

Many economists think drivers should be charged more for using roads. Here is why.

Why You'll Love Paying for Roads That Used to Be Free

By Eric A. Morris

To end the scourge of traffic congestion, Julius Caesar banned most carts from the streets of Rome during daylight hours. It didn't work—traffic jams just shifted to dusk. Two thousand years later, we have put a man on the moon and developed garments infinitely more practical than the toga, but we seem little nearer to solving the congestion problem.

If you live in a city, particularly a large one, you probably need little convincing that traffic congestion is frustrating and wasteful. According to the Texas Transportation Institute, the average American urban traveler lost 38 hours, nearly one full work week, to congestion in 2005. And congestion is getting worse, not better; urban travelers in 1982 were delayed only 14 hours that year.

Americans want action, but unfortunately there aren't too many great ideas about what that action might be. As Anthony Downs's

excellent book *Still Stuck in Traffic: Coping With Peak-Hour Traffic Congestion* chronicles, most of the proposed solutions are too difficult to implement, won't work, or both.

Fortunately, there is one remedy which is both doable and largely guaranteed to succeed. In the space of a year or two we could have you zipping along the 405 or the LIE at the height of rush hour at a comfortable 55 miles per hour.

There's just one small problem with this silver bullet for congestion: many people seem to prefer the werewolf. Despite its merits, this policy, which is known as "congestion pricing," "value pricing," or "variable tolling," is not an easy political sell.

For decades, economists and other transportation thinkers have advocated imposing tolls that vary with congestion levels on roadways. Simply put, the more congestion, the higher the toll, until the congestion goes away.

To many people, this sounds like a scheme by mustache-twirling bureaucrats and their academic apologists to fleece drivers out of their hard-earned cash. Why should drivers have to pay to use roads their tax dollars have

space—for less than its true value, shortages result.

Ultimately, there's no free lunch; instead of paying with money, you pay with the effort and time needed to acquire the good. Think of Soviet shoppers spending their lives in endless queues to purchase artificially low-priced but exceedingly scarce goods. Then think of Americans who can fulfill nearly any consumerist fantasy quickly but at a monetary cost. Free but congested roads have left us shivering on the streets of Moscow.

To consider it another way, delay is an externality imposed by drivers on their peers. By driving onto a busy road and contributing to congestion, drivers slow the speeds of others—but they never have to pay for it, at least not directly. In the end, of course, everybody pays, because as we impose congestion on others, others impose it on us. This degenerates into a game that nobody can win.

Markets work best when externalities are internalized: i.e., you pay for the hassle you inflict on others.... Using tolls to help internalize the congestion externality would somewhat reduce the number of trips made on the most congested roads at the peak usage periods; some trips would be moved to less congested times and routes, and others would be foregone entirely. This way we would cut down on the congestion costs we impose on each other.

Granted, tolls cannot fully cope with accidents and other incidents, which are major causes of delay. But pricing can largely eliminate chronic, recurring congestion. No matter how high the demand for a road, there is a level of toll that will keep it flowing freely.

To make tolling truly effective, the price must be right. Too high a price drives away too many cars and the road does not function at its capacity. Too low a price and congestion isn't licked.

The best solution is to vary the tolls in real time based on an analysis of current traffic conditions. Pilot toll projects on roads (like the I-394 in Minnesota and the I-15 in Southern California) use sensors embedded in the pavement to monitor the number and speeds of vehicles on the facility.

A simple computer program then determines the number of cars that should be allowed in. The computer then calculates the level of toll that will attract that number of cars—and no more. Prices are then updated every few minutes on electronic message signs. Hi-tech transponders and antenna arrays make waiting at toll booths a thing of the past.

The bottom line is that speeds are kept high (over 45 m.p.h.) so that throughput is higher than when vehicles are allowed to crowd all at once onto roadways at rush hour, slowing traffic to a crawl.



already paid for? Won't the remaining free roads be swamped as drivers are forced off the tolled roads? Won't the working-class and poor be the victims here, as the tolled routes turn into "Lexus lanes"?

And besides, adopting this policy would mean listening to economists, and who wants to do that?

There's a real problem with this logic, which is that, on its own terms, it makes perfect sense (except for the listening to economists part). Opponents of tolls are certainly not stupid, and their arguments deserve serious consideration. But in the end, their concerns are largely overblown, and the benefits of tolling swamp the potential costs.

Unfortunately, it can be hard to convey this because the theory behind tolling is somewhat complex and counterintuitive. This is too bad, because variable tolling is an excellent public policy. Here's why: the basic economic theory is that when you give out something valuable—in this case, road

To maximize efficiency, economists would like to price all travel, starting with the freeways. But given that elected officials have no burning desire to lose their jobs, a more realistic option, for now, is to toll just some freeway lanes that are either new capacity or underused carpool lanes. The other lanes would be left free—and congested. Drivers will then have a choice: wait or pay. Granted, neither is ideal. But right now drivers have no choice at all.

What's the bottom line here? The state of Washington recently opened congestion-priced lanes on its State Route 167. The peak toll in the first month of operation (reached on the evening of Wednesday, May 21) was \$5.75. I know, I know, you would never pay such an exorbitant amount when America has taught you that free roads are your birthright. But that money bought Washington drivers a 27-minute time savings. Is a half hour of your time worth \$6?

I think I already know the answer, and it is "it depends." Most people's value of time varies widely depending on their activities on any given day. Late for picking the kids up from daycare? Paying \$6 to save a half hour is an incredible bargain. Have to clean the house? The longer your trip home takes, the better. Tolling will introduce a new level of flexibility and freedom into your life, giving you the power to tailor your travel costs to fit your schedule. ▲