

# Toronto's \$2.5 Billion Question

GTA and Hamilton Public Transit  
Expansion Funding Options

Hugh Mackenzie





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**ISBN 978-1-77125-072-6**

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CAW 507  
OTTAWA

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**ACKNOWLEDGEMENTS**

Data analysis for this project was prepared by statistician and public policy analyst Richard Shillington, principal of the firm Tristat Resources.

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# Executive Summary

THE PROVINCE OF Ontario and the City of Toronto are mired in a public discussion about how to pay for badly needed public transit expansion in the Greater Toronto and Hamilton Area (GTHA). This report examines the range of provincial and municipal revenue options available, costs them out, and weighs the pros and cons of each option. It concludes that Toronto's \$2.5 billion question — how to pay for an expansion of public transit in the GTHA — doesn't have a silver bullet answer. No single tax option would raise enough money to pay for the transit options under consideration. That means the city will have to rely on an envelope of probably three different revenue options to cover the costs of expansion.

So, how to choose amid such contentious terrain?

Let's consider, first, the objectives behind expanding public transit in the GTHA:

- Meet the dire need to reduce traffic congestion in the area, given commute times are among the worst in the developed world;
- Improve commuters' ability to move seamlessly throughout the GTHA, especially given the fact that about half of the province's working age population lives in the region<sup>1</sup>;
- Encourage more GTHA drivers to get out of their cars and onto public transit — to relieve traffic congestion as well as combat climate change;

- Expand public transit in a way that's fair for everyone and affordable, especially for the region's lower income residents.

This examination of the options rules out several potential revenue sources for various reasons: tolls (for their administrative complexity, uncertain distributive impact and limited revenue raising potential), land transfer taxes and property taxes (because they are already important local sources of revenue), vehicle registration charges (because their impact is extremely regressive) and transit fares (because the farebox revenue share in the GTHA is already too high relative to world standards).

It favours a healthier mix of revenue-generating options — a mix that meets the four objectives stated above. These options include three of the following: sales or payroll taxes; fuel taxes; and parking charges or development charges.

Finally, the paper concludes that the ability of multiple levels of government to draw on a range of revenue options to pay for the GTHA's public transit plans is within reach. The gridlock on this file has been political in nature. This paper sets out a range of funding options, weighing the pros and cons of each, as a means to facilitate a compromise — whether at the provincial or municipal level. It demonstrates a meeting of the minds is possible: middle-of-the-road compromises could not only help pay for the region's badly needed public transit expansion, it could do so in a way that is fair to everyone involved.

Looking at regional revenue sources for transit capital, and adopting realistic estimates of the revenue from the various options available for capital funding, two things become clear: first, that none of the options, standing on their own, can generate the funding required; and second, to reach the revenue target, an income, sales or payroll tax must be part of the mix. On balance, for practical reasons, sales taxation would appear to be the most viable option to provide that core funding base.

Fuel taxation makes sense as part of the funding mix. Fuel taxation has been introduced as a local revenue source in Canadian cities. Among major cities, both Montreal and Vancouver have fuel taxes that exceed provincial general tax levels. Furthermore, there would appear to be a degree of fuel tax room in Ontario, as the rate of tax has not been increased since 1993, despite the growing political importance of climate change as an issue and the currency of carbon taxation as a potential part of the climate change policy mix.

Most of the other funding options under active consideration are extremely regressive. To the extent that options that are unrelated to ability to

pay, such as vehicle registration fees, tolls and parking charges, their role in the overall funding package should be limited. Of the options in this category, charges for parking spaces offer a number of advantages. Their administration would be relatively straightforward. And with the potential for levying varying rates depending on location, they could play a positive role in the GTHA's transportation policy package. Development charges could also play a role in transit funding, although it would be a challenge to develop a common approach across the GTHA.

It is important to note the fiscal room available for increasing revenue from the major taxes that emerge as viable options. The corporate income tax rate in Ontario currently stands at 11.5%. As recently as 2010, the rate was 14%. The combined federal and provincial rate of corporate tax is 26.5%, below the federal corporate tax rate in the United States and substantially below the combined federal and state tax rates in jurisdictions in the U.S. — Ontario's key competitors.

More options: The HST rate, at 13%, is below the 15% combined GST and RST rates that prevailed before the Harper government implemented its ill-conceived GST cuts in the mid-2000s.

In short, there is substantial fiscal room in Ontario to meet pressing transit infrastructure needs.

Finally, although the major regional revenue sources under consideration for GTHA transit expansion are regressive (in that they account for a somewhat smaller percentage of a household's income as that income increases), the regressive impact is mitigated by the use to which the revenue will be put — public transit. Public transit delivers proportionally greater benefits to lower- and middle-income households than it does to higher-income households. In fact, transit benefit is so strongly progressive that expanded transit funded from modestly regressive taxes is, overall, progressive.

# Introduction

AFTER DECADES OF political procrastination, the demand for solutions for GTHA's traffic congestion problems — and answers to the thorny question of how to pay for it — has grown too big to ignore.

There has never been a shortage of plans to improve the area's transit systems. Had the city acted on the combination of subway and light rail plans unveiled over the years, Toronto's public transit system would now be the envy of similar-sized urban areas around the world. Unfortunately, most of the talk about options failed to produce the necessary results. Today, however, the debate is notably different: public discourse about the region's public transit needs is, for the first time since the City of Toronto ventured into subway construction in the 1940s, being paired with a public discussion about the revenue sources required to pay for them. Getting the mix of funding options right within this limited window of political opportunity is essential to turn plans into action.

This paper is intended as a guide for those trying to determine what the right mix of revenue-generating options might be, to help inform the decision-making process at this crucial time.

What follows is a brief discussion of the wide range of revenue options that could help generate the \$2.5 billion a year required to convert current public transit expansion plans into real action. In this paper we compare the various options under discussion with respect to:

- viability as a regional revenue source



- revenue-raising potential
- distributive impact (progressivity vs. regressivity)
- ancillary transportation policy and environmental effects

# Context

THE GTHA IS suffering extreme congestion and gridlock as a result of massive underinvestment in public transportation.

The consequences of that underinvestment are evident in both in the observable state of disrepair in the existing system and in the lengthy, steadily growing commute times experienced by those who live and work in the area. For example, in a study based on 2010 data, Statistics Canada found that one-way commute times in Toronto were the longest in Canada. In large Canadian cities, average commute times were 50% longer for commuters using public transit than those using private automobiles.<sup>2</sup>

Whereas major urban centres elsewhere in the world show greater commitment to continuous investment, reinvestment and expansion, investment in public transportation in the GTHA has been derailed by short-term political considerations. It has led to decades in which no investment took place whatsoever. It has led to cancellations of projects that were already under construction. And it has led to major expenditures directed towards political, rather than transportation, priorities.

Meanwhile, commuters sit in ever-lengthening traffic jams.

Similar consequences are reflected in funding for transit operations. While the extent of reliance on fares for operating funding varies across the GTHA — TTC fares, for example, cover more than 70% of operating costs — transit riders are carrying the burden of public transit costs at a ratio far higher than any other major urban area in the world.

In the past few months, public discourse about transit funding has shifted dramatically. While some politicians continue to live in a fantasy world in which major transit renewal can be achieved with no extra cost to taxpayers, for most of us, the debate has moved on to a more grounded discussion of the options.

Metrolinx, the provincial agency responsible for regional transit planning, is preparing a review of funding options. Others with an interest in these funding issues have weighed in: the Greater Toronto Civic Action Alliance and the Toronto Board of Trade have called for new sources of revenue to fund public transit.

In September 2012, the City of Toronto issued a background paper on transit infrastructure development and funding options.<sup>3</sup> As it happens, the city's list virtually coincides with the short list released by Metrolinx on April 2, 2013.<sup>4</sup> This analysis precedes a widely anticipated Metrolinx report, which will likely propose a specific set of funding options.

# Options

WHEN IT COMES to paying for public transit the GTA and Hamilton so desperately requires, there is no shortage of options.

*Table 1* summarizes the funding options presented to Toronto city council in the fall of 2012. It presents the list of revenue sources, tax rates and anticipated revenue from each source as provided by the city. Then it calculates the tax base implied by each city estimate.

