, cost-effective, and painless.

Similarly, TransCore's CTSP helps transit agencies and operators keep busses on schedule by using real-time vehicle location and notifying signal controllers to adjust signal timing as busses approach to minimize delays at intersections.



San Jose, California USA

In 2017, TransCore implemented the CEVP system across **900 intersections** in **under 9 months**.

CEVP improved emergency response safety and decreased response times.



Some of the world's busiest cities use ACDSS, including New York City; Denver, Colorado; and Riyadh, Saudi Arabia.

AGIL Urban Traffic Management System (UTMS)

UTMS cutting edge, AI-driven urban traffic management system has a built-in expert incident management module and real-time prediction capabilities that have enabled customers to:

- **Reduce** incident handling time by up to **53%**
- **Reduce** accident duration by up to **56%**
- **Reduce** traffic congestion duration by up to **23%**

AGIL UTMS is used daily in Singapore and Dubai, UAE, to manage traffic in congested urban areas. The system is flexible and capable of integrating with existing ITS sensors, while allowing for expansion to new sensors where needed. The UTMS platform ingests and fuses raw traffic data from sensors and third-party sources for prediction and real-time traffic management support, while the deep pool of data also enables analysis for planning and development of transportation policies.



Smart Parking and Charging

RFID-Enabled Smart Parking Payment Systems to improve efficiency of parking operations

Utilizing a handheld RFID reader and firmware deployed on an Android mobile device or mobile computer, parking attendants read interoperable vehicle-mounted RFID tags associated with roadway tolling accounts and send transactions to a mobile application via local servers to validate accounts and process charges. Interoperable functionality allows drivers to seamlessly transition from regional toll roads to parking facilities, with system applications for stadium, arena, airport, and seaport parking.



GoParkin Car Park Management Platform

GoParkin is a cloud-based parking facility management platform and application that enables operators to manage enforcement, transaction reconciliation, and report generation.



Fully integrated to work with both LPR and RFID, the GoParkin mobile application offers motorists a seamless experience to search for parking, pay, and manage parking activities.

EV Charging Management

As electric vehicle (EV) adoption accelerates, GoParkin has also fully integrated EV charging management capabilities. GoParkin offers parking facility operators a unique opportunity to service parking and EV charging customers from the same platform. Motorists benefit from a streamlined user experience with one application for both parking and charging.



Connected Smart Street Lights to support sustainability and safety

More than 1.1 million Smart Street Lights have been successfully deployed globally. Tangible benefits they provide include:

- **Reduced** maintenance costs
- **Reduced** energy consumption
- **Reduced** outages and response time
- **Increased** life of fixtures
- **Increased** connectivity if deployed as a low-bandwidth sensor network

