CONGESTION PRICING

Making a Profit from Bad Service

Peter G. Koltnow

In keeping with the National Academy of Science's policy of disclosure of potential sources of bias, I expect to be as rich as Croesus if every vehicle has to be equipped with an electronic gadget as part of a congestion pricing scheme. Other than that, pricing has little appeal to me.

About 15 years ago an enterprising Pennsylvanian marketed potholes to those who yearned for one of their own. For a few dollars he provided purchasers with a pothole desktop conversation piece. If you can sell one symbol of inadequate highways—potholes—why not sell congestion? A new breed of peddlers proposes to package congestion as if it were a commodity, not a condition, and charge what the traffic will bear. The idea of charging extra for bad service lends a new dimension to market economics.

The pothole salesman made no bones about his motive—money. Peddlers of congestion pricing, having less of a sense of humor or humility, imply that congestion sales will result in reduced congestion—and presumably the ultimate disappearance of their product. Skeptics may wonder if their real motive is the same as the pothole salesman's—money.

Areawide charges for use of streets during congested periods are promoted as a useful way to dampen transportation demand, raise money for transportation or other public purposes, and right the wrongs of imperfect highway taxation. Pricing is an attempt at "deliberate limitation" of traffic, part of the ultimate solution to urban travel problems, described more than 30 years ago in the landmark report from the United Kingdom, *Traffic in Towns* (*1*). Highway users are understandably skeptical, having been promised an end to congestion from massive transit investments, ride-sharing, HOV lanes, monorails, people-movers and other fix-its du jour.

As a demand-dampener, congestion pricing seems to have logic enough; at some price a buyer opts out. If motorists do not like the price they pay for traveling at busy times and places, they can shift modes, travel outside peak periods, or curtail trips. Many would see any of these as socially useful alternatives.

Other alternatives include traveling to a different job site—within the built-up area or a long way away. Purveyors of pricing schemes should keep the last option in mind. What it may mean is exporting jobs to competing communities.

During the 1960s the latter was a deliberate policy of the London County Council. In Silicon Valley during the 1980s, this was seriously considered by computer industry employers, facing difficult travel problems in their competition for workers. One alternative to making highway and transit improvements was to move selected production facilities (jobs) to Sacramento and Texas. An urban area that advertises its inability to provide public services, especially when other areas take a more optimistic and constructive approach, may well lose employers to its competitors.

Unknown, of course, is how high the price must be to have any measurable impact. Evidence to date is that the proportion of family budget for transportation has been essentially unchanged for decades, despite five-digit automobile price shock, oil embargoes, suburbanization, and similar developments. In all likelihood, it will take heavy imposts to make a visible dent in travel habits, at a level that is likely to have political impact before changing driving behavior. On the other hand, if the public can be convinced that driving is a sin, there may be no limit to what can be charged.

Questions can also be raised about the effectiveness of congestion pricing for money-raising purposes. If the objective is to enhance transportation funding, then pricing appears to be an unnecessary venture into the unknown—unnecessary because highway users currently show a substantial willingness to raise conventional user taxes for highway purposes, or indeed for almost any transportation purpose. At the same time, the political ability of highway users to stave off diversion of highway taxes to nontransportation uses appears to be seriously damaged. Why rock this lucrative boat?

Taxing congestion raises hackles among many highway users because it puts a taxing authority in the position of making money by preserving congestion. Is this healthy? Lingering in the backs of users' minds is the experience with many toll agencies, which find ways to continue to collect tolls long after the roads they built have been paid for.

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Highway users also wonder at the wisdom of perfecting taxes through the pricing mechanism. Most of the tangible gains in highway mobility have come about through *im*perfections in highway taxation. The Interstate Highway System exists because for decades motorists in half the states exported some of their tax revenues to the other half. The farmer got out of the mud because Congress moved urban-derived tax revenues to selected rural roads. National transportation purposes have been greatly advanced by ignoring economic theory and simply moving money from where it is to where it most needs to be spent, largely in response to representative political decisions.

