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To: Nick Bradley
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Re: Proposed Article

IF NOT TOLLS, WHAT?

ROAD TOLLS ARE NOT A NEW IDEA

THE WORD **TOLL** HAS MANY MEANINGS, and most of them having negative connotations. As a noun it is a “fixed charge or tax for a privilege, especially for passage across a bridge or along a road”. It is also a charge for a service, such as a long distance telephone call. *Toll* as a noun can also mean “an amount or extent of loss or destruction”, as in ‘The storm took a heavy toll on life and property’. As a verb, it means “to sound a bell slowly at regular intervals”, or, “to announce an arrival with such sounds”. *Toll*, as in “Ask not for whom the bell tolls...” derives from the Middle English *tollen*, which means “to ring an alarm” derived from the Old English word *tyllan* in *fortyllan*, which means “to attract or allure”.¹

The word *toll* as a “tax” comes from the Greek *telos*, tax, through to Old English, *toln*. Tax collector in Greek is *telonēs*. The Greek for toll booth is *teloneion*, in Latin it is *teloneum*, and in Medieval Latin it is *tolonium*. Toll as “tax” is translated into French and German as *tribut*, into Italian as *tributo*. Since there are Latin and Greek words for tolls and toll booths, one might naturally assume that tolls were collected back in ancient times. Yes, it seems that tolls were collected even back then. Rodolfo Lanciani, in his book *Ancient Rome in the Light of Recent Discoveries*² wrote: “Travelling on the great consular roads of Italy was always made disagreeable by publicans, or toll and octroi³ collectors.”

In earlier times, kings and local lords taxed their subjects to travel on their roads and across their bridges. Later, it was a building society or corporation that incurred the debt to pay for the road or bridge. Today, it is governments who take for themselves the privilege of imposing economic restrictions on movement to achieve a variety of goals, such as to channel that movement into collective forms of transportation.

There are also tolls that are charged for entrance into a city, region or state. From ancient times and well into the 19th century, walls surrounding cities were built to ensure that trade routes passed through the cities’ gates. Tolls or customs were levied by the ruler of the city region on people and the goods they carried into the city. The records of customs for the City of London in 1260 are recorded in a volume called *Liber Albus*, which list the customs to be paid for goods passing into or through London. In 1856, there were 117 toll gates within a six-mile radius of Charing Cross, the official “centre” of London, England.

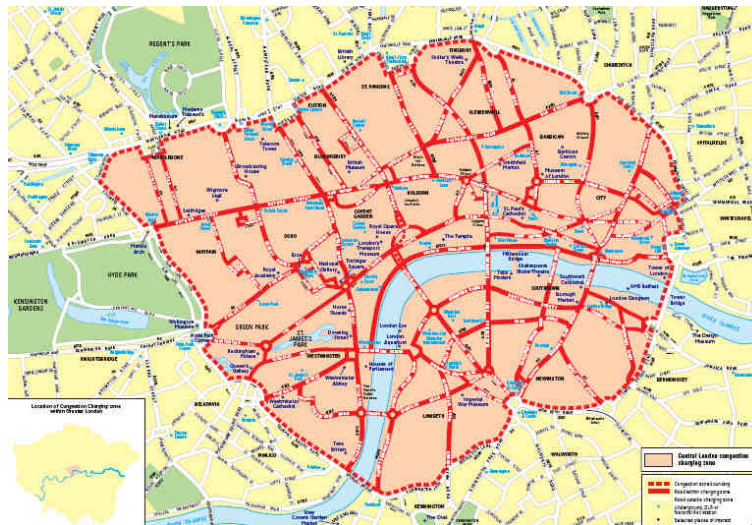
Approximately one hundred fifty years later, in February 2003, London re-instituted a tolling system. Instead of bars and turnpikes, it consisted of cameras that photograph the license plates of vehicles entering the so-called *Congestion Zone*.

¹ The American English Dictionary, Random House, Inc. 1964.

² Lanciani, Rodolfo, *Ancient Rome in the Light of Recent Discoveries*. Boston and New York: Houghton, Mifflin and Company, 1898. Reproduced on the World Wide Web by William P. Thayer.