50%
Reduction of
Energy Consumption

20%
Reduction Annual Street
Light Operating Costs

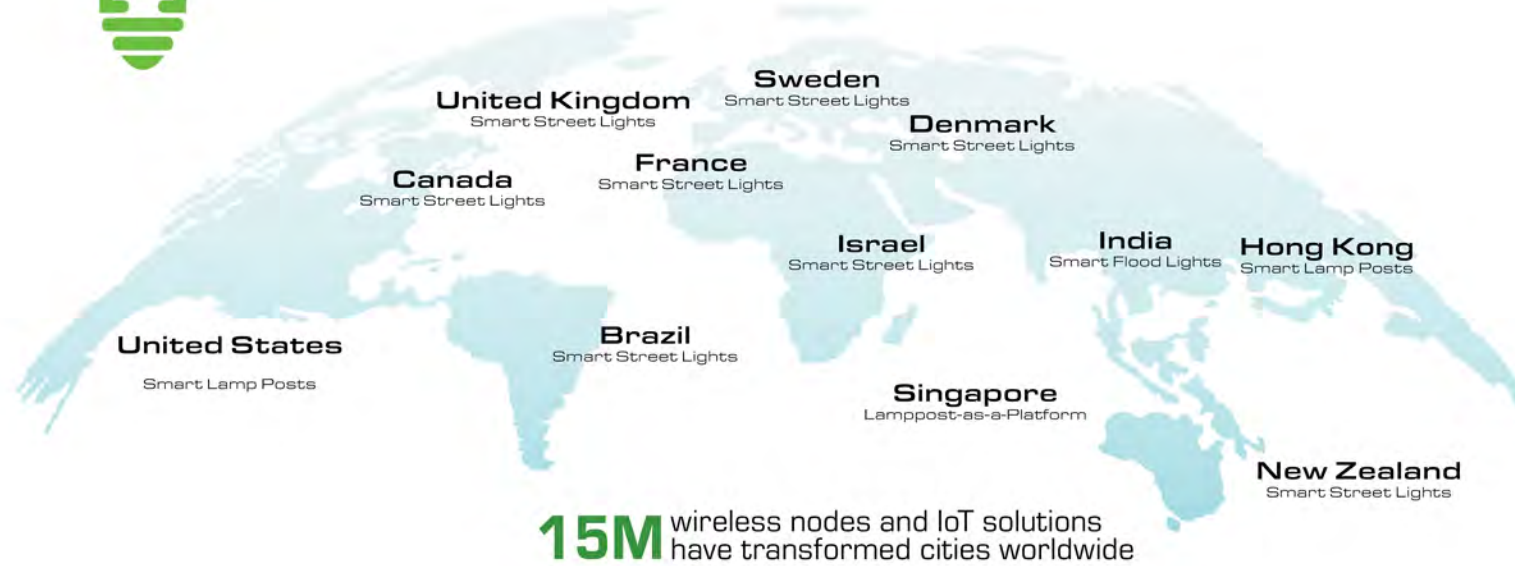


Cleveland, Ohio  61,000 Smart Street Lights 



Smart Street Lights Around the Globe

Smart Street Lights improve efficiency and cost effectiveness of street lighting.



Smart Street Lights as a platform for enhanced services

Smart Street Lights don't just provide lighting. They can be integrated with a suite of sensors to tap into the same wireless communications network used to manage the lights. Sensors for monitoring air quality and counting vehicles and pedestrians can be integrated with lamp posts and the existing network, enabling smart city applications to be deployed more quickly and cost-effectively than a new, bespoke system.

Meanwhile, citizens benefit from Smart Lamp Posts to charge EVs, connect to Wi-Fi, or use infotainment consoles.

AGIL Digital Platforms for smart city operations

Smart City Operating System (OS)

This highly scalable platform is designed to enable automation of workflow and processes across operational technology (OT) and information technology (IT) systems for smart and sustainable operations.

AGIL IoT Platform

This platform is designed to support operations of IoT devices and sensors with differing connectivity protocols. It simplifies device on-boarding, health monitoring, and data collection across different sensors, helping cities overcome the challenges of operating different platforms from different sensor or device providers.



Smart Metro solutions transit into the 21st century and key metro concerns

Automatic Fare Collection System

A comprehensive barrier-gate-based ticketing systems and machines for metro fare collection. A barrierless gate solution with facial recognition has been developed for the next evolution.

Platform Screen Doors

Solutions to help prevent unwanted track incursion for general commuter safety and disruption to operations. Platform Screen Doors provide metro operators and agencies integrated video and audio capabilities for clearer announcements and advertising opportunities.

Passenger Information Systems

Train and platform passenger information systems. Train-borne systems are integrated with the communications network to provide accurate station and route information to commuters.

Smart Metro Control Center

An integrated control system for metro operations to provide an overview of all aspects of metro operations—from train schedules to platform situation and equipment performance, the control system offers comprehensive management capabilities at the individual line or across multiple lines in a city.

TunnelFox

A solution that automatically inspects rail infrastructure with a 3D scanner that reveals tunnel cracks, dampness, clearance issues, and track bolt thinning—reducing inspection man hours by 95%, keeping crews safer, and making inspections more accurate than ever by reducing human error.

Connect with us.




The TransCore logo features the word "TRANSCORE" in a white, serif font. A thin white arc is positioned above the letters "A", "N", and "S".


TRANSCORE

The ST Engineering logo consists of a white sunburst icon to the left of the text "ST Engineering" in a white, sans-serif font.

ST Engineering

A panoramic view of a city skyline at dusk, with numerous skyscrapers and buildings illuminated against a dark blue sky. The city lights reflect on a body of water in the foreground.

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A long-exposure photograph of a highway at night, showing vibrant red and blue light trails from moving vehicles. The highway curves through a dark, forested area.

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