Three observations about this list are worth noting at the outset. First, the list does not include public-private partnerships (P3s) as a source of revenue for public transit capital in the GTHA. City staff has noted that P3s are not a source of funding but, rather, a method for delivery of transportation infrastructure in that, regardless of how a project is managed, must still be paid for. Second, none of the options is identified as a single source of revenue to fund all infrastructure requirements. In other words, it is assumed that more than one revenue source will be required. Third, the discussion leaves unanswered the key question: how, once the capital infrastructure has been put in place, will the operations of the system be funded?

The following section examines each option put before council, considering the revenue estimated for each option.

**TABLE 1** Transit Funding Options (Revenue in \$Millions)

Tax	Rate	Base Desc.	GTHA Revenue	Implied Base	Unit
Personal Income Tax	1%	taxable income	1,400	140,000	\$mm
HST	1%	HST sales	1,300	130,000	\$mm
Property Tax	1%	municipal base	90	9,000	\$mm
Payroll Tax	1%	payroll	500	50,000	\$mm
Tolls	0.10	per km.	1,500	15,000	km. mm
Fuel Tax	0.10	per litre	500	5,000	litres mm
Vehicle Tax	100.00	per vehicle	300	3	vehicles mm
Parking	365.00	per space	1,080	3	per space
Land Transfer	1%	property sales	600	60,000	\$mm
Development Charges	5,000	per unit	200	40,000	housing units

Source: Transportation Funding Strategy—Appendix B and author's calculations.

## Personal Income Tax

The city's estimate is based on assigning a share of provincial government revenue from personal income taxes, based on the GTHA's share of provincial GDP, which the City appears to have estimated at 50%. With taxable income in Ontario at approximately \$350 billion in 2009<sup>5</sup>, an assignment of 1% of taxable income would generate approximately \$1.75 billion—somewhat higher than the estimate of \$1.4 billion provided by the city. That would correspond to a 0.8% flat rate tax on taxable income or a 0.7% flat tax on total income.

An alternative approach would be to levy a surtax that would apply generally to the full amount of Ontario income tax. Using the same share assumptions, the targeted revenue of \$1.4 billion would imply a surtax of 11.6% on Ontario income tax paid and would replicate the distribution of the current provincial income tax. Based on a review of Census data for the GTHA census areas (Hamilton CMA, Toronto CMA, and Oshawa CMA), the 50% share estimate would appear to be appropriate. (Total census income in 2005 in Hamilton, Toronto and Oshawa combined amounted to 48.6% of income in Ontario.)

## Sales Tax

As of 2011–12, the Ontario HST raised an estimated \$2.61 billion per percentage point of tax (i.e. 1/3 of HST revenue raised in Ontario. Based on the 50%

assumption in the city report, that would, indeed, generate the \$1.3 billion in revenue for one point of HST included in that report.

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## Payroll Tax

The city's estimate of payroll tax revenue is drawn from Statistics Canada's database on statutory deductions from payroll. Because the statutory deductions for CPP and EI are capped at an income of \$50,000, this would generate a significant understatement of potential revenue from a payroll tax.

According to the Canada Revenue Agency's 2009 taxation statistics, total employment income in Ontario was \$251.3 billion. Using the 50% rule of thumb, that would give rise to a comprehensive GTHA employment income base of \$125 billion and potential revenue from a 1% tax of \$1.25 billion, rather than the \$500 million cited in the city's report.

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## Highway Tolls

The city's estimate of revenue from highway tolls is based on Ministry of Transportation highway traffic data. Estimated revenue potential of \$1.5 billion from tolls would appear to be an upper-limit estimate. At the rate of 10 cents per kilometre used in the estimate, the city valuation implies a base of 15 billion kilometres of tolled transportation per year and further implies 5,000 kilometres of tolled travel annually for each of the three million vehicles registered in the GTHA. When one considers that, to date, Highway 401 has not been identified as a potential source of toll revenue, the \$1.5 billion estimate appears to be overstated.

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## Fuel Tax

One option would be to allocate a proportion of Ontario's fuel tax revenue to the GTHA based on GDP share. Based on revenue for 2011–12 of \$2.4 billion for gasoline (at 14.7 cents per litre) and fuel taxes of \$704 million (at 14.3 cents per litre), provincial yield for each one cent per litre of tax is \$210 million. The GTHA amount would be approximately half that, or \$105 million. A 10-cent tax would generate \$1.05 billion. This estimate is substantially higher than the city's estimate of \$500 million. A one-cent-per-litre tax on gasoline alone, assuming the GTHA's 50% share, would generate \$800 million.

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## Vehicle Tax

The city's estimate is based directly on Ontario vehicle registration data. It would generate \$300 million.

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## Property Tax

Based on municipal financial information returns for 2011, a tax of one mil<sup>6</sup> on all assessments in the GTHA would generate approximately \$100 million. Approximately 80% of that would come from residential property taxpayers. And approximately 40% of that would come from City of Toronto taxpayers — 60% from outside the city.

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## Parking Levy

The city's estimate is based on an extrapolation of Toronto Parking Authority data. That translates to approximately the same number of taxable parking spaces as vehicles in the GTHA — roughly three million.

As the city notes in its report, such a tax would have significant differential effects on various businesses. Commercial parking lots would be in a position to pass on the extra cost to users; parking facilities currently provided without charge, in malls, for example, would not. In addition, the flat rate suggested by the city would benefit owners of parking spaces in areas that generate significant revenue per space relative to those whose parking lots do not generate significant revenue per space. For example, owners of parking lots for which a fee is already charged would be in a position to pass the fee on to customers whereas owners of “free” parking lots would either have to start charging for parking spaces or absorb the tax. Owners of small strip malls, for example, would likely have to absorb the tax.

Ontario data from the 2006 census on commuting patterns show a total of 3.6 million individuals get to work by driving their own vehicle. Using the same rule of thumb the city employs in other areas, 1.8 million of these vehicles are used for work travel in the GTHA. This suggests that a parking levy better targeted to commuting at its proposed rate of \$365 per space would generate less than the \$1.1 billion indicated in the city's report.

Much more detailed study would be required to estimate potential revenue from a more targeted tax and/or a tax related in some way to the value of the space.

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## Land Transfer Tax

Perhaps for internal political reasons, the city chose to base its estimate of the revenue from a land transfer tax on a GDP-related share of Ontario's land transfer tax rather than on the Toronto's own land transfer tax revenues.

The city's estimate is an understatement. Total assessed value of real property in the GTHA, according to 2011 municipal Financial Information Returns, comes to 67% of total provincial assessed values.

Making very conservative assumptions — same churn rate in the GTHA as in the province as a whole, the same value distribution (because the provincial tax is graduated by value) at a rate equal to the provincial rate — a land transfer tax in the GTHA would be expected to generate roughly \$950 million. Given the likelihood of a higher churn rate in the GTHA — because of the higher pace of development relative to that of the rest of the province — and the fact that distribution is likely skewed towards the higher end of the value scale, a tax that replicates the provincial tax would likely generate substantially more revenue.

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## Development Charges

Development charge estimates are based on an assumption that 20% of transit capital would be recovered from development charges, and use estimates of new housing construction activity based on assumed household sizes and projected population growth. The impact of development charges is difficult to assess. It is not at all clear who would end up paying the charge. While it would appear in the first instance that a tax on new housing development would be passed on to home buyers, the fact that the charge does not apply to re-sales, which dominate the housing market, suggests that development charges would ultimately be borne by the owner or developer of the land. There are also important issues raised by the fact that development charges are flat rate per unit charges. That means that the charge is the same, regardless of the value of the home and would therefore have a greater relative impact on lower cost housing than on higher-cost housing. It could also become a deterrent to density.



# Assessments of Impact

THE FOCUS OF this assessment is on the distributional and behavioural impacts of the identified transit funding options.

