

Intelligent Transportation Solutions Portfolio
Performance You Can Take To The Bank



TRANSCORE[®]

Transportation Services Spanning 75 Years:

The same high caliber TransCore services that play an integral role in projects are also at your disposal on an a la carte basis to bridge gaps left by other vendors and to take care of work overflows as needed.

► **Systems Integration.**

We carefully analyze your existing systems environment to ensure that any new components will deliver superb performance. And because our expertise includes all leading software packages, you can be assured that any solution we build for you incorporates the best features available in the industry.

► **Operations and Maintenance.**

We are a trusted partner, with over 350 engineers and technicians, many right in your neighborhood, available any time to provide field engineering, consultation, and operations and maintenance services that extend the life and effectiveness of your system, regardless of manufacturer or installer.

Unparalleled Returns on Your Transportation Investment

TransCore is the one transportation solution provider dedicated to lasting performance that persists well beyond the project spreadsheet, measuring your return on investment in sustained benefits that continue to pay you back throughout the entire life of your system.

In every segment of the intelligent transportation systems (ITS) industry, our solutions offer the lowest total cost of ownership. Simply: we know what it takes to get the results you want and we remain vigilant, filling every gap, known or anticipated, until you and your customers are satisfied. And our dedication continues on into subsequent projects, facilitating each transformation that keeps you and your organization always positioned for optimal growth and success.

Our proven technology and full suite of products and services deliver exceptional value in every aspect of the transportation arena. From the most affordable to the most sophisticated, we cover the entire spectrum with more tools and skills at our disposal than any other vendor in the business.



Dubai's Salik Toll System – world's widest open road tolling zone

Toll. A trailblazer in the electronic toll collection industry since its inception, TransCore literally wrote the book on how to leverage emerging radio frequency identification (RFID) technologies to maximize toll collection efficiencies

and accelerate throughput on even the busiest roadways. We remain the premier partner serving toll customers across North America and around the world.

Traffic Management. Whenever forward-thinking people with good ideas have needed enabling technology to visualize and manage the movement of vehicles through busy city streets and highways, TransCore has always been there. With mature and proven traffic control systems that support a wide array of field devices, and the most trusted adaptive technology on the market, we pride ourselves on having the right answers to every question, no matter how complex.

Airports. For decades, airport managers have relied on TransCore's automatic vehicle identification (AVI) to keep landside traffic moving smoothly, reduce idling and emissions, automate parking and terminal access revenue collection, track airside



Denver International Airport – Denver, CO

ground support equipment and reinforce security initiatives. Equally important, TransCore has consistently led the industry in providing interoperability with neighboring toll systems to ensure these airports can continue to build upon the existing tag base for even greater efficiencies and lower-cost revenue capture.

Rail, Intermodal, and Mass Transit.

TransCore's leadership in the rail and intermodal market has remained unchallenged since the 1980s when our automatic equipment identification (AEI) technology transformed the movement of goods by adding a level of visibility never before possible. Today, our AEI optimizes the use of transportation assets, reduces operating overhead and costs, enhances safety, and improves the accuracy and efficiency of reporting. For light rail/mass transit applications, TransCore also leads the way with reliable and accurate train positioning /separation systems.



Washington Metro – Washington D.C.

Freight and Logistics. Transporting goods from origin to destination is a complex process that only TransCore has the sophistication to support from end to end. The powerful operations, financial and analytics tools in our transportation management logistics software give brokers the complete visibility they need to track business trends and deliver exceptional customer service.

Parking, Access Control, Security.

TransCore's AVI technology provides hands-free, worry-free solutions that get authorized vehicles in and out of parking areas and secured facilities quickly, collect fees automatically, and account for transactions with maximum ease and convenience.

Border/Security. At border crossings, airports, and other key portals, TransCore solutions automatically detect and identify pre-screened vehicles, shipping containers, trailers and cargo, and associated individuals (drivers, passengers and crew). These systems help to quickly identify trusted individuals and vehicles, allowing agents to focus on higher-risk contacts and keep traffic moving.

Electronic Vehicle Registration. Tags and readers that currently serve toll markets superbly are also being used to implement electronic vehicle registration (EVR) programs that streamline the registration enforcement process.



