

**THE  
BIG  
MOVE.**



# Conversation Kit

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# Conversation Kit

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The contents of this kit are designed to help you learn more about The Big Move and discuss the future of transportation in the Greater Toronto and Hamilton Area (GTHA). We hope you will use the materials in this kit to support a lively and thoughtful discussion with the people seated at your roundtable or in smaller informal conversations with friends, family, and co-workers.

As a group, you can decide which of the ten question cards you would like to discuss. Then, use the map, project cards, vehicle cards, and major regional transportation system profiles to explore the details and options for transportation in the GTHA. If you've decided to host your own event, send us a summary of your discussion at [connect@bigmove.ca](mailto:connect@bigmove.ca) or log on to try our online interactive simulator at [bigmove.ca](http://bigmove.ca)

## **What's inside:**

- 1 "Let's Move" introductory booklet
- 1 Profile of major regional transportation systems
- 1 Profile of funding mechanisms used in other regions
- 1 Double-sided fold-out map of The Big Move Plan
- 10 Current Projects cards
- 11 Next Wave Projects cards
- 8 Vehicle cards
- 10 Discussion cards

*Ces documents sont aussi disponibles en français*

# Starting Your Conversation

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Ask each member of the group to introduce themselves and describe their daily commute or most frequent mode of transportation.

Ask one member of your group to take notes that can be circulated later and shared with Metrolinx.

Ask another member of the group to facilitate the conversation, ensuring that everyone has an opportunity to contribute their perspective, and that you cover as many topics as possible in the time allowed.

Review the Discussion Question cards and select at least three or four questions that you would like to discuss as a group.

## **Two quick activities to get you started:**

1. The Big Move features 22 Current and Next Wave projects. Take a moment to familiarize yourself with these projects by sorting them. First, spread out the eight Vehicle Cards on a table. Deal out the 22 Project Cards under the appropriate Vehicle Card. ie., the Toronto-York Subway Extension Project Card would be dealt below the Subway Vehicle Card. Discuss the different features of these projects as you go.

2. Study the Big Move Map. Look at the lines connecting where you work, live and play. Which of the 22 Big Move projects are likely to affect you?

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# Let's Move

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What you need to know about our 25 year plan for building a great regional transportation system

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# It's our job to get the region moving



## Meet Metrolinx

Metrolinx is an agency created in 2006 by the Government of Ontario to improve transportation throughout the Greater Toronto and Hamilton Area. Metrolinx is responsible for planning and delivering an improved regional transportation system that slows the growth of congestion and enables residents to travel across the region more quickly and efficiently. Metrolinx is also responsible for operating GO Transit, the PRESTO fare card system, and the Union Pearson Express (launching in 2015).

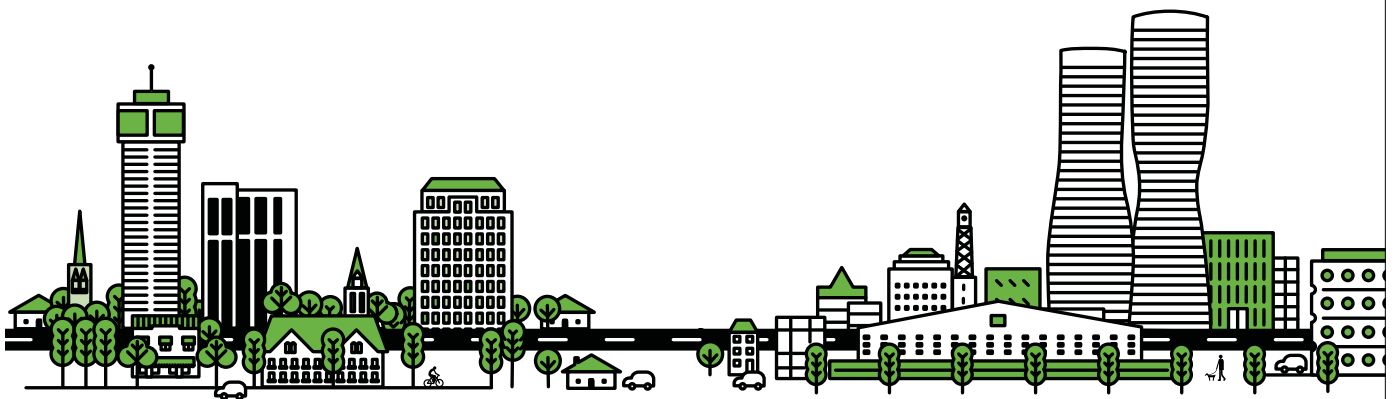
## Here's how we plan to do it.

Whether you drive a car, use public transit, cycle or walk...transportation matters to you.

The GTHA is a thriving urban centre. The region needs a modern transportation system that will connect destinations throughout Toronto, Hamilton, Durham, Halton, Peel and York.

Metrolinx has a plan to build rapid transit and connect transportation routes throughout the region, helping you get where you need to go. This guide explains how expanding regional transportation can benefit you, your family, and the entire GTHA. It also invites you to join a conversation about the long-term vision for transit and transportation in the GTHA.

