



# City of Toronto Road Tolls vs. Regional Congestion Charges

## Policy Report

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## Introduction

Regional problems require regional solutions. When the discussion turns to the economic cost of congestion in Toronto, the numbers reflect not just the cost of congestion to the city of Toronto but rather the cost to the regional economy. The Toronto Region Board of Trade has estimated these costs for the Greater Toronto Area and Hamilton at about \$6 billion per year, while a C.D. Howe Institute report suggests these economic costs are even higher, at between \$7.5 and \$11 billion per year (Dachis, 2013).

What congestion represents to urban economists is a classic externality, which results in a divergence between private and social costs. Externalities occur when economic actors undertaking the production process, or in the act of consuming goods (in this case a public good) impose social costs due to their activity. In making their production or consumption decisions the producers and consumers take into account only their private costs, and not the social costs that they impose.

Manufacturing firms may solely be concerned with the costs of labour, capital, and material for producing goods, and not necessarily the social cost of the pollution that they create. In the case of road congestion, drivers only consider their private cost of driving, and not the social costs, such as time delays they impose on other commuters and freight transport, the increase in fuel consumption, and pollution.

When reviewing externalities, economists consider three primary economic tools to address the divergence between private and social costs: regulation; taxes (or charges); and expenditure (subsidy) tools. In addition, economists may consider ways in which policy makers can encourage people to change their consumer behaviour which includes what policy makers refer to as “exhortation” or “moral suasion.” However, in reality the last approach may be considered a subset of the expenditure tool as this approach may require some type of expenditure for investments in advertising and/or education. Examples include the Province of Ontario’s “Reduce, Recycle and Reuse” campaign, or the TTC attempt at the “TTC the Better Way” campaign.

The economic tools to address externalities are consistent with the policy instruments in play (Pal, 2015; Howlett et al, 2009). Approaches to addressing congestion externalities is the imposition of a tax or charge, which could include road tolls or congestion charges.

Two economic rationales must be considered for a toll or tax on an urban activity as it relates to determining the amount of the tax or charge. One approach is the application of the benefit principle where those who benefit from the good or service should pay, which often results in the imposition of a user charge. Such charges are applied for urban services because they lead to

efficient allocation of public services while raising additional revenue. The second rationale relates to mitigating the impact of externalities.

Effective public policy demands that regional problems should be addressed with regional solutions, including a regional congestion charge to address traffic congestion in the entire Greater Toronto Area. This has been proposed by both Anthony Downs who argued for the need to act regionally to address congestion issues, and Robert Krol who proposed empowering the state governments to implement congestion charges on freeways (Downs, 2004; and Krol, 2016).

In the Canadian context, both the Ecofiscal Commission and the Gill and Lawson report published by the Conference Board of Canada, support congestion charges. They recognize the need to apply reasonably complex charges in order to make them effective in best addressing the congestion problem (Canada's Ecofiscal Commission, 2015; Gill and Lawson, 2016).

Severe congestion does not only occur on the expressways owned by the city of Toronto but also on 400 series provincial highways throughout the Greater Golden Horseshoe (GGH). A section of Highway 401, which runs across the city of Toronto, has one of the worst bottlenecks (congestion) in Canada, Highway 404 also experiences extreme congestion (CPCS, 2017).

## Road Pricing Applications

In applying road pricing, we can consider both the benefit principle/user charge rationale and the mitigation of externality rationales. User charges have been applied as tolls on many roads and bridges globally such that those who drive on the facility should pay for all or part of the capital and maintenance costs. The toll is generally set to pay for the construction costs, by paying the debt incurred to provide the road, the costs of operation and maintaining the road, or both as a form of full-cost pricing.

Now consider the cost of implementing a policy change to address an externality. In this case, a divergence between private and social costs occurs when a road is heavily used resulting in congestion, which causes time delays, reduces productivity, increases tail-pipe emissions, and consumption of fossil fuels.

The discussion so far helps to evaluate the alternatives of a “Toronto Road Toll” vs. a “Regional Congestion Charge.”