Willis Tower (formerly Sears Tower) – Chicago, IL

Transportation Services Spanning 75 Years:

► **Customer Service.**

TransCore people are among the most highly respected and most experienced in the toll collection business. For over 20 years we have been taking care of customers and providing customer care centers (CSCs) that deliver a superior service experience to our customers' customers.

► **Violation Enforcement/ Customer Conversion.**

Whether fully integrated as part of our CSC operations or as a standalone service, TransCore's violation processing is second to none in economically and accurately maximizing revenues from transactions that might otherwise fall through the cracks and smoothly converting would-be violators into customers.

► **Software Development.**

Our IT experts are among the best in the industry, standing ready to customize existing software, create interfaces, or develop entirely new applications for your one-of-a-kind challenges. We continuously improve and upgrade our own software products and port your favorite software applications to new generations of hardware.



HOT Lane Installation
San Diego, California

Enabling strategies that expand your options:

Our solutions allow you to fully leverage the infrastructure you have to gain more control and more revenue without adding lanes.

- ▶ All electronic tolling (AET)
- ▶ Open-road tolling (ORT)
- ▶ Video tolling
- ▶ High-occupancy toll (HOT) lanes
- ▶ Dynamic pricing
- ▶ Cross-protocol interoperability

Enduring Value and Performance from the Toll Industry Trailblazer

Over the past 75 years, TransCore has earned its stripes as a leader and innovator in the toll industry with a track record for serving our customers with the utmost respect and integrity. Our roots run deep and we have remained an agent of change, responsibly facilitating the transformation of solutions to meet evolving industry and customer needs.

Because we are dedicated to the electronic toll collection industry — providing hardware, software and services — we know better than anyone else how to avoid pitfalls and align system elements for perfect harmony and optimal performance, no matter how we interface with them.

When you team with TransCore, you keep your eye steady on the bottom line, confident that our answers are complete, with no strings and no surprises down the road, whether we are providing strategic elements or turnkey systems with end-to-end support.

Lane Solutions

TransCore has served as system integrator for more than 7,400 toll lanes worldwide. With expertise in a wide range of lane products — including our own — we have the broad perspective no one else has to select precisely the right components for your unique requirements.

Infinity[∞] Lane Technology

When selected for your project, our exclusive Infinity[∞] brand of lane solutions lends an extra measure of confidence. The modular, blade-based architecture at the heart of our design makes it easy for you to flexibly and economically advance to advantageous new technologies without having to procure an entire new toll system. And the benefits are many, including:

- ▶ **Lowest overall cost of ownership.** We are proud to say that no Infinity[∞] open road tolling lane has ever gone out of service. This means your capital investment will pay you back with the lowest ongoing operating costs over time.
- ▶ **Revenue capture and accountability.** Working together, our highly accurate vehicle transaction processing and digital video audit technologies capture revenues that might otherwise be lost and provide complete auditability.



Infinity Digital Lane System – Blade-Based

- ▶ **Lowest risk.** Only a system like ours that has been conceived, developed and field proven for optimal integrated operations can guarantee sustained performance and easy, low-cost maintainability.
- ▶ **Highly configurable.** Our lane, plaza, and host software products are built to anticipate agency requirements, with a wide range of capabilities already designed in.

Customer Care and Service Center Operations (CSC)

Just like you, TransCore people go to work every day answering directly to stakeholders both inside and outside the organization. We know first-hand the challenges you face. So when you rely on us to support your operations you can relax knowing our back office solutions will do everything you expect:

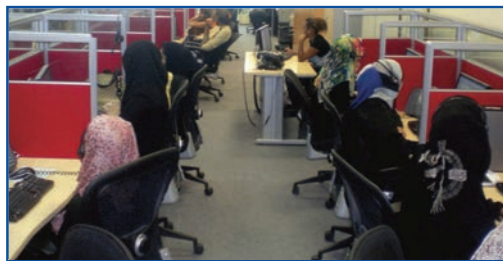
- ▶ Easy and convenient customer care
- ▶ Minimize the cost of making money
- ▶ Simplify and enhance system auditability
- ▶ Put key information at your fingertips

Customer Account Management System (CAMS)

Our multi-language-ready CAMS application blends all the best of familiar products with new approaches that increase availability of information and the speed, efficiency and accuracy of back office processes by orders of magnitude.