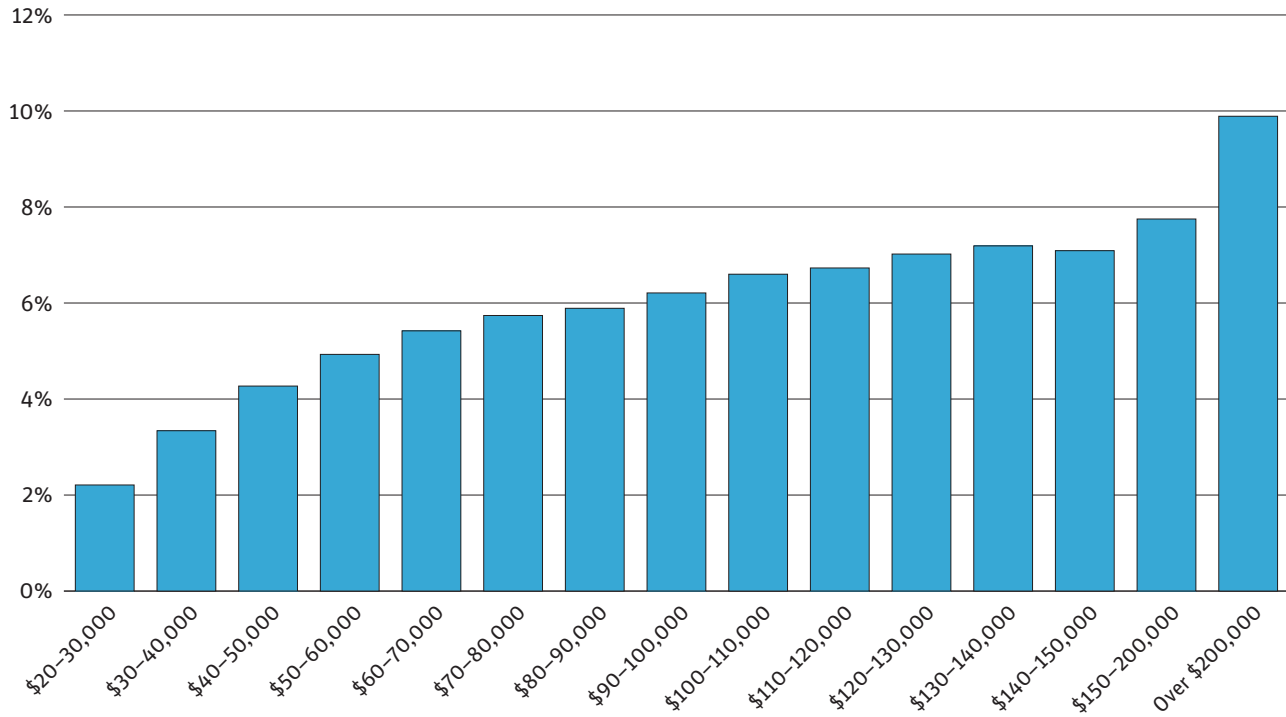
Because there is no single data source to base a distributional assessment of each revenue source, a variety of different data sources and models have been used to estimate the impacts. It is important to note as a general proposition, however, that distributional impacts are highly variable, and that the extent of that variability is different for different revenue sources.

For example, given that personal income tax applies directly to the most commonly used measure of ability to pay, there is almost by definition no variability across different individuals, whether the measure is before-tax income or after-tax income. However, at the household level, the impact of income tax will vary, depending on the composition of the household's income and whether the reference point is before-tax or after-tax income. If the measure were to be disposable income after covering basic necessities (food, shelter, clothing etc.), there might be substantial variability in impacts among households with similar incomes but in different circumstances.<sup>7</sup>

Because consumption is closely linked to income, measures of sales tax impacts related to income would tend to vary relatively little among individuals or households with similar incomes.

With respect to payroll taxes, while the relationship between tax paid and income is reasonably reliable among working age individuals in the lower-middle to upper-middle income ranges, the impact of the tax will depend on income sources among low-income and high-income individuals and households.

**FIGURE 1** Income Tax as a Share of Household Income (By Income Range)



Source: Statistics Canada SPSPD/M

Comparing sales and payroll taxes, payroll taxes will tend to have a lesser impact on very low income households and individuals, who tend to derive income from transfer payments, and on very high income households and individuals, who tend to derive relatively more income from capital. Similarly, a payroll tax will have relatively little impact on seniors compared with a sales tax.

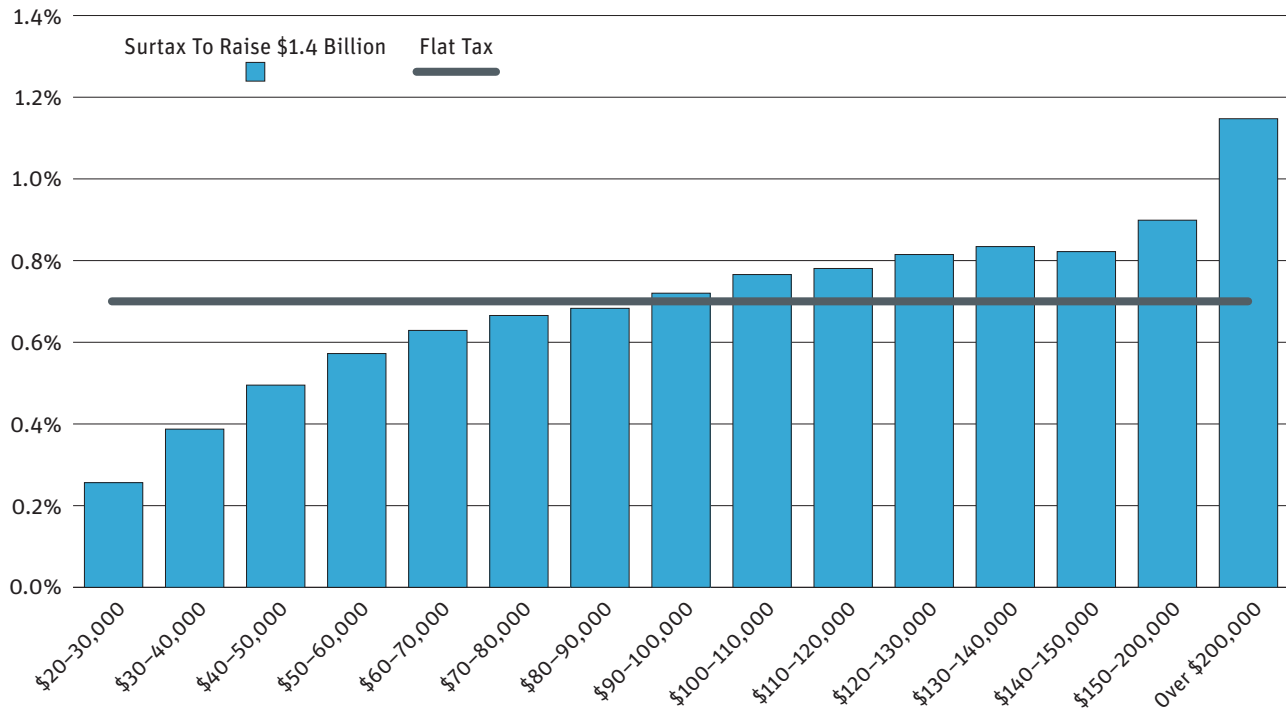
For taxes that are less reliably related to income, like gasoline and fuel taxes, there is a greater variation the impact of the tax on people's ability to pay.

## Personal Income Tax

In the analysis that follows, the distribution of income tax revenue by household income range is used as the reference point for the distributions of other taxes.

*Figure 1* shows the share of household income accounted for by Ontario income tax, by household income range.

**FIGURE 2** Distributional Impact of Income Surtax and Flat Tax on Income  
(GTHA Revenue Target \$1.4 Billion)



Source: Statistics Canada SPSD/M

Figure 2 shows an estimate of the distribution of income tax as a share of household income for two options for raising an additional \$1.4 billion: a GTHA income surtax; and a GTHA flat tax on income.

