Who’s on track for rapid transit?
An interim analysis of GTHA transit investment and expansion plans from Ontario’s major political parties

Overview
Reducing traffic and improving transportation infrastructure are major priorities for much of Ontario. In the Greater Toronto and Hamilton Area (GTHA), the top priority is building more rapid transit. After more than three decades of inaction, it is critical that the province implement a strategy to build — and pay for — expanded rapid transit. Otherwise, the cost of continued inaction for the average commuter could reach $800 per year in lost time and wages, plus another $700 per year for drivers who burn more gas while idling in gridlock.¹

In the lead up to this year’s provincial budget, the Pembina Institute analyzed the positions taken by the three parties in Ontario’s legislature with regards to expanding rapid transit. As more details emerge and party positions are clarified, the Pembina Institute intends to update this preliminary analysis.

We selected four guiding principles around transit expansion as the criteria for our analysis, and then evaluated each party according to these criteria. Our evaluations were based on the parties’ actions, public statements and materials to date. This document presents both our conclusions, as well as the rationale underlying our analysis.

Guiding principles

1. Rapid transit for the whole region
The GTHA includes more than six million Ontarians and extends over more than 7,000 square kilometres. Any plan for transit expansion must take a holistic view of the region and bring rapid transit to all of its constituent municipalities.

We evaluated each party on their commitment to building a truly coordinated, region-wide network that serves commuters and municipalities throughout the region.

The GTHA is fortunate to already have the Big Move, a 25-year transit plan developed by Metrolinx that would bring rapid transit to 80 per cent of residents in the region. We used this plan as a baseline for evaluating alternatives.

2. New dollars for new transit
No investment is free. New sources of revenue are required to overcome the GTHA’s transit infrastructure deficit, and funding is therefore a key part of any transit expansion plan.

This is particularly true for Ontario, where analysis has shown that an infrastructure project of this scale — an estimated $50 billion over 25 years — cannot be paid for with existing budgets or by finding efficiencies in other areas.² Capital and operating costs for transit require a new, substantial and guaranteed stream of revenue.

We evaluated each party on their commitment to raising enough revenue to both operate and expand transit across the region, as well as their proposals for new revenue sources.
3. Creating a dedicated fund for transit and transportation

Investing $50 billion over 25 years is a substantial commitment. Transparency, accountability and reliable funding are therefore important components of any transit investment strategy.

Public support for transit investment in the GTHA is significantly greater if the revenue raised for transit is placed in a dedicated fund that cannot be used for other purposes.

Of course, this type of dedicated fund should not only benefit the GTHA. Any new dollars raised in other regions should be used for transportation investment (including roads, highways and bridges) in those communities.

We evaluated each party on their commitment to establishing a separate, dedicated fund for transit and transportation investment.

4. Fast-tracking transit improvements

Years of inaction have created significant transportation challenges for the GTHA. Transit infrastructure takes years to build, especially for major projects like a subway relief line. In the meantime, congestion on existing transit lines and on roads continues to worsen.

Long-term investments in transit infrastructure are crucial. However, there are also a number of short-term strategic investments that could be made to kick-start improvements to transit service and operations.

We evaluated each party on their plans for short-term improvements to transit for the GTHA.

Examples include putting more transit vehicles on the roads, improving the frequency and span of service, or investing in cycling and pedestrian infrastructure that can be deployed quickly. This approach can provide immediate relief to commuters while other work continues.

Rating scale

Evaluations of the three parties are presented on the next page. For each guiding principle, the parties’ current positions were rated on a three-point scale. Each party was evaluated individually based on these criteria, so in some cases parties hold varying positions that nevertheless receive the same overall rating.

On track for transit: The party has made commitments that would support the creation of a comprehensive regional rapid transit network and help ease traffic congestion.

Some forward movement: The party has made some positive commitments, but it’s unclear if these are sufficient to support a comprehensive regional rapid transit network.

Stuck in traffic: The party has either made no commitment, or it has made commitments that do not support meaningful transit expansion.
Who’s on track for rapid transit?