Customer Care and Service Center Operations (CSC)

TransCore has more CSC experience than any other vendor in the business. We've seen it all and have been recognized across the industry for our excellence and innovation.



TransCore-operated Customer Care Service Center – Dubai, UAE

We do it all. We quickly identify your needs, configure processes, set up walk-in centers, hire and train personnel, even market to your community, and get operations up and running in no time, providing multilingual services around the world.

Broad CSC application expertise. Our teams have a wealth of experience running CSCs that use other vendors' back office applications as well as our own. This gives us the broadest possible perspective on what it takes to meet performance requirements, no matter what tools we use.

Customer Account Management System:

CAMS is the customer care and back office service software CSC personnel prefer because it helps get maximum productivity out of every day.

- ▶ **One Web-based platform for both staff and customers.** Any software updates or configuration changes that reflect new/modified business rules instantly populate both the customer and the CSC portals simultaneously.
- ▶ **CAMS Mobile smart phone application.** Our newest application lets customers manage toll accounts via their smart phones, and makes it easier than ever to convert violators into customers in a flash.
- ▶ **Ultimate capability tailored with a touch.** With massive functionality built in, CAMS can handle the most complex implementations requiring reciprocity with other agencies, yet it can be scaled down to serve the smallest toll facility with equal speed and simplicity.
- ▶ **Maintenance Online Management System (MOMS): the built-in watchdog.** Every CAMS application includes our Web-enabled MOMS maintenance software capable of monitoring a variety of equipment and processes both inside and outside of CAMS.

Our Core Technology Skills Include:

- ▶ System and field hardware design and configuration
- ▶ Software development and integration
- ▶ Database design and development
- ▶ Cable and wireless communications
- ▶ Local and wide area networking
- ▶ Analog and digital closed circuit television (CCTV) and video management
- ▶ Dynamic message sign control management
- ▶ Vehicle detection design and integration
- ▶ Automatic vehicle identification products
- ▶ Intelligent voice response design and development

Trusted, Low Risk Traffic Management Solutions Pay Back Fast

Intelligent transportation systems span a vast landscape of technologies all focused on improving transport outcomes. Tolling and traffic management are among the most advanced of ITS initiatives, and TransCore has been a leader in both from the beginning.

No matter what the project scale, our mature, flexible and customizable advanced traffic management systems (ATMS) software products can be relied upon to give you optimal performance at the lowest risk, even as your system and requirements evolve.

A recognized leader in ATMS, TransCore has served more than 25 cities — including urban areas as diverse as Los Angeles, New York, Las Vegas, Houston, and Kansas City — covering over 500 miles of freeways with 12,000+ field devices and software that provide real-time traffic visibility, mitigate congestion, reduce pollution and improve safety around the clock.



New York City – Large Scale Urban Traffic Management System Using Wireless Network

Field proven through over 30 years of demanding service, our products are routinely evaluated and improved to keep pace with new technologies and offer our customers an affordable upgrade path.

TransCore's advanced traffic management software products include:

- ▶ The TransSuite® family of traffic management products
- ▶ SCATS® adaptive signal control
- ▶ AVI-based travel time applications
- ▶ Personalized traveler information systems
- ▶ Transit intelligent transportation systems
- ▶ Border crossing and trade corridor systems

Our services span the entire traffic management life cycle from traffic engineering, ITS and operations planning, traffic management center design, engineering design (PS&E), systems engineering, software development, integration and testing...to field installation and integration, construction inspection and support, traffic management center operations and comprehensive system maintenance.



TransSuite®

TransSuite is TransCore's integrated family of ATMS tools that support incident management and monitor a variety of vehicle detection devices.

- ▶ **Mature, proven traffic control software.** Over time, the TransSuite product line has continuously improved in performance by overcoming real-world challenges and responding to customer feedback.
- ▶ **Flexible and customizable system architecture.** The system's modular design makes it scalable and versatile, easily customizable and adaptable to new technologies, devices and functionality.
- ▶ **Generous licensing terms.** We offer unlimited user/unlimited device licensing on a jurisdiction-wide basis.
- ▶ **Fully NTCIP client.** Standards based communications—whether center-to-center or center-to-field—simplifies integration.
- ▶ **Support of multiple manufacturers' ITS field devices.** Our software can integrate a variety of products as your system grows.