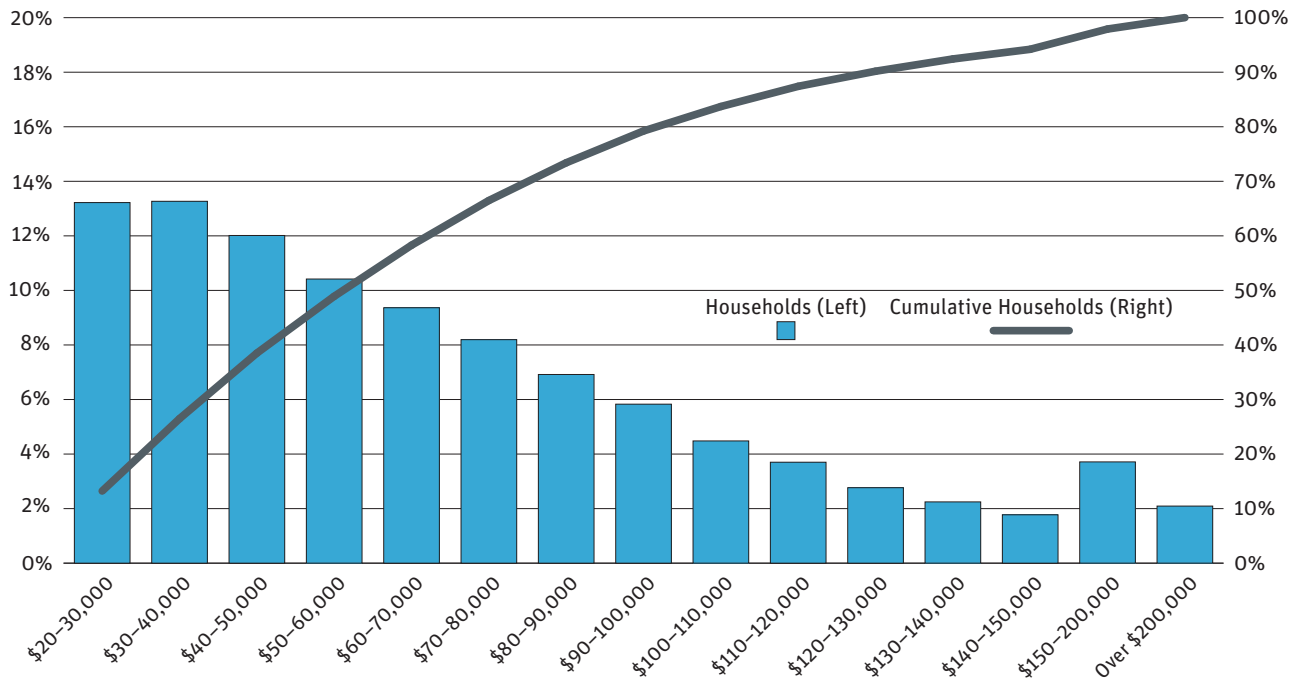
The flat tax line shows the percentage of household income that would be paid through a flat percentage tax on household income. The surtax line shows the percentage of household income that would be paid if the same revenue were raised via a surtax on Ontario income tax paid.

To put these figures into perspective, Figure 3 shows the distribution of households across this income range. It shows, for example, that half of all households in Ontario have a household income below \$60,000 per year.

As noted above, personal income taxes are the only major source of revenue that is progressive through the full household income range, in that higher income households pay a greater percentage of their incomes in tax.

It is likely that a higher personal income tax rate would give rise to some tax avoidance behavior at the margins, although the fact that the incremen-

**FIGURE 3** Distribution of Households by Household Income



Source: Statistics Canada SP5D/M

tal tax rate is relatively low and the boundaries of the GTHA are relatively broadly defined mitigates against any substantial revenue loss.

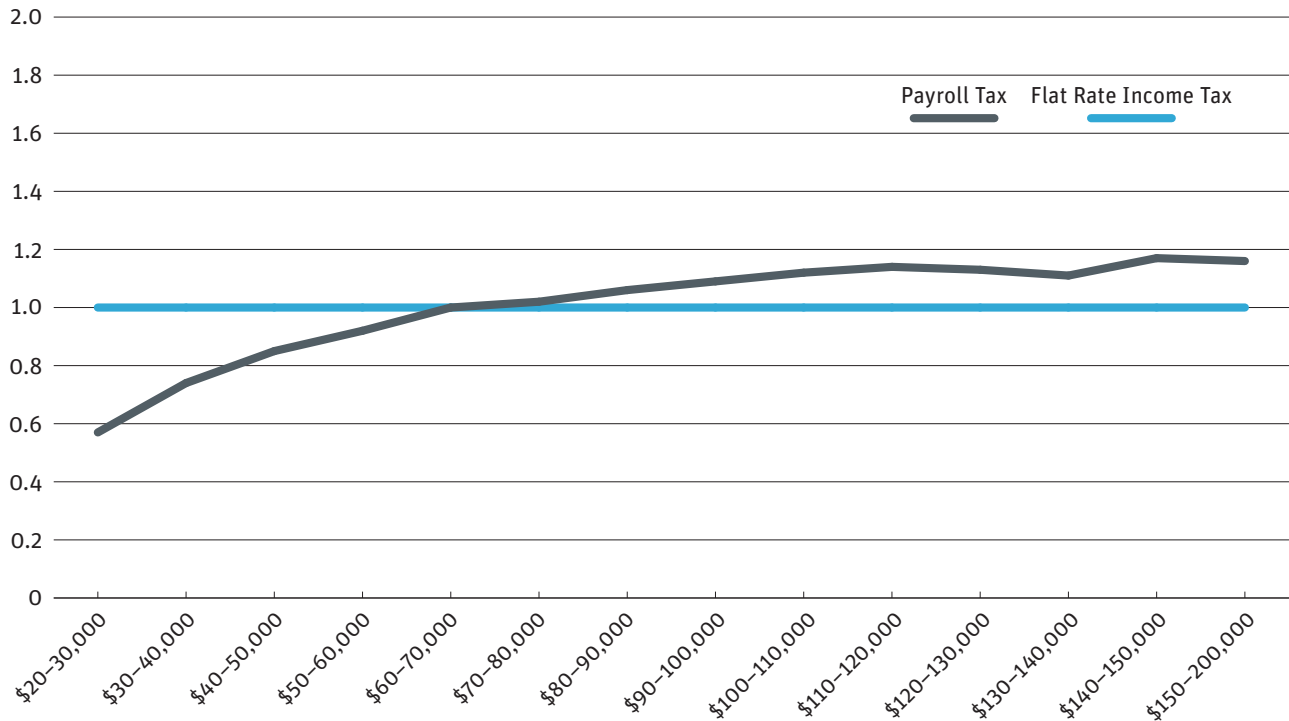
Despite its advantages from a distributional perspective, income taxes — either personal or corporate — face practical difficulties as a regional revenue source. In both cases, the potential for tax base leakage through tax avoidance and tax evasion is significant.

While there are strong arguments for generating additional revenue from reversing Ontario’s planned corporate tax rate reductions and for enhancing the progressivity of Ontario’s personal income tax, from a practical perspective these revenue sources are best considered for their contribution to restoring Ontario’s overall fiscal capacity at the provincial level.

## Payroll Tax

Of the taxation options put forward in the city’s menu, payroll taxes are second only to personal income tax as revenue source that best meets the test of distributional fairness.

**FIGURE 4** Payroll Tax: Incidence Relative to Income, Household Incomes \$20,000 to \$200,000 (Proxy: Wages)



Source: Statistics Canada SPSD/M

Figure 4 estimates the distribution of payroll taxes by household income range, compared to the income-neutral impact of a flat percentage tax on income.

The chart shows that the impact of a payroll tax on households with incomes between \$20,000 and \$30,000 is less than 60% of the impact of a flat rate income tax raising the same total amount of money. At a household income of about \$75,000, the impact of the two would be roughly the same. A payroll tax on all income, without caps (unlike CPP or EI premiums) or exemptions (like the Ontario Employer Health Tax) is progressive in lower-income ranges and roughly proportional to income in higher income ranges. The importance of transfer payments and income from retirement savings for senior households and transfer payment income for lower-income households generate accounts for the payroll tax’s relative progressivity in the bottom half of the household income distribution.

The fact that a payroll tax is directly related to employment means that a payroll tax would be better targeted to commuting than other tax categories. Payroll taxes are generally understood to be shifted back onto employees in the longer term, regardless of whether employers or employees appear to be paying the tax. This means that, all things being equal, there should be no long-term employment impact from a transit payroll tax. As with other taxes of general application, one would expect to see a marginal impact on employment location at the boundaries of the geographic area in which the tax applies. As is the case with income tax, this effect is likely to be limited, because of the broad area encompassed by the GTHA.