**So please join the conversation about getting the region moving again.**



# Thinking like a region

**Toronto, Hamilton, Durham, Halton, Peel and York: the Greater Toronto and Hamilton Area is Canada's largest urban region and the fifth largest in North America. Half of all Ontarians live and work here.**

The economic engine of Ontario, the region is home to Canada's busiest transportation and trade gateways: Highway 401, Union Station and Pearson International Airport. Each day, over 800,000 people travel through these three gateways alone – more than the population of New Brunswick.

## **We're growing fast...**

The GTHA is the third fastest growing urban region in North America. Our population will increase from 6.6 million today to 9 million in 25 years. That's like adding the entire population of Greater Montreal.

## **...but continued investment is needed.**

The GTHA spends significantly less on rapid transit and transportation than other globally competitive urban regions throughout the world. Our roads, highways, subways, streetcars, buses and regional rail services are being pushed to their limits, and residents everywhere are paying the toll. Although \$16B worth of investment in rapid transit is underway, if we do not do more this lack of investment will jeopardize our ability to grow as a region and enjoy a high quality of life.

## **The road forward.**

The fact is sobering: the average person in the GTHA spends 82 minutes commuting every day. Given that our population is projected to grow by 1.5 million in 10 years, the need for action is not in 10 years – it's right now.



# Regional demographics and ridership

## Toronto

# 34%

- 34% of the workforce traveled by transit
- 56% traveled by automobile
- 2% traveled by bicycle
- 8% walked
- Population: 2,503,281

## Hamilton

# 9%

- 9% of the workforce traveled by transit
- 83% traveled by automobile
- 1% traveled by bicycle
- 7% walked
- Population: 504,559

## York

# 10%

- 10% of the workforce traveled by transit
- 86% traveled by automobile
- Less than 1% traveled by bicycle
- 3% walked
- Population: 892,712

## Peel

# 12%

- 12% of the workforce traveled by transit
- 84% traveled by automobile
- Less than 1% traveled by bicycle
- 3% walked
- Population: 1,159,405

## Halton

# 9%

- 9% of the workforce traveled by transit
- 86% traveled by automobile
- 1% traveled by bicycle
- 4% walked
- Population: 439,256

## Durham

# 10%

- 10% of the workforce traveled by transit
- 86% traveled by automobile
- Less than 1% traveled by bicycle
- 4% walked
- Population: 561,258

## Residents want greater mobility

# 88%

Over 88% of GTHA residents said that it's important to reduce congestion on major highways, expand and increase the frequency of transit, and get commuters to their destinations more quickly.

– Environics, 2011

## Falling behind

\$ per year per person spent on public transit



GTHA \$175



Paris \$275



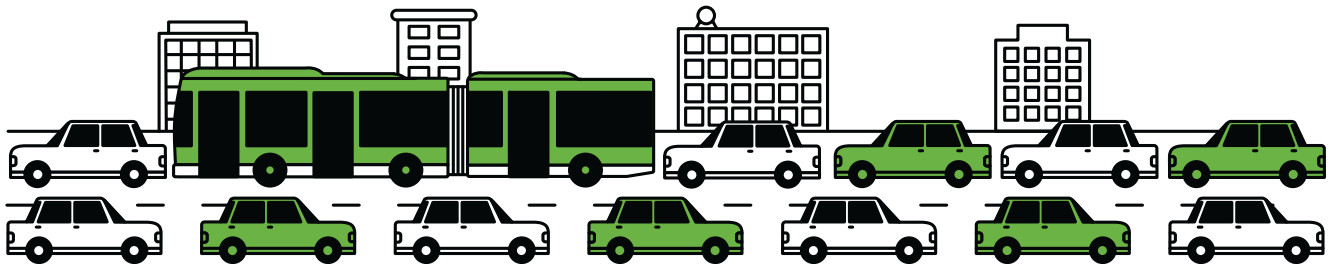
NYC \$335



London \$500

– OECD Territorial Review, 2010

# The true cost of congestion



**Once highly regarded, our region's transportation system just isn't keeping up. Construction of rapid transit, which averaged approximately 135 kilometres per decade from the 1960s to the 1980s, all but ground to a halt until very recently.**

The symptoms are obvious to everyone: congested highways, gridlocked streets, crowded buses, subways and streetcars, inadequate bike lanes and pedestrian paths. At 82 minutes per round trip, residents of the region have some of the worst commute times in North America.

Other symptoms are less obvious: the economic cost of congestion, the increased number of smog days, the stress that long commutes place on people and families, the expense of simply getting from a to b.

Today, congestion costs GTHA citizens almost \$6 billion per year: \$3 billion in added travel costs and lost time and \$2.7 billion in lost GDP. The cost to both citizens and the economy will double in 30 years if we continue to underinvest in transportation.

