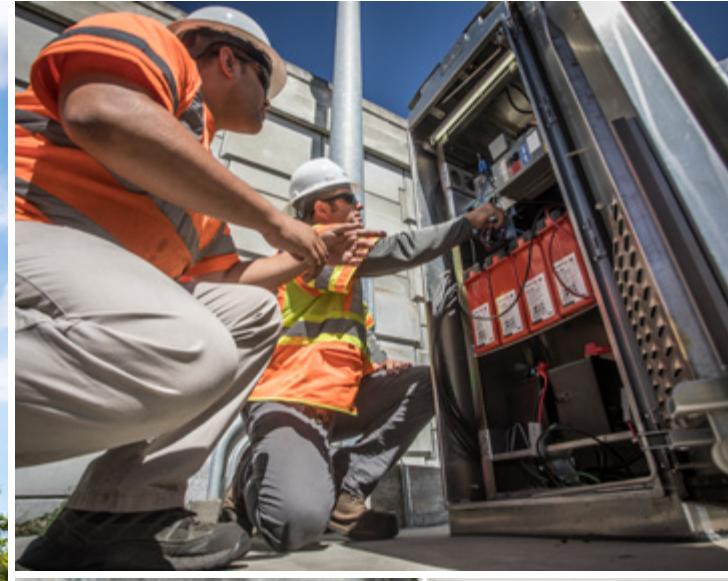


INTEGRATED TOLLING SOLUTIONS FOR A MODERN ROAD NETWORK

Together, We can Drive Progress, Delivering
Tolling Solutions for Today and Tomorrow





Core Tolling Services:

- All Electronic Tolling, Open Road Tolling & Traditional Toll System Design
- Back-Office Operations Consulting
- Business Rules Development & Refinement
- Congestion Pricing Analysis
- Alternative Funding & Road User Charging
- Economics & Finance
- Planning, Implementation and Operations
- Managed Lanes
- Various Procurement Methodology Support
- Program Management/ Construction Management
- Integration, Testing & Commissioning
- Planning Level Traffic & Revenue
- Toll Technology
- Reciprocity & Violation Enforcement Support

Tailor-Made Tolling and Revenue Replacement Solutions

Traditional funding sources are evaporating or not keeping up with the needs of our aging infrastructure and increased capacity needs. At the same time, higher safety and mobility standards are driving the need for more efficient use of our roadway networks.

As you consider how to address these challenges, we will help you evaluate which approach is right for you — be it tolling, congestion pricing, managed express lanes or road user charging. Our tolling team has the experience and expertise to solve your unique challenges and implement quickly. To do this, we will:

- Listen to your mission and needs
- Collaborate on possible solutions
- Perform the analysis and evaluation
- Support you in the decision-making process
- Assist you in communicating to stakeholders and the public

Together, we will develop and implement a practical and actionable plan that is customized for you to meet your revenue generation and improved mobility objectives.

Generating Revenue and Return on Investment

A core objective of tolling is to generate revenue while minimizing costs. Our economic and traffic modeling expertise can help you identify optimal strategies for revenue generation in the following three areas:

ACCELERATING DELIVERY

Combining program management with project development has unique benefits, including seamless integration of services, improved team communications and better cost, risk and schedule management to generate revenue more quickly.

IMPROVING OPERATIONAL EFFICIENCY

Whether your goal is to improve operational efficiency, increase capacity without adding infrastructure, evaluate and enhance business rules — or all of the above — our team has the expertise to make that happen.

FUTURE-PROOFING TECHNOLOGY PLANNING AND ADOPTION

The constraints of today's technology should not limit your toll systems' potential. Our technologists are intimately familiar with state-of-the-art technology and current trends, while looking forward to what's next.



I-75 Express Lanes Project, Development and Environment (PD&E) Study, Broward County, FL

Recent Projects



New York City Central Business District Tolling Program

Manhattan, NY

Developed a cordon-based congestion tolling program strategy, tolling concept/policy, conceptual design of a 100+ tolling points system, and design-build procurement documents on an accelerated schedule. Helped procure a contractor and toll system integrator one month ahead of schedule. Continuing as Program Manager/Construction Manager through design, construction and implementation.



Tolling Feasibility Study

Indianapolis, IN

Prepared a risk-adjusted traffic and revenue analysis for six corridors using the statewide travel demand model with multiple tolling scenarios. Assessed the public's willingness to pay for tolls and quantified economic impacts of tolling, including likely changes in household expenditures, public spending on roadway construction, O&M and transportation system improvements from additional highway capacity.