Kathleen Wynne
LIBERAL PARTY

Andrea Horwath
NEW DEMOCRATIC PARTY

Tim Hudak
PROGRESSIVE CONSERVATIVE PARTY

Rapid transit for the whole region

The Liberals would continue building the Big Move, which would give 80 per cent of Greater Toronto and Hamilton residents access to rapid transit. They have already invested $16 billion in transit as part of the $50-billion plan.

The NDP support continuing to build the Big Move, which would give 80 per cent of Greater Toronto and Hamilton residents access to rapid transit.

The PCs would build new subways and move some light rail lines underground. However, their subway-heavy plan would cost $2.6 billion more than the Big Move while building 124 fewer kilometres of rapid transit lines.

New dollars for new transit

The Liberals have committed to raising new dollars for the Big Move and to securing financing with green transit bonds. They have not yet identified the specific sources of revenue they would use.

The NDP would raise new dollars using a “fairness” tax and corporate taxes. It’s unclear whether or not this revenue would be used strictly for transit and transportation.

The PCs would cut other parts of the provincial budget and reallocate those dollars to transit. With no new sources of revenue, and other promises from the PCs to both cut taxes and balance the budget, it’s unclear how this would pay for their transit plan.

Creating a dedicated fund for transit and transportation

The Liberals expressed the need for a dedicated fund in the 2013 provincial budget. It’s currently unclear how this would be put into action.

The NDP would earmark revenue from specific sources to pay for transit expansion, but have not outlined a detailed plan for a fund.

The PCs would create a new dedicated fund to “address gridlock.” It’s unclear whether that means expanding transit or just improving traffic flow on roads and highways.

Fast-tracking transit improvements

The Liberals would continue to increase GO train service and would create new high-occupancy toll lanes to help ease traffic.

The NDP would cover 50 per cent of municipalities’ transit operating costs. This would free up municipal budgets to invest in improved service or new infrastructure.

The PCs have not committed to short-term transit improvements. They would introduce new technologies to improve the flow of traffic.
Analysis: Liberal Party

1. Rapid transit for the whole region
   - The Liberals have committed to building the Big Move, a regional transit expansion project planned by Metrolinx. They are currently building the “first wave” of the Big Move, which received $16 billion in provincial funding. The rest of the Big Move calls for another $34 billion of investment.
   - However, changes were made to the rapid transit line planned for Scarborough in the first wave of the Big Move, resulting in higher costs and a subway that will serve fewer residents.
   - When the “next wave” of the Big Move is completed, 80 per cent of GTHA residents would have access to rapid transit, consisting of a mix of bus rapid transit (BRT), light rail transit (LRT), subways and improved GO train service.

2. New dollars for new transit
   - The Liberals have stated that they are committed to finding funding for regional transit and building the Big Move, including introducing new revenue tools. They have not provided further details.
   - Premier Kathleen Wynne appointed the Transit Investment Strategy Advisory Panel in September 2013 to help inform the province on revenue options by reviewing Metrolinx’s investment strategy.
   - Wynne is the only major party leader to have signed the CivicAction pledge in support of “new funding sources that are dedicated, efficient, transparent and accountable, regional, fair, and sustainable.”
   - The 2013 budget set out principles for new revenue to fund transit, including new revenue tools to support transit infrastructure.
   - The 2013 budget committed to converting select high-occupancy vehicle lanes in the GTHA into high-occupancy toll lanes, which carpooling drivers can use for free and solo drivers can use for a fee. This is a foray into road pricing and one way to help reduce congestion. However, no action has been taken yet in this area.
   - The Liberals announced a plan to issue government-backed low-interest “green bonds” to help finance transit expansion, as well as other green infrastructure projects. This would help manage borrowing costs for transit expansion and speed up financing by making use of the province’s good credit rating.
   - The 2013 budget committed to converting select high-occupancy vehicle lanes in the GTHA into high-occupancy toll lanes, which carpooling drivers can use for free and solo drivers can use for a fee. However, bonds are borrowed money — new revenue still has to be generated in order to pay them back.

3. Creating a dedicated fund for transit and transportation
   - The 2013 budget stated that new revenue generated from transportation-related activities should be dedicated to transportation projects in a clear and transparent manner, so that the investment is directly tied to measurable results. It’s unclear at this time whether this fund has been implemented or put into action.