The major drawback in considering payroll taxation as a source of revenue for transit capital is that none of the taxes currently levied on payroll at either the federal or provincial level is based on a comprehensive payroll base. CPP contributions and EI premiums are both based on a definition of payroll that is capped at roughly the average wage. The Ontario Employer Health Tax base includes costly exemptions related to an employer's total payroll. Neither of these tax base definitions would be appropriate as a base for a transit capital funding levy. A tax using the CPP/EI base would effectively exempt all income above the median income. A tax using the EHT base would exempt a significant portion of the workforce, for no obvious policy reason.

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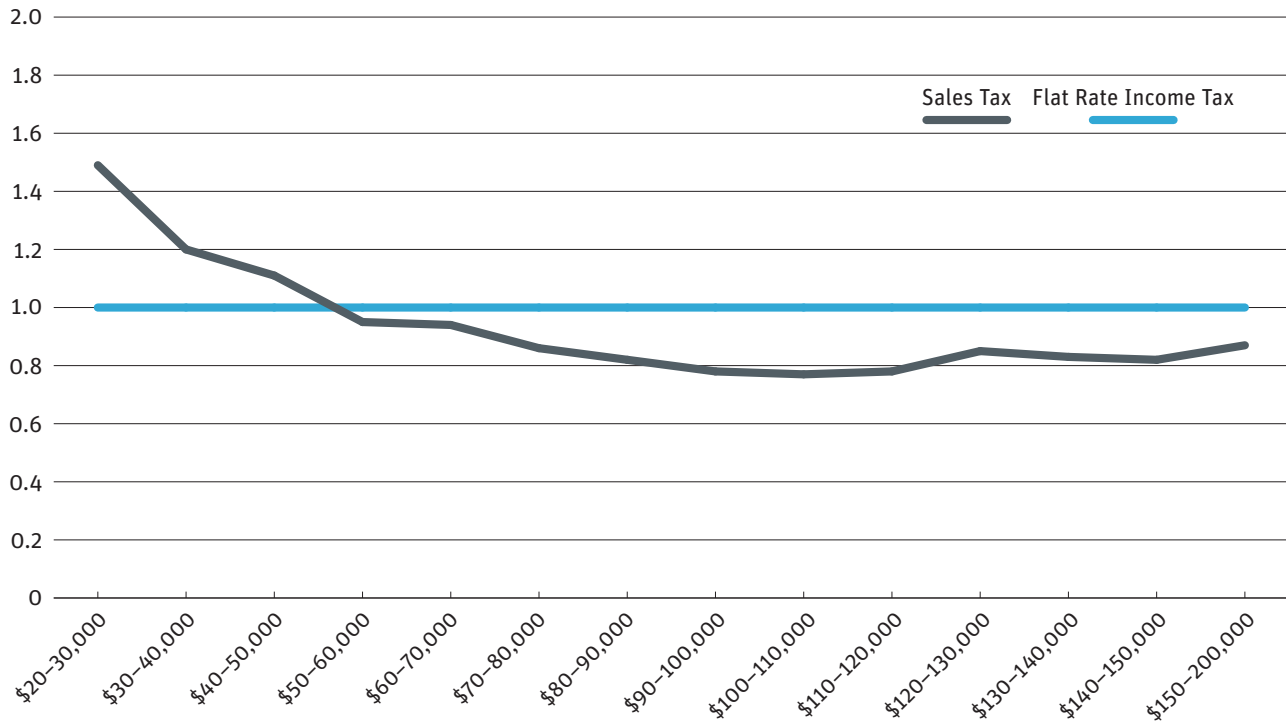
## Sales Tax

*Figure 5* shows the impact of a sales tax relative to that of a flat rate income tax.

Sales taxes have a disproportionate impact on lower-income households because they apply to all consumption, whether from income or from capital. And because savings are not subject to sales taxes, sales taxes tend to be regressive relative to income taxes at higher incomes, where the propensity to save is greater.

As with payroll and income taxes, one would expect to see some erosion of the tax base as a result of behavioral changes. Some cross-border shopping between the GTHA and the rest of Ontario would likely develop should the sales tax rate be increased in the GTHA.

**FIGURE 5** Sales Tax: Incidence Relative to Income  
Household Incomes \$20,000 to \$200,000 (Proxy: GST)



Source: Statistics Canada SPSD/M

## Gasoline and Motor Vehicle Fuel Taxes

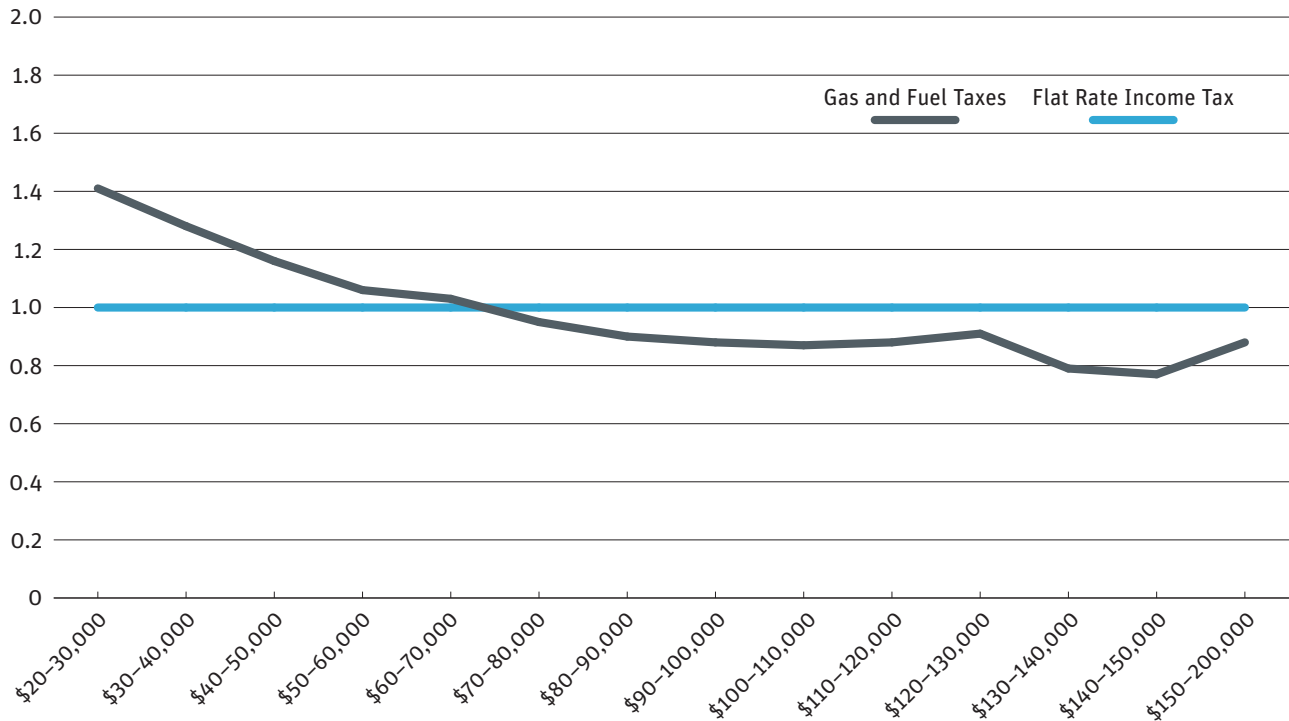
Fuel taxes exhibit the same general pattern relative to household income as sales taxes, as *Figure 6* shows.

This chart shows that, as income increases, the percentage of income accounted for by fuel taxes declines. Relative to a flat rate tax on income (the straight line) gas and fuel taxes show a regressive impact on income — the higher the household’s income, the lower the relative impact of the tax on its income.

Gas and fuel taxes have desirable environmental behavioural impacts by increasing the costs of vehicle use. This would tend to reduce kilometres driven, encourage shifts to modes of transportation other than private vehicles and encourage shifts to more fuel-efficient vehicles.

Fuel taxes could give rise to tax avoidance behaviour on the borders of the taxation area, but because of the relatively high cost of avoidance — the need to drive to the lower-tax area to avoid the tax — this would likely yield a lower level of avoidance than sales taxes.