TransSuite supports all traffic devices with a field-proven suite of software modules, including: traffic signal control; event management; freeway and tollway traffic management; video management; dynamic message sign (DMS) and highway advisory radio (HAR) management.

SCATS® Adaptive Control System

The SCATS adaptive traffic control system is the most proven and deployed adaptive system on the market today. For over 30 years, SCATS has been instrumental in reducing vehicle stops and delays and improving traffic flow at over 28,000 intersections worldwide.

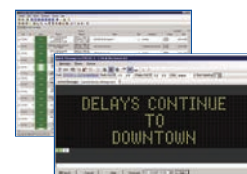
- ▶ **Immediate and long-term benefits.** Real-time adaptive capabilities mean that SCATS can adjust signal cycles around peak periods and compensate for increases and decreases in congestion as they occur or as patterns emerge over the long term, all without requiring manual intervention.
- ▶ **System payback measured in months.** Numerous independent studies have shown that system payback is often achieved within 18 months of installation, based on reduced vehicle emissions alone.
- ▶ **Best overall value.** SCATS costs less over time because it is self-calibrating and does not require ongoing traffic counts or manual development of timing plans.

TransSuite offers a field-proven suite of software modules:

▶ Traffic Control



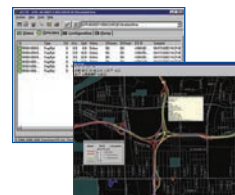
▶ Traveler Information



▶ Video Control



▶ Freeway Management



▶ Event Management



Manufacturing:



TransCore's Amtech Technology Center in Albuquerque, New Mexico, is an ISO-9001 certified manufacturing and testing facility where more than 67,000 readers and 46.3 million tags have been produced for transportation customers around the world.

This state-of-the-art, high-volume, manufacturing facility was designed from the ground up to meet the unique demands of RFID technology research and development and production. It is all we do here and we are committed to doing it right. Diligent quality processes begin at the very conception of a design, ensuring each product not only precisely meets the demands of its end user but lends itself to easy implementation and represents the best value to you throughout its entire life cycle.

Our teams assure quality follows each product from specification and design to assembly, programming, labeling and ultimately testing at every stage of the process.

RFID Products that Continue to Raise the Bar

As a supplier with over 25 years' experience installing, operating, and maintaining virtually all the most popular radio frequency identification components available in the industry, TransCore certainly knows how to apply each one to maximize its strengths. But it is when we are asked to provide our own products that we know unequivocally you are getting the highest quality for the best value anywhere.

Represented by over 100 active patents, our award-winning innovations target some of the most vexing challenges the industry has faced, and we continue to set the bar with products that fill needs no one else has had the courage to take on.

TransCore led the industry with the low-cost, high-performance, and environmentally friendly sticker tags that have now expanded customer participation in toll systems around the world. And countless interoperability concerns became a thing of the past virtually overnight with the introduction of our fully integrated, high-speed multiprotocol products.

Because we control the design, functionality, and manufacturing of every component, you can rest assured that our products will deliver the superb performance you require without compromise for as long as they remain in service.

Tags/Transponders

TransCore tags/transponders have every base covered, with targeted performance and configuration options that fill every niche. We have deployed over 46.3 million tags, including 18.5 million eGo® and eGo® Plus tags.



- ▶ **Modes/protocols.** Our tags support all the most common protocols including: eGo, Super eGo (SeGo), ATA, IAG, Allegro, Title 21, 6C, and CVISN.
- ▶ **Frequency.** Some tags operate in 870 MHz, 915 MHz, or 2450 MHz frequency band. Others can operate in multiple bands.
- ▶ **Tag power.** Certain tag models — including our sticker tags — are powered by the reader's RF signal ("beam powered"). Other tag types use a battery to boost read range and/or maximize the data exchange rate for more complex transactions.

- ▶ **Read-only, read/write.** For basic identification transactions a read-only tag represents the most economical solution. More sophisticated transactions may require a tag that allows the system to not only read data from the tag but to write new data into the tag at highway speeds.
- ▶ **Physical configuration.** Our tags are packaged in as many forms as there are unique application conditions. Certain models are designed for use inside a vehicle. Other tags must withstand harsh conditions such as those that may be found inside a windshield exposed to desert heat, or outside on a vehicle's bumper, or in high temperature thaw sheds that melt snow off railcars.