## The Proposed City of Toronto Road Toll

The City of Toronto had proposed, and received approval at the Executive Committee, imposing a toll on the Don Valley Parkway and the Gardiner Expressway. There was discussion that a

charge of \$2 per car per trip would generate \$200 million per year. The \$2 quantum is arbitrary presumably based on what the city feels is reasonable.

The question is how would the revenue be used? There has been a discussion about supporting transit improvements, but also there is consideration to use the revenue to maintain and repair the Gardiner Expressway. Some politicians may view it as a revenue source to mitigate property tax increases closing the revenue gap. Financing the Gardiner option may have gained the support of some councilors in light of the recent announcement about the increased estimates for repairing the easterly end of the Gardiner. When the city of Toronto Council voted to support the road tolls, those who voted in favour may have had a variety of uses in mind for the revenue when casting a supporting vote.

If Council could impose tolls, it would have the opportunity to “earmark” the revenue for a specific purpose. Some members may support that it be earmarked for transit but this may not be the ultimate outcome. Even if the current Council would vote to earmark the revenue for transit improvements, there is no guarantee that the Council of the day when the revenue would begin to flow in the future will not have a different priority regarding the allocation of the toll revenues.

## **Regional Congestion Charges**

Metrolinx and the Province have considered a regional congestion charge as one of the potential revenue tools to help improve transport infrastructure. If this type of charge is adopted, funds will be used to explicitly support transportation investments.

The application of a regional congestion charge to address the congestion costs can be set to address the congestion costs/externality problem. In this application, the charge can also include the social costs in addition to the basic costs of road construction and maintenance. Furthermore, the revenue stream could be used to improve transit throughout the region, which could include remote areas where many trips originate. The charge plus improving transit may entice some of these commuters to car pool or switch to public transit.

However, if the city of Toronto imposed a road toll, it effectively “crowds out” the Province/Metrolinx from tapping into this revenue source for transit improvements. Some may argue that even if Toronto imposes tolls on the DVP and Gardiner, Metrolinx can still impose tolls on the 400 series highways. There are several problems with this outcome. First there is a revenue loss to Metrolinx from the tolls on DVP and Gardiner, and there is no guarantee that the City-collected revenue will support transit improvements in the City. Second, if Metrolinx imposes tolls after the City has done so, there will be an integration problem. If the fare integration across the regions serviced by Metrolinx is any indication, this may not be an easy problem to address.

## Summary

Economic theory and public policy support imposing congestion pricing to address congestion as an externality. Since congestion is a regional problem, it should be dealt with on a regional basis. A charge will increase the cost of driving and entice some drivers to carpool or use alternate means of transportation. If the Province (perhaps through Metrolinx) imposes the charge on a regional basis, it can ensure that it will be a revenue stream to help fund transit improvements on a regional level. Regional level toll implementation is needed to influence the travel behaviour of drivers in the 905 area who might feel encouraged to either switch to sustainable modes of transportation, such as public transit, or to carpool when congestion pricing regimes are implemented at a regional scale.

Preferably, the regional congestion charge could be applied in a sophisticated (electronic) manner to have the charge vary to reflect a number of metrics such as the time of day, distance travelled, type of vehicle, and road traffic congestion.

The imposition of a road toll in Toronto is clearly a second best alternative and inferior to a regional congestion charge. As proposed, the road toll is a blunt instrument (\$2 per vehicle) such that the funds; if earmarked for transit; will be used to improve transit in the city of Toronto and not where a number of drivers paying the toll will start their commutes. In addition, future councils have the discretion of redirecting the toll revenue. Furthermore, as proposed, the tolls will not address congestion issues and costs for trips in the Greater Toronto and Hamilton Area that do not pass through roads that have the toll in Toronto. If at a later date the Province (Metrolinx) wishes to apply a congestion charge on regional roads outside Toronto, the integration of the charge/toll system may prove problematic.

Regional congestion charges are superior to Toronto's proposed road toll both in terms of economic efficiency, addressing the regional congestion/social costs, and in terms of equity, having those who pay the charge benefit from the revenue/expenditures.

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