**FIGURE 6** Gas and Fuel Taxes: Incidence Relative to Income, Household Incomes \$20,000 to \$200,000 (Proxy: Expenditures on Motor Vehicle Fuels and Lubricants)



Source: Statistics Canada SPSPD/M

## Vehicle Registration Fees

Although there are no data sources that capture the number of vehicles owned by household income range, it would be reasonable to expect the distribution to be similar to that for motor vehicle fuel taxes, though it would likely be more regressive. The only recent Canadian database of car ownership at the household level and household income is the CIBER-CARS survey conducted by the Centre for Spatial Analysis at McMaster University. Data from the commuting patterns survey in the 2006 Census could also illuminate the issue. However, in both instances, special tabulations would have to be compiled.

A registration fee based on vehicle cost could offset that regressive pattern to some extent. Linking registration fees to kilometres driven and/or fuel economy could also incorporate environmental factors into the design of the tax. Vehicle registration fees are tied to the vehicle owner's residence and thus are difficult to avoid.



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## Road Tolls

The impact of road tolls is extremely difficult to determine. Because tolls would generally apply only to travel on expressways, and because there are no data available linking travel on expressways to household income, patterns of tax incidence would have to be inferred from commuting patterns. Evaluation is further complicated by the fact that commuters would be in a position to avoid tolls by changing their commuting patterns. While some of the induced change might be desirable in and of itself – switching to transit, for example – the ease with which behaviour could be changed complicates revenue estimates. Although the information is somewhat dated, analysis of custom tabulations from the 2006 census data on commuter flows and travel modes could provide some insights.

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## Parking

The impact of parking levies depends critically on their base and design. As noted above, the flat tax included by the city in its revenue sources summary gives rise to a number of design and implementation issues. In general, one would expect a flat parking levy to mirror the incidence of a vehicle registration tax, the most obviously regressive of all of the options under consideration. To be justified, a parking levy would have to be designed to serve clearly-defined transportation planning objectives.

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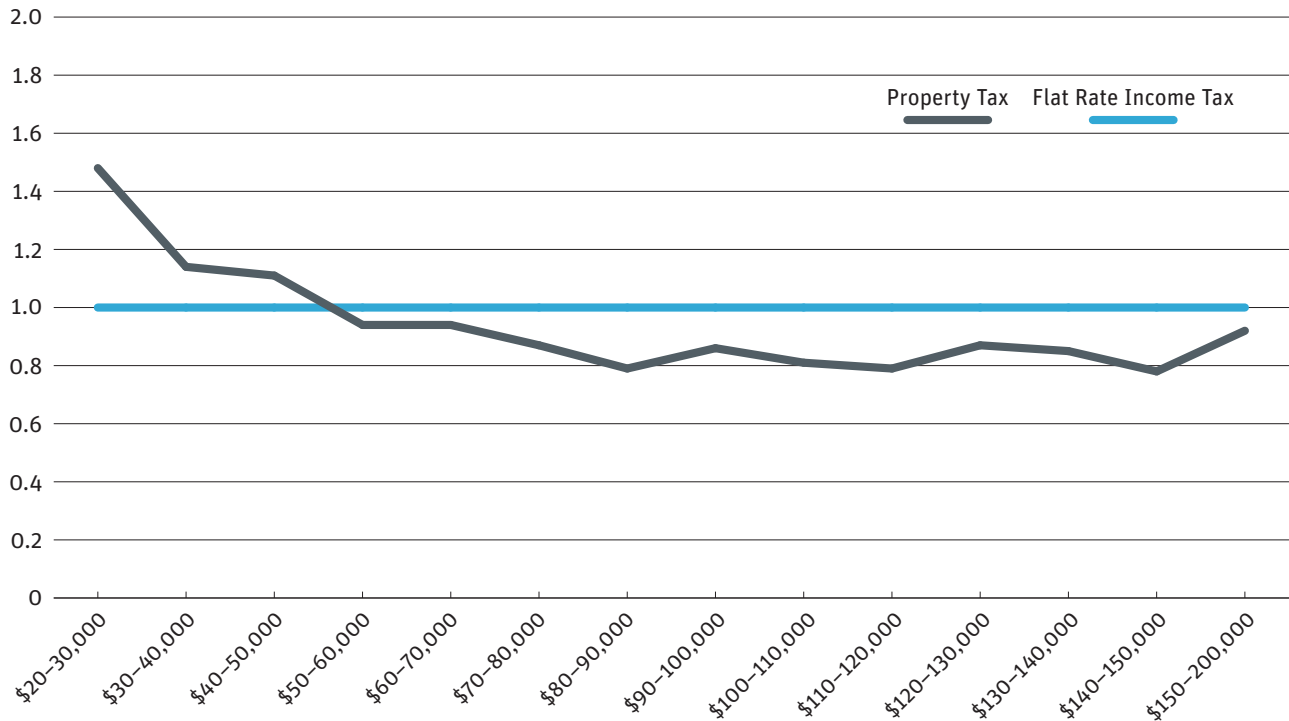
## Property Taxes

Although there is significant variability in impact within income ranges, property taxes, on average, are regressive relative to a flat percentage tax on income, as illustrated in *Figure 7*.

Property taxes are regressive, in that they account for a larger proportion of income for lower-income households than for higher-income households. Studies of the impact of property taxes also reveal a high degree of variability in their impact on household income, because of the impact of location and family size (and therefore house size) on property tax levels.

Unlike other potential revenue sources, property taxes are difficult to avoid and can be levied at different rates on a geographic basis, creating the potential for using the tax to encourage transit-friendly forms of development. In addition, it should be noted that, overall, a property tax levied at

**FIGURE 7** Property Tax: Incidence Relative to Income  
Household Incomes \$20,000 to \$200,000 (Proxy: Property Tax)



Source: Statistics Canada SPSD/M

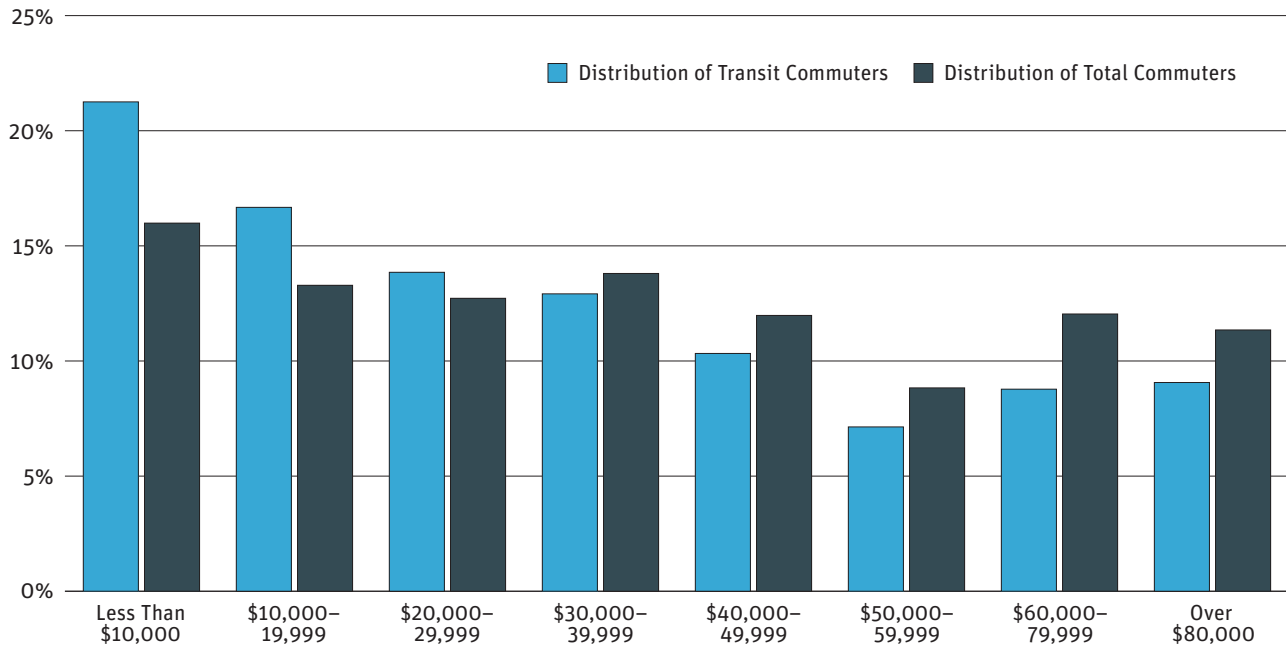
a fixed rate across the GTHA would generate approximately 20% of its revenue from non-residential property taxpayers.