4. Fast-tracking transit improvements
   - The Liberals would invest in short-term improvements to GO Transit, which began with the introduction of all-day train service on the Lakeshore line last year. These investments would improve peak-hour service and increase capacity by 50,000 riders per day.
Analysis: New Democratic Party

1. Rapid transit for the whole region
   - NDP leader Andrea Horwath has said that “New Democrats are 100 per cent in favour of the Big Move.”
   - Urban transportation critic Rosario Marchese has said “My team is 100 per cent committed to building a comprehensive regional transit network.” He has also signed the CivicAction pledge in support of investment in a regional transit network, along with Jonah Schein, Cheri DiNovo, Peter Tabuns and a number of other NDP members in the legislature, although Andrea Horwath has not signed to date.

2. New dollars for new transit
   - The NDP have rejected any “new” revenue tools to fund transit. Specifically, they do not support any new taxes, tolls or fees that affect middle-class families, including the harmonized sales tax, a gas tax or road tolls.
   - The NDP would maintain the extra levy on incomes over $500,000 — described as a “fairness tax” — to help fund transit expansion. The levy was introduced in the 2012 budget, with the Liberal government planning to phase it out when the provincial budget is balanced. The NDP would keep the levy in place when the budget is balanced.
   - The NDP have discussed using these same revenue sources to fund other government projects and priorities, such as day care and health care. It’s unclear what proportion of these funds would be dedicated to transit and transportation improvements.
   - The NDP would potentially fund transit projects through existing taxes with progressive structures such as the income tax.
   - The NDP would restore Ontario’s corporate tax rates to 2010 levels.
   - The NDP would also close a corporate tax loophole related to the harmonized sales tax. However, it is unclear how these proposals would produce new revenues that can be readily collected and earmarked for transit.

3. Creating a dedicated fund for transit and transportation
   - The NDP support earmarking revenue from specific sources to fund transit expansion. They have not outlined a detailed plan as to how this would be done.

4. Fast-tracking transit improvements
   - The NDP would cover 50 per cent of transit operating costs currently paid by municipalities. This would free up room in municipal transit budgets for investment in improved service or new infrastructure.
   - The NDP would accelerate the electrification of GO train lines in order to expedite the introduction of all-day service on more corridors.
Analysis: Progressive Conservative Party

1. Rapid transit for the whole region
   • The Progressive Conservatives would expand Toronto’s subway network. Specifically, they would prioritize the extension of the Bloor-Danforth line to Scarborough, the building a downtown relief line from Bloor to Union, and the extension of the Sheppard line to Scarborough City Centre.
   • The PCs have also promised to invest in a Yonge line extension and a subway to Mississauga in the future.
   • The PCs would take two light rail lines that are currently planned or under construction — the Sheppard and Eglinton LRTs — and either move them underground or convert them to subways. The construction of these lines was funded through the first wave of the Big Move, so these alterations would require additional provincial funding.
   • The PCs would cancel all other surface rapid transit lines (both LRT and BRT) that were planned as part of the Big Move for quick deployment to suburban communities.

2. New dollars for new transit
   • The PCs have ruled out introducing any new sources of revenue for transit.
   • The PCs would re-allocate funds within the existing provincial budget. They suggest that the current $12-billion capital projects budget, which includes all forms of capital spending by the province, should be re-prioritized to invest more in transportation.
   • The PCs would sell surplus provincial lands and buildings and invest the proceeds in transportation.
   • The PCs would implement land value capture to recoup part of the increase in property values around new rapid transit lines, and then direct that revenue to transit investment. Land value capture has also been recommended by Metrolinx, the Toronto Region Board of Trade and the Transit Investment Strategy Advisory Panel, but it would raise limited revenue.
   • The PCs would use public-private partnerships for contracts and encourage private investment in businesses near or at train stations. However, this does not constitute new revenue for transit investment.
   • The PCs would encourage Ontario and Canadian pension funds to invest in government-owned businesses, though the link between this policy and transit expansion is unclear.

3. Creating a dedicated fund for transit and transportation
   • The PCs would set up a dedicated “Ontario Transportation Trust” that would be used to address the worst gridlock challenges across the province, with funding coming from the sources described above. It is unclear what proportion of the fund would be allocated to transit as opposed to traffic flow and roadway improvements.

