Recommendation to Improve Operating Budget for Province of Ontario

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Simon Rowland, CEO, Direct Leap Technologies, Inc.

1. Executive Summary

The 2010 Ontario Budget seeks to postpone $4 billion in key Toronto transit investments, as part of a strong response to a record deficit. This recommendation assumes that if there is a way for the Provincial government to fund the infrastructure while still rapidly moving to eliminate the operating deficit, then the Province will proceed with their funding commitments.

The central proposal is that the Provincial Government make a capital investment now, but postpone the interest expense in its Operating Budget until the money is spent and the economic impact is realized. Within a year of capital being spent, the investment adds enough to the Province's tax base to cover its interest costs.

The bond issuer, the City, or Ottawa can provide the Province with a "payment holiday" while the money is still being spent and absorbed by the economy. If this is done, rather than an investment in transit hurting the short-term operating budget deficit, the spending as stimulus instead hastens the return to a balanced budget.

Proposal

1. Ask the Province to issue bonds that cover the $4 billion project cost now, not in several years.

2. The Province's bond be structured to embed the first three years of interest into the principal, until the provincial government is generating net cash flow from economic growth generated by the spending. Alternately the City and/or Ottawa provides the Province with a payment holiday on the bond until the economic impact is felt through higher provincial tax revenues, nominally three years.

Public Policy Outcomes

This allows the Province to proceed with their financial commitment in a way that works into the deficit reduction plan. The capital expense shows up as a debt on the provincial balance sheet, but the operating budget and the operating deficit are no longer hurt by funding the transit expansion.

By making transit investments during a recession and while interest rates are low, we maximize the economic multiplier effect, while providing employment relief when it is most needed. By spending public money while interest rates are low, we minimize the carrying cost of public debt.

The jobless recovery taking place creates a moral imperative to act provided it is possible to do so. High unemployment has a corrosive effect on Toronto's working people, visible in public health metrics. Long-term unemployment injures productivity growth, dulls the value of our workforce, and serves to retard Ontario's economic potential as a region.

Toronto's transit investments are large by nature, and dollar-for-dollar are effective stimulus. Toronto's traffic conditions mean the money absolutely has to be spent. It is logical to spend this money when jobs are needed, as this spending during an economic boom several years hence will waste this stimulus on an economy already at capacity and simply create inflationary pressure.

2. Economic Multiplier Effect of Transit Spending

The APTA's study on the economic impact of public transit spending calculates short-term and long-term multiplier effects of spending.[1] The US stimulus bill's congressional testimony also shows a variety of multiplier effects, including 1.69 for general infrastructure spending, in Table 2 of the reference.[2] A one-year multiplier effect of 1.69 means that for every $1 in one-time capital spending, by the next year annual economic output is $1.69 higher, provided the economy is not close to full employment.

In the first year from disbursing funds, we can expect the proposed capital spending to raise Ontario's GDP by $6.8 billion per year. This is received where the money is spent, partly for example in Thunder Bay where the trains are built.

In addition to the stimulative effect of public spending, there is an additional $7.2 billion per year increase in GDP (long-term multiplier of 1.7) from this investments in public transit resulting from cost savings. This is largely realized within the region transit is installed.

Ontario GDP increase (first year):	$6.8 billion per year (multiplier from Ref. 2)	1.7x
Ontario GDP increase (short-term):	$6.0 billion per year (multiplier from Ref. 1)	1.5x
Ontario GDP increase (long-term):	$14 billion per year (multiplier from Ref. 1)	3.5x
City of Toronto GDP increase (long-term):	$10 billion per year (45% of capital spent in GTA)	2.5x

3. Recovery of Spending through Taxes

The Province needs to balance their books — this is clearly a serious priority. In this context, infrastructure spending makes sense if it helps them to do so.

Once the economic impact is felt, the larger economy has an accordingly larger tax base. If the economic impact is large enough, the tax revenue can offset the cost of borrowing to build the new transit infrastructure. In this case, it clearly is.

Provincial FY10 tax income is planned to be $65 billion, about 11% of Ontario's $600 billion economy.[3] Size of government at all levels is 33.4% of GDP,[4] and as the Province collects 42% of the total tax base,[5] so the

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[1] American Public Transit Association: Economic Impact of Public Transportation Investment Report. http://www.apta.com/resources/reportsandpublications/Documents/economic_impact_of_public_transportation_investment.pdf (Table within Summary, pg. iii)

[2] Congressional Testimony for the US Stimulus Bill. http://www.economy.com/mark-zandi/documents/Economic_Stimulus_House_Plan_012109.pdf

[3] 2010 Ontario Budget: Ontario's Economic Outlook and Fiscal Plan. http://www.fcm.ca/CMFiles/FCM%20Fiscal%20balance%20report1LIB-11172008-8388.pdf Table 26.