Readers

Like our tags, the TransCore readers have continually set the bar for performance in an industry otherwise fragmented by diverse technologies. Our innovations have broadened the market from single-protocol, read-only capabilities to read/write and multiprotocol products that bridge gaps and lay the foundation for fully automated, cost-effective interoperability.

Encompass® readers. Our Encompass family of readers supports all the protocols commonly used in today's transportation operations including: eGo, Super eGo (SeGo), ATA, IAG, Allegro, Title 21, 6C, and CVISN. We offer readers that range from economical single protocol and read-only units to sophisticated high-speed read/write models including our flagship reader, the versatile multiprotocol Encompass 6 reader that has virtually revolutionized the toll industry. Readers are available in a variety of configurations — including rugged fixed-mount and handheld models — to serve every application.



Encompass® 6
Multiprotocol Reader

AI-series readers. For over 20 years, our reliable and durable AI series readers have served as the backbone for rail and intermodal transportation and for legacy toll collection RFID.

Other Products

TransCore also offers companion RFID products including:

- ▶ Antennas
- ▶ RF modules
- ▶ Tag programmers

Testing:



To put products through their paces under field conditions we submit them to a variety of rigorous scenarios at our own Albuquerque test track. The track supports testing at all vehicle speeds through a simulated open road tolling zone that comprises four travel lanes and two shoulders. We test under the harshest of conditions, leaving nothing to chance, until we are certain our products are ready for your applications.

2011 Awards and Recognition:

- ▶ **2011 Outstanding Project of the Year Award in Traffic Control Systems by the Intelligent Transportation Society of New York (ITS-NY)** for TransCore's Integrated Adaptive Traffic Signal Control Decision Support.
- ▶ **2011 Outstanding Project of the Year in Roadway Management by the Intelligent Transportation Society of New York (ITS-NY)** for the New York State Thruway's Woodbury Toll Barrier – Highway Speed E-ZPass system.
- ▶ **2011 Best of Intelligent Transportation Society of America Finalist Award** for TransCore and New York City Department of Transportation project which links 12,400 traffic signals wirelessly into North America's largest traffic control system.
- ▶ **2011 Engineering News-Record (ENR) ranks TransCore at number 151** of the 500 largest, U.S.-based design firms. Year after year, our TransCore team is recognized for design excellence.
- ▶ **2011 TEAM Florida's Chairman's Award** for TransCore's work in converting Tampa Hillsborough Expressway over to all electronic tolling.

A Solid Foundation, Built for Longevity and Sustained Results

TransCore's real strength lies in delivering fully engineered, complete solutions that manifest the vision of success you had in mind. To do that, we know we have to thoroughly understand your world and your challenges. And we go one step further to predict your needs based on our 75 years' experience in managing roads and systems, serving customers, and maintaining accountability to the public.

When we make a commitment, it goes beyond project boundaries. We invest in your success, not just for the duration of a contract but over the life of our relationship.

What's more, we sustain that relationship by earning your trust and proving our worth every day at every level of our organization, and by reinforcing that trust with the financial resources to secure the kind of bonding that is often required for large projects.

Strong Corporate Governance

TransCore is a wholly owned subsidiary of Roper Industries, Inc., a publicly traded company with solid cash flow from operations and substantial revolving credit facility and investment grade balance sheet. Roper is an S&P 500 corporation and has a \$7+ billion enterprise value in 2011.

Roper consistently earns recognition for its performance. And in 2009, Forbes included Roper in its list of "Platinum 400 – America's Best Big Companies."

Roper's strength as a corporate parent allows TransCore to focus on delivering value propositions to its customers. TransCore's financial commitment and stability are clearly demonstrated in myriad respects.

- ▶ More than 75 years of continuous operation shows our commitment to tolls and ITS projects.
- ▶ Long term proven customer relationships with excellent retention.
- ▶ A solid record of growth demonstrates our long-term commitment to continuous improvements, evolving solutions, and proven industry firsts.