4. Fast-tracking transit improvements
   • The PCs would implement new technologies to ease the flow of traffic. These include electronic speed signs, which alter speed limits to avoid dead stops during rush hour, and the coordination of stoplights and on-ramps to improve traffic flow.
   • The PCs have not committed to any immediate investment in transit that would improve conditions for transit commuters or provide alternatives to driving.
Analyzing the PC transit plan

In December, the PC caucus released a white paper outlining their transportation plans for the GHTA. The Pembina Institute undertook an analysis of the new PC plan, comparing it to the next wave of rapid transit lines planned under the Big Move both in terms of cost and the infrastructure to be built. We chose the Big Move as a baseline, as it meets our first guiding principle of being a truly coordinated, region-wide network.

<table>
<thead>
<tr>
<th>PC transit plan</th>
<th>The Big Move (rapid transit lines in next wave)</th>
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<tbody>
<tr>
<td><strong>18 kilometres</strong></td>
<td><strong>142 kilometres</strong></td>
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<tr>
<td>Net increase in length of rapid transit lines</td>
<td>Net increase in length of rapid transit lines</td>
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<td><strong>$17.7 billion</strong></td>
<td><strong>$15.1 billion</strong></td>
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<tr>
<td>Cost of rapid transit projects to be built or altered</td>
<td>Cost of rapid transit projects to be built</td>
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<tr>
<td><strong>$568 million / kilometre</strong></td>
<td><strong>$106 million / kilometre</strong></td>
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<tr>
<td>Average cost of new rapid transit lines</td>
<td>Average cost of new rapid transit lines</td>
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In terms of spending, the next wave of rapid transit projects in the Big Move would cost $15.1 billion, compared with $17.7 billion for the PC plan. Our analysis shows that the PC plan would build 22 kilometres of new rapid transit in the region. However, the plan also calls for changes to projects that have already been funded or are currently under construction as part of the Big Move’s first wave. The changes would lead to a four-kilometre reduction in the length of those rapid transit lines. As a result, adopting the PC plan would only provide a net increase of 18 kilometres for the region’s rapid transit network when compared to the status quo (completing the first wave of the Big Move without any additional investments).

<table>
<thead>
<tr>
<th><strong>New rapid transit lines in plan</strong></th>
<th><strong>The Big Move (rapid transit lines in next wave)</strong></th>
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<tr>
<td><strong>New lines to be built</strong></td>
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<td>• Downtown Relief Line</td>
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<td>• Yonge North Subway Extension</td>
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<td>• Bloor-Danforth West Subway Extension</td>
<td>• Hamilton LRT</td>
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<td>• Bloor-Danforth West Subway Extension</td>
<td>• Dundas Street BRT</td>
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<tr>
<td>Length of new lines</td>
<td><strong>22 km</strong></td>
</tr>
<tr>
<td>Cost of new lines</td>
<td><strong>$12.5 billion</strong></td>
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<tr>
<td>Cost per kilometre</td>
<td><strong>$568 million</strong></td>
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<th><strong>Changes to rapid transit lines already funded or under construction</strong></th>
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<tr>
<td><strong>Lines to be altered</strong></td>
</tr>
<tr>
<td>• Eglinton LRT (moved fully underground)</td>
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<tr>
<td>• Sheppard East LRT (converted to subway)</td>
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<tr>
<td>Change in length of lines</td>
</tr>
<tr>
<td>Cost of alterations</td>
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<tr>
<td>None</td>
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Endnotes