These features make property taxes an ideal source of revenue for local government. But given the fact that the provincial government already uses a substantial share of the property tax base to fund its elementary and secondary education program, further incursions into the base by another provincial government agency would face strong, and appropriate, local resistance.

## Land Transfer Taxes and Development Charges

Because land transfer taxes and development charges apply to asset developments and transfers, there is no systematic way to approximate the distribution of their impact by household income range. It is important to note, however, rates of tax that do not vary by location have no behavioural impact.

**FIGURE 8** Distribution of Commuters by Household Income, Transit Commuters and Total Commuters (2006 Census)



Source: Census of Canada, 2006

As with property taxes, it must also be noted that development charges are already an important source of revenue for local governments in the GTHA. Provincial appropriation of the development charges tax base for Metrolinx would face the same resistance as would an incursion into the property tax base.

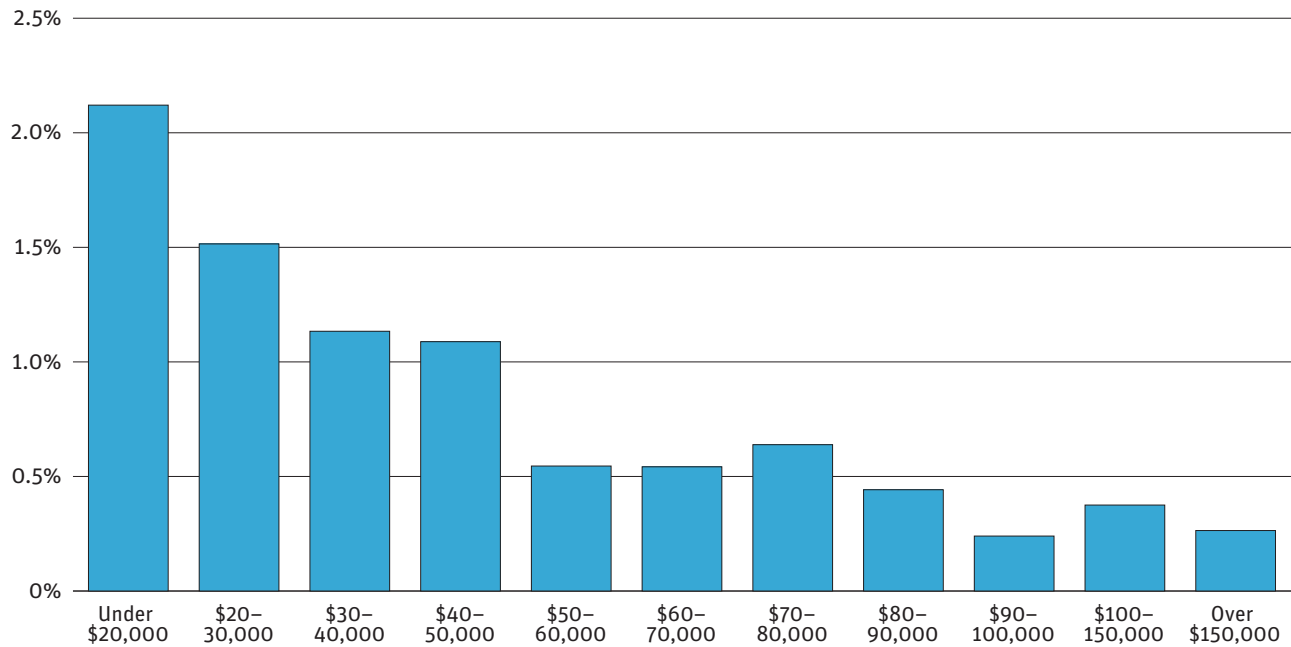
### Distribution of Direct Benefits

The other side of the transaction in public transit investments is the distribution of the benefits from those investments.

While the principal public policy case for such investments is based, in part, on benefits flowing to non-users through reduced congestion and commuting times—as well as environmental benefits arising from changes in commuting patterns from private vehicles to public transit—benefits from the use of the current system have a redistributive impact.

*Figure 8*, based on 2006 census data, shows the percentage of transit commuters and the percentage of total commuters in each income range.

**FIGURE 9** Percentage of Income Spent on Local and Commuter Public Transportation



Source: Statistics Canada, Survey of Household Spending, 2007

The chart shows that commuters from lower-income households are relatively more likely to commute by transit than commuters generally, and suggests that the direct benefits from investments in public transit are broadly redistributive.

Funding of transit from fares offsets the redistributive effect of the direct benefit from public transit investments. And to the extent that public transit benefits individuals other than those who use public transit, fare box funding may actually reverse that favourable distributive effect.

Figure 9 shows the distribution of expenditures on local and commuter public transportation by household income group in urban areas in Ontario.

Transit fares are an extremely regressive revenue source. Fares account for a much higher percentage of household income for lower-income households than they do for higher-income households. This results in part from the fact that lower-income households are heavier users of transit than higher-income households. But the primary explanation for the pattern is that transit fares are flat rate fees that bear no relationship to ability to pay.

Funding from transit fares is highly regressive. In fact, in relative terms, it is the most regressive of the options available for transit funding.

More important, however, is what these data show about the distribution of benefits from public funding for transit. Relative to household income, public transit is significantly more important to lower- and middle-income households than it is to higher-income households. Consequently, the benefits from expenditures on public transit will be greater, relative to income, the lower a household's income.

This pattern of benefits more than offsets the somewhat regressive profile, relative to household income, of sales and fuel taxes, making the overall impact of a fiscal package of transit expansion funded primarily by sales and fuel taxes progressive relative to income.

# Discussion

IT IS CRITICAL in any consideration of funding for transit capital not to lose sight of the need to address the issue of funding for transit operations. To be successful, transit must be accessible — geographically, physically and financially. In the 20 years before the mid-1990s, Ontario had a funding system that made sense. It provided for 50/50 cost sharing of support for transit operations between the provincial government and local governments. It made sense because it reflected the reality that the benefits from public transit operations accrue to both users and non-users of the system.

A return to a transit operations funding system that reflects that reality, and that is more in keeping with the standards for funding in major cities around the world, is a necessary condition for a successful transit funding strategy.

As far as senior government support for transit is concerned, a 1% increase in the Ontario corporate tax rate would more than cover the cost of renewing senior government funding for public transit in the province, and allow for increased operating funding as system expansion proceeds. Generating the required revenue from corporate income taxation would ensure two things: first, that provincial support for transit offsets the regressivity of transit fares and local property taxes as revenue sources; secondly, it would create a revenue source that is linked in a meaningful way to the benefit derived by business from reduced congestion.

Looking at regional revenue sources for transit capital, and adopting realistic estimates of the revenue from the various options available for capital funding, two things become clear: first, that none of the options, stand-

ing on their own, can generate the funding required; and second, to reach the revenue target, an income, sales or payroll tax must be part of the mix. On balance, for practical reasons, sales taxation would appear to be the most viable option to provide that core funding base.

Fuel taxation makes sense as part of the funding mix. Fuel taxation has been introduced as a local revenue source in Canadian cities. Among major cities, both Montreal and Vancouver have fuel taxes that exceed provincial general tax levels. Furthermore, there would appear to be a degree of fuel tax room in Ontario, as the rate of tax has not been increased since 1993, despite the growing political importance of climate change as an issue and the currency of carbon taxation as a potential part of the climate change policy mix.

Most of the other funding options under active consideration are extremely regressive. To the extent that options that are unrelated to ability to pay such as vehicle registration fees, tolls and parking charges, their role in the overall funding package should be limited. Of the options in this category, charges for parking spaces offer a number of advantages. Their administration would be relatively straightforward. And with the potential for levying varying rates depending on location, they could play a positive role in the GTHA's transportation policy package.