³ *Octroi* is a local tax levied on certain articles, such as foodstuffs, on their admission into a city. Also, the place at which the tax is collected or the person collecting it. Derived from the French, *octroyer*, “to grant”. (The American College Dictionary, op. cit.)

Figure 16: The first London Congestion Charging Zone



Source: Transport for London (2006)

Initial results during the first few months of the congestion charging scheme in London were all positive. Traffic was supposedly down by 30%, with 65,000 fewer vehicles entering the charging zone. *Transport for London* was claiming that the large majority of these people had simply switched over to public transport. But eighteen months later, *The London Chamber of Commerce and Industry* published their Third Survey of the effect on the retail sector painting a very different picture, one that showed a severe effect on business in the charging zone.⁴ It seems that instead of switching to public transport, many people just did not travel into London. The “non-essential trips” made by shoppers, tourists and some business people, were the reason the numbers had fallen, and it appears that these had the greatest effects on the businesses in the charging zone.

It may seem remarkable that many of the strongest proponents of inner city road charging are politicians of the left, who should be, in theory, supporters of egalitarianism. Closing a street for all drivers is fair; leaving it open for all drivers is fair; but closing it for drivers who cannot afford to pay for the privilege discriminates against people with lower incomes. As a concept, “congestion charging” implies that people who can afford to pay the toll have a greater need to use the road, and therefore a greater right than people who cannot afford it. One highway manager put it bluntly: “Not everyone can travel at the same time. Pricing is the means of rationing.”⁵

The fallacy of congestion charging is that it is a final solution to congestion. The reality is that in time, a new equilibrium is established. From the baseline established in the wake of congestion charging, traffic volumes increase along with population growth if, and only if, commerce and industry in the area increase as well; or, traffic volumes decrease if the population shrinks and/or if businesses move beyond the tolling zone. If traffic volumes increase over time, rates have to be made substantially higher to create a new shock to the travellers’ pocketbooks. If traffic volumes decrease to levels that either do not sustain the costs of collecting the tolls (if the scheme should be self-financing), or if reduced car usage has such a negative effect on the businesses in the tolled areas that they are forced to close, rates will have to be significantly reduced or eliminated altogether.

If governments of any colour on the political spectrum insist on using road charging as a tax revenue option, then it should be a fair tax. Rather than basing the sizes of a toll on the time of day, or—worse—having a flat toll as in London, why not base it on ability to pay and the need to drive? Shouldn’t a low income, two-job wage earner who needs to get across town between her third and first shift, have priority to use the roads over a high-income executive? She should pay a lower fee, one that is commensurate with her income and circumstances. Does it really make sense to charge an executive earning a six or seven figure income the same amount to use the roads as a person making the minimum hourly wage?

How could this differentiation on the basis of fairness be accomplished? Governments have no problems using income tests to gauge what its citizens should pay for certain services, including their state and federal tax burden and how much they are able to pay for their children’s higher education. Why not apply the same tests to road usage? If the toll payment technology can match license plates to people who have paid and people who have not, and to track the toll evaders down to their doorsteps in order to deliver a fine, that technology can surely keep tabs on a database that says what fee an individual should pay, and whether the fee has been paid.

⁴ Campaigns Team, London Chamber of Commerce and Industry. *The Third Retail Survey: The Impact of Congestion Charging on the Central London Retail Sector – Eighteen Months On*. January 2005

⁵ The Intelligent Highway, Highway Agency Sees Future Of In-Car Information Services, May 1, 2006, (pp. 8-9).

ALTERNATIVES TO TOLLS

Are there alternatives to tolls? There are, and those cities that use them instead of tolls do so for sound reasons. In order to really compare these alternatives to paying directly for driving on a road, over a bridge or through a tunnel, or driving into a district, it is essential to be clear on the fundamental reasons for instituting any form of driving restriction. A list of possible reasons would include the following:

- Provide a source of revenue to pay for the constructed infrastructure.
- Provide a source of revenue for maintenance of the infrastructure.
- Provide for economic transfer payments to subsidize collective transport.
- Provide an economic advantage for the collective transport alternative by making private automobile use prohibitively expensive.
- Reduce the number of private vehicles to increase the average speeds and on-time arrival of buses or surface rail systems.
- Reduce the overall number of vehicles in order to reduce CO₂ or other emissions, accidents involving pedestrians or cyclists, space allocated to parking, noise related to heavy traffic.