Deliberate cross-subsidies in highway taxation mirror common practices in both

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the public and private sectors. Healthy people subsidize medical care of the chronically ill. Young workers pay the retirement costs of retired folks. Using congestion pricing to rectify purported transportation subsidies for urban workers would leave in place limitless opportunities for cross-subsidies in current public policy.

Is it really time for any ultimate solutions to urban traffic problems? Highway agencies have been proclaiming terminal gridlock and the need for demand management since at least the mid-1920s. Yet Census Bureau data on the journey to work show no deterioration in average work trip times for decades.

If anything, congestion pricing as a tool to cope with seemingly intractable central city problems draws attention away from important emerging traffic problems. Peak-period congestion is growing most rapidly in the outer suburbs of some metropolitan areas, and even beyond. These are places where aggressive programs to provide needed highway space are still practical and effective. It is on these underdeveloped outlying road systems that urban growth is having its greatest impact, one not easily met by alternatives to automobile use. It is also true that no-hope approaches to commuting distract us from the more numerous nonwork trips that often face more serious congestion than many peak-hour trips.

As the nation embarks on congestion pricing experiments, several steps are in order. As part of pilot programs, neutral monitors should measure results against predetermined standards of success or failure. Shutdown costs should be included so that projects can be terminated without embarrassment. To test political feasibility, each project should be prominently identified with the name of its most responsible proponent. If politicians routinely link their names with new roads and bridges, surely some brave soul would like to have his or her name tied to a highly visible congestion pricing project.

Reference

1. *Traffic in Towns: A Study of the Long-Term Problems of Traffic in Urban Areas.* Reports of Steering Group and Working Groups Appointed by the Minister of Transport. Her Majesty's Stationery Office, London, 1963.

IMPLEMENTING PEAK-HOUR ROAD PRICING AT FULLSCALE

Finding Solutions to Practical Problems

Anthony Downs

Combatting peak-hour traffic congestion by charging tolls to drivers to travel during those hours is an idea whose time may be almost here. The Intermodal Surface Transportation Efficiency Act of 1991 (ISTEA) allocated $25 million to funding demonstrations of this approach, and several places have applied for funds. As indicated in my recent book, *Stuck in Traffic*, I am a strong supporter of this idea (*1*). I believe it is one of the few anticongestion strategies that might really work. But I also believe that implementing peak-hour road pricing across a major metropolitan area is a difficult task and one that will first require that a host of practical obstacles be overcome. The focus of this article is on those obstacles and how to cope with them, but it should not detract from my unflagging support for the value of trying this approach at full scale in at least one major metropolitan area plagued by congestion.

On Which Roads Should Peak-Hour Tolls Be Charged?

The first problem is determining on which roads to charge peak-hour tolls. Major radial expressways and beltways are obvious candidates, but focusing solely on them would tend to divert many peak-hour travelers onto other arteries that do not have tolls. Many nonexpressway arteries heavily used during peak hours might also have to be included to encompass most of the major peak-hour travel routes now burdened by heavy congestion. This goal would have to be carried out by one agency with the authority to impose tolls throughout a metropolitan area, most of which contain no such bodies. Hence the legal and political problems involved with this decision may be much greater than the technical ones.

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What Toll-Collection Method Should Be Used?

A second issue is deciding on a toll-collection method. The best of these would not force most toll-paying drivers to stop or even slow down to pay their tolls. That implies some electronic system that queries a transponder carried by each vehicle as the vehicle passes over (or under) a wire connected to a computerized detection and billing system. The transponder could be a "smart card" containing a prepurchased toll amount that is reduced each time the vehicle passes the wire, thereby dispensing with the need to keep track of individual vehicle locations on the system. This would help minimize opposition based on fears of invasion of privacy. Only if the smart card had exhausted its credit would the vehicle's location be tracked and a monthly bill sent. Vehicles without such cards would be photographed by videocameras and drivers fined later if they failed to pull over into roadside toll booths.

Should High-Occupancy Vehicles Be Included?

A tougher issue is whether to force those in high-occupancy vehicles (HOVs) to pay