It is important to note the fiscal room available for increasing revenue from the major taxes that emerge as viable options from this study. The corporate income tax rate in Ontario currently stands at 11.5%. As recently as 2010, the rate was 14%. The combined federal and provincial rate of corporate tax is 26.5%, below the federal corporate tax rate in the United States and substantially below the combined federal and state tax rates in jurisdictions in the U.S. — Ontario's key competitors.

Another option: The HST rate, at 13%, is below the 15% combined GST and RST rates that prevailed before the Harper government implemented its ill-conceived GST cuts in the mid 2000s.

In short, there is substantial fiscal room in Ontario to meet pressing transit infrastructure needs.

Finally, although the major regional revenue sources under consideration for GTHA transit expansion are regressive (in that they account for a somewhat smaller percentage of a household's income as that income increases) the regressive impact is mitigated by the use to which the revenue will be put — public transit. Public transit delivers proportionally greater benefits to lower- and middle-income households than it does to higher-income households. In fact, transit benefit is so strongly progressive that a fiscal package of expanded transit funded from modestly regressive taxes is, overall, progressive.

# Conclusion

AFTER YEARS OF political delays, there is growing consensus that the window of opportunity for resolving the GTA and Hamilton's (GTHA) gridlock woes is upon us. Public debate is now focused on Toronto's \$2.5 billion question: how do we pay for the transit expansion that everyone agrees is absolutely necessary?

This paper examines the full range of funding options, including areas for potential contributions from municipal, provincial and federal governments. This paper also attempts to balance the debate by considering both sides of the ledger — capital and operating expenses. (The debate to date has focused only on funding for the long-term capital expansion plan.)

It is important that the discussion be broadened to encompass transit operating costs, for two reasons: first, the massive expansion of the transit system contemplated by the Metrolinx plan will have significant implications for operating costs; second, there are substantial gaps in funding for operations in the current system — funding for transit has not recovered from the elimination of provincial funding for transit operations in the mid-1990s, a reversal of a 25-year history of provincial operating support for transit.

That decision left local governments in the GTHA struggling to maintain their systems in a state of good repair and keep up with growing needs. As a result, transit systems in the Toronto area rely more heavily on the fare box for their operating funding than comparable systems anywhere in the world.

The massive and badly needed expansion contemplated by Metrolinx' Big Move will only increase the financial pressure on transit operating fund-



ing. A commitment by the provincial government to step back into its role in funding transit operations is a necessary condition for transit expansion.

Funding for transit capital in the GTHA will require at least three different types of revenue streams: one general stream that is robust enough to provide a significant proportion of the funding required; another, mid-level revenue stream that combines some environmental and policy benefits with revenue raising capacity; and one or more smaller sources of revenue whose major role would be as an expression of transportation policy.

With respect to revenue sources able to do the heavy lifting, in practical terms that means that the package would have to include one of: income tax, sales tax or payroll tax. None of the other revenue raising measures has the potential to raise a significant portion of the required funding.

Although income taxation – either corporate or personal – is the only potential revenue source that is unequivocally progressive, the vast potential for revenue leakage and tax avoidance makes it impractical as a regional revenue source. Measures at the provincial level to recover fiscal capacity lost through corporate tax cuts and to enhance the progressivity of the personal income tax could be employed to restore the provincial government’s traditional share of transit funding across the province.

A dedicated sales or payroll tax could be levied on a regional basis. Though both taxes are regressive in their distributive impact, they are roughly proportional to income throughout the range of incomes from lower-middle income to upper-middle income. Of the two, the payroll tax has the lesser relative impact on low-income households. However, because none of the current payroll-based taxes has the comprehensive base that would be required of a fair source of revenue for transit expansion, it would be somewhat more practical to rely on sales taxation as the core revenue source.

Of the potential revenue sources in a second tier, a tax on fuel should be part of any funding package. Higher fuel taxes are a feature of funding systems in both Montreal and Vancouver. And in light of the fact that Ontario’s fuel taxes have not been raised since 1993 – despite our heightened environmental consciousness – there is room to generate additional revenue from that source. Fuel taxes have an income impact that is comparable to that of a sales tax, without the much more regressive impacts of other potential transportation policy driven taxes.

The third tier of revenue sources would be aimed primarily at altering behaviour, and only secondarily raising money. This would include vehicle registration fees, tolls, congestion charges and parking space levies, among the revenue sources currently under discussion.

Tolls are politically toxic, and have the further disadvantage that tolling systems in Canada have often been accompanied by infrastructure privatization. Congestion charges similar to the fees charged for driving in the central core of the City of London are likely too much of a political stretch in Toronto, particularly considering that, unlike London's, Toronto's public transit alternative is underdeveloped. Given Toronto's experiment with vehicle registration fees, they should probably be retained as a local optional revenue source.

Parking space levies might make sense, but only if the fee is varied by location and time of day. For example, \$1 per hour in locations near transit nodes, for usage between 9 and 5.

Land value capture seems to be an option in search of a practical application. For example, transit-induced development was supposed to pay for the Sheppard subway. In practice, land value capture probably boils down to a land transfer tax, which is already in use as a revenue source for the City of Toronto.

Other revenue sources under discussion — development charges, property taxes and transit fares — are not new, and are inherently local. Any further provincial incursion into these local revenue sources would not be welcomed by local governments in the GTHA and would run counter to recent trends in provincial financial policies towards local governments.

One's perspective on these regional funding options depends to a significant extent on what one considers the alternatives to be. If the alternative to regionally funded transit capital expansion is provincially or federally funded transit capital expansion, the range of options potentially available for funding would include measures to shift the provincial and/or federal revenue base towards more-progressive taxes, in addition to the taxation and user fee measures under consideration in the current debate. It is important to note that increased provincial or federal funding does not necessarily imply a more progressive ultimate revenue source.

If the alternative to regionally funded transit expansion is no transit expansion at all, the fiscal package — transit funding coupled with the taxes and fees required to pay for them — is strongly progressive, even if the taxes themselves are regressive. The data show that expenditures on public transit are strongly progressive, in that the household benefit from public transit is relatively greater, the lower the household's income. So combining a revenue package that is income neutral or slightly regressive, such as the harmonized sales tax with expenditures on public transit, makes the overall package progressive. In other words, even with funding from somewhat

regressive taxes such as the HST and fuel taxes, lower- and middle-income households will be still better off with funded transit expansion than with no transit expansion at all, and even without taking into account benefits to transit users and non-users beyond the costs of running the system.

After weighing the full range of revenue options to pay for public transit expansion, this report settles on the following conclusion: support for public transit operations from general government revenues — from federal or provincial revenue sources as well as local property taxes — makes sense economically and is essential for the viability of any modern transit system. General revenue funding makes economic sense because the benefits from public transit usage are not confined to the users of the system. Everyone benefits from greater transit usage, whether through reduced congestion on the roads and highways or through reductions in greenhouse gas emissions and other pollution sources.

In addition, renewed provincial funding for transit operations linked to a roll-back of post-2010 corporate income tax cuts would address one of the fundamental weaknesses of the options for regional funding for transit capital expansion — the absence of any appreciable contribution from the business sector. Despite the fact that the background studies make it clear that the business sector will derive significant economic benefits from transit expansion, none of the measures under active consideration would apply more than tangentially to the business sector. Renewed provincial funding for transit operations should apply to all transit systems in the province.

# Notes

**1** [http://www.fin.gov.on.ca/en/budget/ontariobudgets/2013/ch1a.html#ch1a\\_31](http://www.fin.gov.on.ca/en/budget/ontariobudgets/2013/ch1a.html#ch1a_31)

**2** “Commuting to Work: Results of the 2010 General Social Survey”, Canadian Social Trends, Statistics Canada Catalogue no. 11-008-X, August 2011

**3** “Transportation Funding Strategy – Appendix B”, Office of the Deputy City Manager and Chief Financial Officer, City of Toronto, 12 September 2012.

**4** The only option not considered in the City’s list was the Metrolinx suggestion for a per-kilometre charge.

**5** T1 Final Statistics, Table 2A, Canada Revenue Agency, 2009

**6** In property tax calculations, a tax rate of 1 mil is 1/100 of 1% of the value of the property.

**7** The primary sources for the distributional estimates in this paper Statistics Canada’s Social Policy Simulation Database and Model (SPSD/M) and Statistics Canada’s Survey of Household Spending





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