“Reducing traffic congestion” is not a valid reason on its own because it is a euphemism for getting the economically challenged drivers off the road in order to make more room for the economically advantaged.

There are other ways to reduce the overall number of vehicles without instituting regressive taxes on all drivers. One Italian city, Bologna, began in 1972 to introduce restrictions in its historic centre. Areas were made pedestrian-only and bus lanes were added to streets, limiting space for private cars and trucks. In 1984, the people of Bologna voted in a local referendum to implement even further restrictions on private automobiles in the centre. Access to the centre became totally restricted between the hours of 7.00 a.m. and 8.00 p.m., except for certain vehicles, such as hotel guests, taxis, buses, residents and shop owners. Speed limits were reduced to 30 kilometres per hour on all roads and parking spaces were reduced. One of the main objectives achieved was the reduction of carbon monoxide levels by more than 75%. Congestion reduction also improved the efficiency of businesses in the district and increased safety for pedestrians.

The City of Gothenburg, Sweden has attempted to make driving within the old city compound a nightmare without actually closing streets, instituting tolls or charging excessive prices for parking. Gothenburg is Sweden's second largest city with approximately half a million residents. It is also home to two of Sweden's vehicle manufacturers, Volvo Cars and Volvo Trucks. It has a old centre that has a design reminiscent of Amsterdam, with circumferential canals and radial streets. While traffic congestion in Gothenburg was never as severe as in the country's capital, Stockholm, the city's planners decided that they wanted to maintain the quiet, pedestrian-oriented environment that had existed before the advance of car and truck traffic.

In the early 1960s, Gothenburg's central district was divided into five traffic zones. Cars and trucks could drive into each of the zones, but driving between zones was highly restricted. To move between zones, it is necessary to drive out to a low-speed parkway that circles the district and then to drive into the next zone. Traffic was reduced inside the district by almost 50% when the restrictions were introduced, pedestrian and bicycle accidents were reduced by 45%, and buses and trolley significantly improved on-time performance. The system is still in force.

Restrictions on the number of parking places, sky-high parking fees for workers and free parking for shoppers have been the most common alternatives to congestion charging in the large northeastern U.S. cities. This approach actually reversed the pre-1980s city planning recommendations for new tower offices in downtown areas to provide a maximum number of parking spaces for employees, usually beneath the building. One example of this is Boston, Massachusetts, one of the oldest cities in the U.S. with a tortuous street pattern in its business and financial district. The city has had bridge and turnpike tolls since cows were grazing on the Boston Common. It has also had one of the most extensive public transportation networks in the country comprising underground, trolley, bus and commuter rail.

Still, by the 1980s, following a construction boom in the city, congestion on the clogged arteries threading through the city of Boston seemed to be an intractable problem. Gradually, the parking rates in the central business district were raised from a few dollars per day to over ten times that amount by the mid-1980s. At the same time, large park-and-ride facilities were constructed at the fringes of the city where commuters could park for the entire day for free. They were patrolled and safe. Office building continued. The number of jobs in the city actually is higher than the number of residents, 671,000 versus 600,000, with services accounting for half of the total.

Boston has succeeded better than other cities with getting commuters to use public transit, and they have done it without instituting congestion charging schemes. Park-and-ride is the key. Almost 40% of Boston workers use

public transit to commute, either from their communities on the south shore, north shore or western suburbs, or from the park-and-ride facilities. Massachusetts Bay Transportation Authority ridership has increased by 30% since 1970. Around 15% of residents of Boston walk to work.

Cities and city regions are sensitive organisms. They are born, they grow and prosper. Sometimes they stagnate, decline, fall into decay and die. They have good periods and poor periods, depending on countless factors, including those that can be affected by humans and those that are completely out of human control. When city governments attempt to modify the movement behaviour of the people who live in, work in or otherwise use the city, they must be aware that their actions can have unforeseen effects. While the short-term results of instituting congestion charging schemes may be easy to measure in reduced traffic on the streets and reduced emissions in the air, the long-term effects may not be evident until after a long period has passed, after the mayor who pushed for them has gone on to another place. Before rushing into congestion charging, governing bodies should consider all the potential consequences, both positive and negative, and seriously test all of the other available options.