Industry Acclaimed Team

With solid backing from the top of the organization, the TransCore team is fully empowered to answer questions no one thought to ask and to solve problems that seemed insurmountable. No one has more ingenuity and determination than TransCore people — they are the real engine that drives our success and sees your vision through to its fullest expression. And our resourcefulness is second to none.

► *Houston, we have a problem.*

In Houston, Texas, to prevent further accidents and fatalities at a complex intersection where the Harris County Toll Road Authority's (HCTRA) Westpark Tollway exit ramp meets signalized traffic, the TransCore team innovated a first-of-its kind wrong-way detection system. This system has subsequently identified and stopped numerous

wrong-way drivers, thus helping to prevent countless accidents and save lives, earning HCTRA the 2009 IBTTA Toll Excellence Award.



► *Cash collection in a cashless system.* In Puerto Rico, TransCore was



challenged to implement the island's AutoExpreso toll system without relying on credit cards or bank accounts. Ever nimble, our team developed a unique reverse debit approach that allows drivers to apply cash payments to buy tags and pay tolls as they go. Customer accounts can be replenished with cash at numerous

merchant points of sale. And in 2008, to enhance driver participation, we further innovated the first-ever in-lane replenishment system.



Awards and Recognition:

- **2010 Best of Intelligent Transportation Society of America Award, Best New Innovative Practice.** TransCore replaced legacy readers with multiprotocol Encompass 6 readers in South Carolina's Southern Connector's toll plaza. Southern Connector is now the first in North America with the technical ability to offer its patrons national interoperability.
- **2010 Best of Intelligent Transportation Society of America Finalist Award – Best New Innovative Practice for Sustainability in Transportation** for TransCore's battery-free, environmentally-friendly windshield sticker tag.
- **2009 International Bridge, Tunnel and Turnpike Association (IBTTA) Toll Excellence Award to Dubai Roads and Transport Authority (RTA)** for its TransCore-operated Customer Care Service Center for the Salik Toll System.
- **2008 Insights' Best New Call Center in the Middle East** for Salik's TransCore-operated Customer Care Service Center in Dubai, UAE.
- **2008 Association of TeleServices International (ATSI) Call Center Award of Distinction** for TransCore's management of the Massachusetts Turnpike Authority's FAST LANE Customer Service Center.

World-class results paying dividends in more than 50 countries every day.



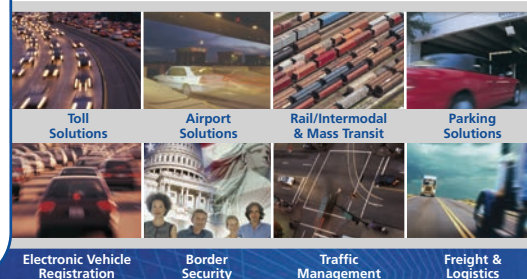
TransCore's Key Industry Firsts:

- ▶ **2009**
Launch of world's first multiprotocol toll tag – eZGo Anywhere™
- ▶ **2007**
Launch of world's first multiprotocol readers – Encompass® 6
- ▶ **2006**
World's first reversible open road tolling bridge – *Tampa Hillsborough Expressway, Florida*
World's widest open road tolling zone (seven ORT lanes, 40.3 meters or 132 feet) – *Dubai, UAE*
- ▶ **2004**
World's first deployment of TransCore's eGo, battery-free sticker tag in a toll system – *AutoExpreso, Puerto Rico*
- ▶ **2001**
World's first countrywide deployment of an electronic vehicle registration tag system – *Bermuda*
- ▶ **2000**
Introduced paper-thin, battery-free windshield sticker tag – *Boston*
World's first deployment of an electronic registration tag – *China*
- ▶ **1998**
First high occupancy toll (HOT) lane and first congestion pricing toll system that adjusts tolls based on time of day and real-time congestion levels – *I-15 San Diego*
- ▶ **1995**
First customer service center to handle patron accounts across multiple toll roads statewide – *Virginia Department of Transportation*
World's first electronic border crossing system – *Otay Mesa Dedicated Commuter Lane*

You can rely on TransCore to back up every claim with solid performance you can take to the bank. Contact us today to share your requirements with us, and together we can begin mapping out the future you imagine.



Intelligent Transportation Solutions



For more information:

Call **1.800.923.4824 • 214.461.6435** or email **ContactUs@TransCore.com**

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TRANSCORE

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