I-95 Express Lanes

Virginia

Engineer of Record on various engineering services tasks for the 10-mile southern extension of I-95 Express Lanes toll facility. Evaluated various horizontal and vertical layout options. Accommodated future widening of both I-95 NB and SB general purpose lanes. Minimized earthwork variances. Provided structural assessments, cost estimates and drainage field investigations.



Options for Establishment of Toll Facilities on F.G. Gardiner Expressway/Don Valley Parkway

Toronto, Ontario, Canada

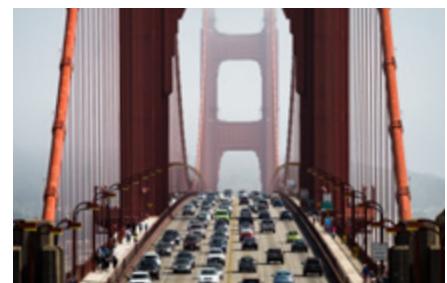
Completed a detailed assessment of the feasibility for tolling to pay for the proposed reconstruction of the Gardiner Expressway, the ongoing annual maintenance of both facilities and upgraded incident management system. A key component of the study was to engage over 30 stakeholders and the public on the implications of tolling.



Surface Transportation System Funding Alternatives National Evaluation

Federal Highway Administration

Serving as a third-party evaluator, examining findings through key metrics such as privacy, data security and public acceptance. This effort has allowed an understanding of which concepts and approaches are best suited to different applications, and which technologies are positioned to serve program needs today.



Golden Gate Highway & Transportation District, Data & Reporting Gap Analysis

San Francisco, CA

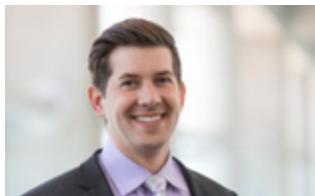
Conducting a comprehensive assessment, reviewing existing reports and processes, database schema, data dictionaries, interface control documents, transaction and financial data, and other information to trace transactions and revenue through the system. Identifying where they are not reconciling between the lane, lane host and CSC to determine necessary reports and data to improve reporting accuracy.

Our Experts



Michael P. Lewis, Principal Program Manager

Former CEO of two state DOTs and past president of AASHTO. His 38 years of public transportation program experience make him painfully aware of challenges brought on by the gross imbalance of infrastructure investment needs against available funding resources. Current program manager for the first U.S. congestion pricing project.



Andrew Cadmus, P.E., Tolling Operations Program Manager

Brings more than 12 years of experience in the public and private sectors of the transit, highway and tolling industries. Specializes in consulting services in the areas of transportation economics, data analysis, cost-benefit evaluation, process improvements, capital cash flow management and tolling operations.



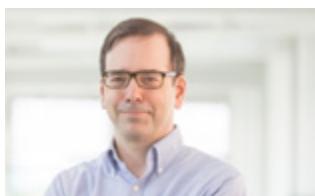
Paul Leghart, Toll Systems Manager

Nationally recognized leader in tolling and mobility solutions. Provides electronic tolling technology, processes and implementation strategies for tolling agencies around the world. His more than two decades of experience comprise the entire tolling chain, from the roadside to back office systems and customer relationship management.



Tony Marti, P.E., Toll Systems Manager

Brings more than 14 years of transportation engineering industry experience, including 10 years as a tolling system consultant and vendor. Other experience includes Intelligent Transportation System design and implementation, quality assurance and quality control. Specializes in all-electronic toll collection systems.



Phil Riggio, P.E., Transportation Technology Northeast Section Lead

More than 34 years of industry experience in ITS and applying technology to solve surface transportation problems. Manages projects; leads the preparation of plans, specifications and estimates; provides engineering support during construction and supervises staff and sub-consultants.

Our Story

We specialize in engineering, architecture, environmental and construction services. While we are most well-known for adding beauty and structure to communities through high performance buildings and smart infrastructure, we provide much more than that. We create an unshakable foundation for progress because our multidisciplinary teams also include scientists, economists, builders, analysts and artists.

Our employees, working in 225 locations around the world, push open the doors to what's possible each and every day.

Well known for providing innovative Intelligent Transportation System (ITS) components to transportation projects, HDR has invested and created an unparalleled group focusing on the next-generation of ITS, tolling and revenue replacement solutions. With our expert help, you can successfully navigate the transportation technology landscape — from concept to deployment and adoption. To learn more or to talk to one of our tolling experts, please contact hdrtransportation@hdrinc.com.

hdrinc.com

We practice increased use of sustainable materials and reduction of material use.

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