

# The Road to Revenue

## Tolling is option of choice for cash-strapped states

**EDITOR'S NOTE:** THE FOLLOWING ARTICLE IS BASED ON AN INTERVIEW WITH PATRICK D. JONES, EXECUTIVE DIRECTOR, INTERNATIONAL BRIDGE, TUNNEL AND TURNPIKE ASSOCIATION.

States faced with insufficient federal funds, creaky infrastructure and interstate highways that look like parking lots are turning to alternative revenue sources to fund transportation projects. And tolling, with its industry-transforming technology, is fast becoming the option of choice.

Today, 33 states have tollway systems, totaling more than 5,000 miles and \$7 billion in annual revenues. That's an enormous shift in acceptance from just 20 years ago. Why the U-turn? Much has changed since the dig-and-drop days of coin baskets and toll plazas. Today, tolling:

1. Helps alleviate congestion.
2. Provides continuous funding.
3. Enables jurisdictions to build projects faster.
4. Is high-tech and more user-friendly than ever.

This article examines four factors that have contributed to tolling's popularity and then looks into the future at what could be the biggest industry change yet.

### Coast-to-Coast Congestion

If you feel like you're spending more time in your car, you probably are. Urban drivers now spend an average of six working days a year stuck in traffic, and congestion is the culprit.

According to the Texas Transportation Institute's 2005 Urban Mobility Report, rush-hour congestion has nearly tripled during the past 20 years. Traffic snarls caused 3.7 billion hours in delays and wasted 2.5 billion gallons of fuel in 2003. The cost to society? A mind-boggling \$63 billion.

As the U.S. population balloons, so will those numbers. What can states do? Many are turning to tolling.

Tolling is a vital tool for managing traffic congestion. The 91 Express Lanes in Orange County, Calif., the I-15 Express Lanes in San Diego and the I-394 HOT lanes in Minneapolis are excellent examples of variable pricing, also known as congestion pricing. Here, toll rates rise and fall with the level of congestion, assuring motorists who are willing to pay the higher rate a driving speed of 55 mph or better.



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### Running on Fumes

Our "low budget" light is on, and many states don't know how to turn it off. The gap between the revenues we have and the revenues we need just to maintain our highway system in its current condition is more than one trillion dollars over the next two decades. Why? Our primary revenue source is evaporating, creating a huge backlog of road projects for DOTs.

Congestion cost society \$63 billion in 2003.

The gas tax, established to support the construction and maintenance of our nation's highways, only has about one-third of the purchasing power it had 40 years ago. Inflation and more fuel-efficient vehicles have siphoned the revenue potential from it. And higher gas prices aren't helping our cause, either. As motorists cut back on driving, gas tax revenues continue to shrink.

We could increase the gas tax, but such proposals often are met with unwavering public disapproval. And, even if some states did increase the tax, it wouldn't end our funding crisis. A study by the Institute of Transportation Studies at the University of Southern California found that California's gas tax would have to increase by 30 cents per gallon to raise the same amount of revenue per vehicle-mile traveled during 1960.

Besides, fuel taxes come with no guarantee. They can be diverted to fund unrelated initiatives, such as education. With tolling, the revenue is dedicated to the roadway. No ifs, ands or buts. And, once the facility is paid for, tolls continue to provide revenue for upkeep and improvements. In short, states are learning that tolling can provide a steady stream of funding in an otherwise drought-like environment.

### A Faster Route

When a DOT decides to build a new road, it accomplishes as much as it can with the gas tax revenues it receives. Then, it stops, waits until next year's appropriation and adds on, repeating the process until the project is complete. Sometimes it takes five years and sometimes it's 15. The more the timeline stretches, the greater chance the project has of snapping under the strain of inflation.

Tolling recognizes and takes advantage of the time-value of money. Toll projects are financed by bonds, which supply most or all funding up front. There's no waiting for annual appropriations, no piecemealing projects. Instead, a bridge, road or tunnel can be

built in much less time than a tax-supported road. And, the faster it is built, the faster it can start generating revenue.

In the end, the opportunity costs of beginning a project today and finishing it in three to five years versus 15 years are huge. DOTs and toll authorities stand to save millions of dollars by completing projects sooner.

### Coinless Convenience

For years, tolling was deemed a nuisance. Clogged toll plazas infuriated motorists, giving tolling a bad rap. The reason: Our mode of transportation had advanced but our method for collecting tolls had not. Until the mid-1980s, we collected tolls much the same way the ancient Romans did.

Not any more. As an industry, we have made more advances in tolling during the past 20 years than we've seen in the previous 2,000. Welcome to the era of Electronic Toll Collection (ETC).

The concept of ETC is similar to swiping a debit card, but from a much longer distance. Each vehicle is equipped with a transponder or toll tag. As vehicles pass under overhead gantries fitted with antennas, these antennas send signals to and receive signals from the transponders. A toll reader then collects information from the antenna and assigns the charge to the appropriate customer. The toll automatically is debited from the customer's account.

Now used in more than 20 states, ETC has transformed tolling from a 'stop, pay, go' nuisance into a 'go, go, go' user-friendly model. It fosters the kind of mobility and choice that toll road patrons did not have until the 1980s. In New Jersey, for instance, motorists can travel the entire length of the state without ever stopping to pay a toll.

### Commercialization: The Road Before Us

Our industry will see further developments just as significant as ETC has been. One such development is commercialization.

It's a strongly debated issue right now. On one side, you have those who believe our economy and the future of our country will depend on private investment in our infrastructure projects. On the other side are those who believe private investment in our surface transportation system is inherently bad.

They contend the private sector will drive up toll fees, pocket the profits and let the facility fall into shambles. Think about it. If you raise tolls too much or let the facility deteriorate, motorists won't use it. And, no customers mean no profits.

It's a false dichotomy to believe that only the public or only the private sector should own, lease or operate highway infrastructure. Private investment of infrastructure works. Europe is a prime example.

What we would consider interstate highways in Europe are tolled and often operated by private enterprises. Under a concession model, the government concedes to the private company the right to build and operate the road. In exchange, the private company gets to keep the toll revenue for a predetermined number of years. At the end of that period, the concessionaire returns the road to the public entity. The public entity, in turn, either hires the same concessionaire, a new company or operates the toll facility itself.

In the United States, the door to the concession model has been opened. In 2005, the city of Chicago leased the Chicago Skyway to private firms Macquarie Infrastructure Group and Cintra Concesiones de Infraestructuras de Transporte S.A. for 99 years in exchange for a cash payment of \$1.8 billion. This marked the first long-term lease of an existing toll facility.

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Indiana officials will lease the Indiana Toll Road to the same Spanish-Australian consortium. The consortium will operate the facility for the next 75 years, keeping all toll revenue. In return, the consortium will pay Indiana \$3.85 billion up front and assume the responsibilities for maintenance, improvements and other operating costs. Proceeds from the lease will fund other road and bridge projects in the state.

The long-term lease of the Chicago Skyway and the Indiana Toll Road both underscore the importance of the U.S. transportation funding crisis and the important role tolling can play in bringing revenue to states.

### A Benefit to Society

During a recent IBTTA workshop, Washington State Department of Transportation Secretary Doug McDonald pointed out the hierarchy of tolling benefits. One is the revenue it generates. Another is the ability to manage traffic congestion. But perhaps the greatest benefit, he said, is the dramatic reduction in the cost of congestion to society in terms of lost time, productivity and wasted fuel.

The toll industry has come a long way from the days of being considered a nuisance. It has become a viable solution to cash-strapped states.

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