1. The cost of wasted gas ($700 per year per commuter) was estimated based on 32 minutes of additional daily commuting time with a 60 km per hour travel speed, 10 litres per km fuel efficiency, five days of commuting per week, $1.25 per litre of gasoline and 80 per cent additional fuel spent in congested traffic; see: Kesting A, Treiber M, “Calibrating car-following models using trajectory data: A methodological study”, Transportation Research Record: 2088 (2006), 148-156. Average daily commute times increased by more than half an hour — from an estimated 77 to 109 minutes — at a cost of $16 per week; see: Golden et al., Making the Move (full reference in third footnote). The cost of wasted time and wages was estimated using time valuations by transport mode from Victoria Transport Policy Institute, Transportation Cost and Benefit Analysis II – Travel Costs (2013), Table 5.2.11-1, applied to mean wage and commuter data for the Toronto Census Metropolitan Area from Statistics Canada’s National Household Survey 2011. The cost of congestion estimate was based on Metrolinx’s commuter cost estimates ($3.3 billion rising to $7.8 billion by 2031) and regional population estimates (6.1 million rising to 8.6 million by 2031) for the GTHA, assuming both grow linearly; see: Metrolinx, The Big Move: Transforming Transportation in the Greater Toronto and Hamilton Area (Government of Ontario, 2008).


8. Ibid, 33.


12. Ibid, 34.


18. In 2012, the NDP convinced the Liberals to impose a two per cent surtax on 23,000 high-income earners, raising $470 million in the 2013-14 budget year. This revenue is being directed to paying down the deficit until the province balances its budget, which is currently anticipated in the 2017-18 budget year; see: Robert Benzie and Rob Ferguson, “Ontario Budget: McGuinty agrees to Horwath’s tax-rich scheme,” Toronto Star, April 23, 2012. http://www.thestar.com/news/canada/2012/04/23/ontario_budget_mcguinty_agrees_to_horwaths_taxtherich_scheme.html


In 2009, large corporations and banks were excluded from an exemption on business inputs for the harmonized sales tax. They are scheduled to start qualifying for the exemption in 2014. The NDP would continue their exclusion from this exemption.


Paths to Prosperity.

For the Big Move, this analysis includes only new kilometres of rapid transit lines; it does not include other elements of the plan such as GO train upgrades, expansion and electrification. Unless noted otherwise, all project lengths and costs are taken from Metrolinx’s project profiles, available online at: http://www.bigmove.ca/what-were-building

The next wave of the Big Move includes a mixture of subways, LRT and BRT. The PC transit plan would prioritize subway construction. It would also eliminate any rapid transit lines that interact with other traffic, including planned lines in Hamilton, Peel Region and Durham Region.

The cost of the extension was calculated based on the average cost per kilometre of the proposed Downtown Relief Line and Yonge North subway extension in the Next Wave. The Bloor-Danforth West Subway Extension in the PC plan is understood to be at minimum a three-kilometre extension from Kipling Station to Sherway Gardens; see: Adrian Morrow and Oliver Moore, “Liberals and Tories spar over light rail,” Globe and Mail, October 28, 2013. http://www.theglobeandmail.com/news/toronto/liberals-and-tories-spar-over-light-rail/article15129578/

$50 billion is required to build the entire Big Move, and $16 billion is already being spent on first-wave projects. This $15.1 billion total represents the cost of next wave rapid transit lines, which are currently unfunded. The balance of $18.9 billion for the Big Move includes GO train service expansion, express service and electrification, municipal transit support, improvements to regional highways and other small projects that support larger transportation initiatives.

Two LRT lines are already funded and under construction on Eglinton Avenue and Sheppard Avenue East as part of the Big Move’s first wave. The PC plan would either bury these lines or convert them to subways. Our analysis assumes that the extra costs associated with proposed changes in the PC plan would be paid by the provincial government. Scarborough’s rapid transit project is not included in this analysis because the City of Toronto, rather than the province, has assumed the extra cost of changing the planned LRT to a subway.

The cost of the combined underground Eglinton Crosstown LRT and above-ground Scarborough LRT is $8.4 billion; the cost of an underground Eglinton line was therefore calculated by subtracting the $1.8 billion cost of the approved above-ground Scarborough LRT; see: Toronto Transit Commission, “Eglinton Scarborough Crosstown Project Update,” January 31, 2012. http://www.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2012/January_31/Supplementary_Reports/Eglinton_Scarborough.pdf

Converting the Sheppard LRT to a subway would shorten the eastern end of the Sheppard East line by four kilometres from Morningside Avenue to Scarborough City Centre. The cost of converting the line to a subway was calculated based on the average cost per kilometre for the proposed Downtown Relief Line and the Yonge North subway extension from the Big Move.