[4] http://en.wikipedia.org/wiki/List_of_countries_by_tax_revenue_as_percentage_of_GDP

[5] Federation of Canadian Municipalities Report. http://www.fcm.ca/CMFiles/FCM%20Fiscal%20balance%20report1LIB-11172008-8388.pdf (pg 6)

simplest analysis that we expect $1 in economic growth to net the Province 0.334 x 0.42 or 14 cents in new tax revenue is another rough way to calculate new tax revenue for each dollar in economic activity.[6]

Simply estimating that 11 cents of every dollar is captured through Provincial taxes, the projected $14 billion long-term increase in Ontario's GDP would net $1.54 billion in new tax revenue. This is partly offset by new costs, but this is a first-order calculation.

Province's share of long-term Tax Revenue increase	$1.54 billion per year

It goes without saying that $1.54 billion per year, even in the long run, is larger than any conceivable financing cost for a $4 billion dollar expansion.

This analysis sets aside federal tax revenues, itself slightly larger than provincial revenue increases.

As for the city, the cost of carrying a 4% finance charge for three years on $4 billion is $480 million. To pay this debt out evenly over 20 years, at a blend of interest rates ranging up to 5% for the full term, adds $33 million per year to the City's Operating Budget over these 20 years.

Many studies show the relationship between public transit and property values. Running transit into low-income neighbourhoods also brings a transformative effect on these communities, improving incomes of existing residents, while simultaneously attracting a new set of home buyers. The city only incurs a small fraction of the $4 billion cost by paying interest-only for a few years. However, Toronto receives $10 billion of the total $14 billion per year long-term economic impact.

Toronto's tax base shows some elasticity to GDP, both through provincial transfers, through user fees, and through various rents and other City income. Some of the $10 billion in long-term growth will flow through the City. Assuming that the City's non-property tax income grows by ⅓ cent for each dollar of GDP increase, where the Province's income increase by 11 cents per dollar of GDP, the 10 billion in long-term economic impact will produce $33 million per year in revenue.

Housing value increases in Toronto's $3.6 billion per year property tax base alone roughly offset the $33 million per year long-term expense of providing the 3-year payment holiday to the Province.

4. Job Creation

While stock prices and GDP indicators are rising again, Ontario's working people need job creation now. The Province has an opportunity to create these jobs both directly — building transit facilities, building streetcars, and later in operations — and indirectly through the economic growth made possible both by the spending and through improved infrastructure.

Each billion dollars of new capital spending creates tens of thousands of permanent new jobs. Two tables are reproduced from the ATPA study (Ref 1, pg. 38). These reflect three distinct models of job creation from investments in public transit.

[6] These numbers project impact of capital spending alone. The $4 billion expansion also results in new operations spending, which is essentially paid by the City of Toronto and by ticket fares, rather than by the Province. This increase in operations spending on top of the TTC's $1.3 billion operating budget also generates a significant annual economic impact in jobs and tax revenue. Ref 1, pg. ii cites a short-term multiplier of 2.0 for new operations spending in public transit, assumed here to be $200 million added to Toronto GDP as new lines enter service.

Jobs Created per billion in spending	IMPLAN model	REMI model	EDRG Composite
Public Transit Capital Spending	18,465	31,291	27,571
Public Transit Operations Spending	28,984	43,952	39,611
Public Transit Overall Average	23,788	41,140	36,108

Jobs Created per billion in spending	Capital	Operations	Blended Average
Direct Effect	8,202	21,227	17,450
Indirect Effect	7,875	2,934	4,367
Induced Effect	7,111	16,979	14,291
Total Jobs	23,788	41,140	36,108

5. Why do this right now?

Ontario needs a reduction in unemployment today, not once the books are already balanced and the "recession of employment" is already over.

Toronto needs transit today, both as a livable city and as an engine of Canada's growth. The cost of failing to address Toronto's growing transportation shortage eats countless hours and billions of dollars in productivity and costs out of the region's economic potential.

Today, we can spend this money without the 'crowding out' effect of displacing other jobs, as the Province has an official unemployment rate of 9%. We can create the manufacturing and transit operations jobs without significantly displacing other employment. We therefore achieve the maximum effect on economic growth by spending this money while Ontario unemployment is at a 15-year high.[7]

Today, interest rates are at rock bottom. Current interest rates for Ontario Savings Bonds may today only be 50% what long-term bond yields grow to by 2013.[8] Now is the time to finance public infrastructure.

Ontario Savings Bond – 3 year	2%
Ontario Savings Bond – 5 year	3%

Source: http://www.ontariosavingsbonds.com/en/series2009.html

While $4 B is only about ⅔ of a percent of Ontario's GDP, the expected immediate economic impact within the first year after spending is 1.2% of GDP, and will grow larger in later years as transit lines come online and generate savings in the local economy.

About the author

Simon Rowland spent four years of his undergraduate studies mostly devoted to economics, and ran as a candidate during the 2000 Federal Elections. He owns a Toronto-based telecom engineering firm, which operates one of Canada's largest call center datacenter infrastructures.

He can be reached at 416.405.8073 ext. 221 or simon.rowland@directleap.com.

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[7] *Toronto Star*, "Unemployment hits 15-year high in Ontario". http://www.thestar.com/business/article/646541

[8] Long-term US Treasury bond market yields give the market's guess as to how North American government borrowing costs will grow. It is cheaper to borrow now, before we move to higher bond yields as the economy recovers. Just look at the current yield curve: http://www.bloomberg.com/markets/rates/