## **A closer look at the problem**

The average GTHA family spends \$10,676 per year on transportation. That's 12% of household expenditures – more than food or household operating costs. It's the third largest expenditure for the average family, after personal taxes and shelter.

Congestion in the GTHA costs the average driver almost an hour per week in lost time. If current trends continue, the average commute will balloon to 109 minutes per round trip.

Greenhouse gas emissions from transportation are one of the biggest contributors to climate change. Road transport is the largest contributor to global warming through greenhouse gas emissions – over 70% comes from cars and trucks.

Heavy road use is also a major contributor to smog and is linked to respiratory illnesses. Traffic harms our health and our environment.

# Introducing The Big Move

Rapid transit refers to any system of buses, street cars, light rail, subways or trains that operate on dedicated lanes or tracks that are separated from other vehicles. Rapid transit systems provide express service, connecting riders to major transit hubs with a minimal number of stops along the way.

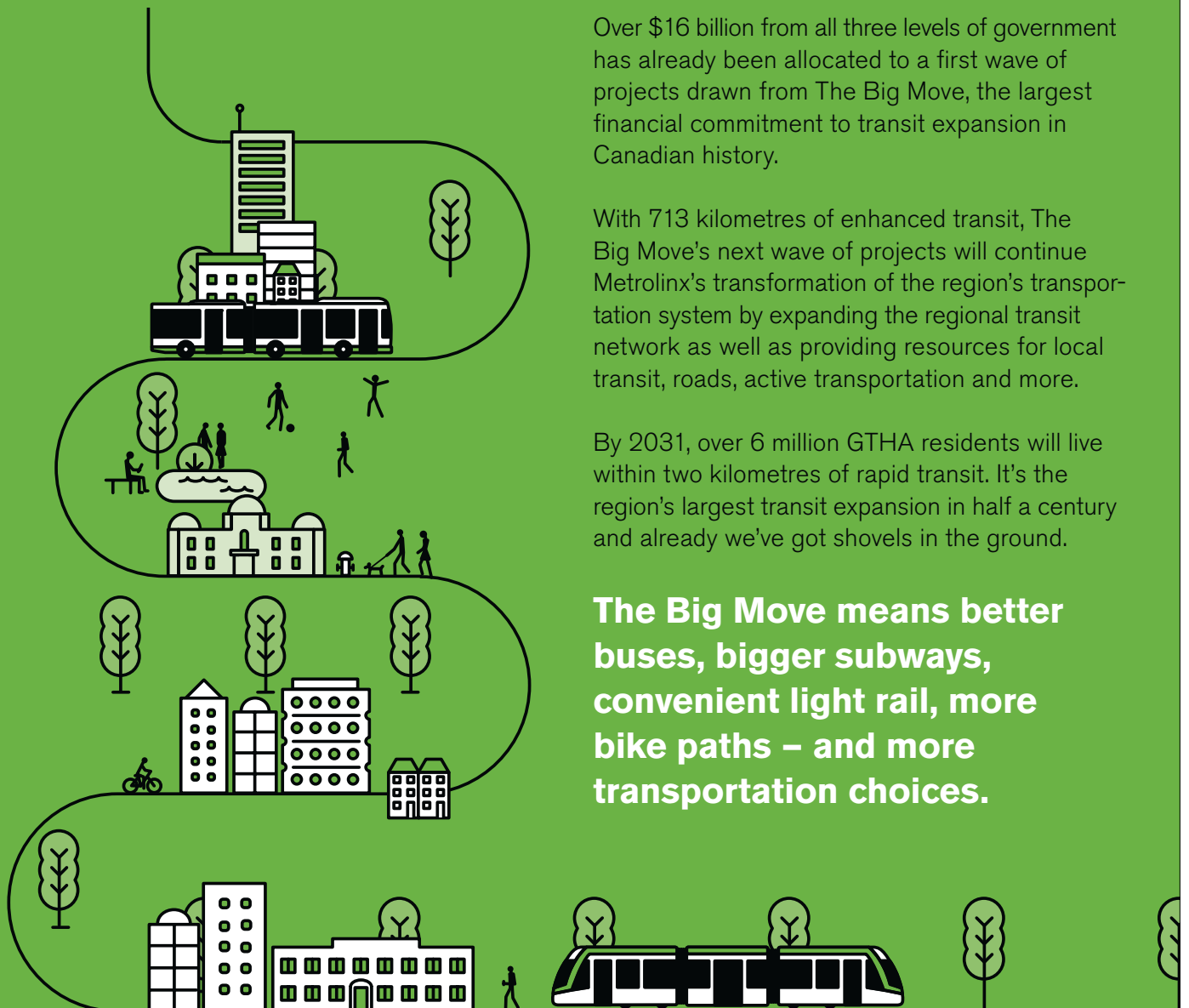
**The Big Move is our 25-year plan for transforming regional transportation throughout the Greater Toronto and Hamilton Area.**

Over \$16 billion from all three levels of government has already been allocated to a first wave of projects drawn from The Big Move, the largest financial commitment to transit expansion in Canadian history.

With 713 kilometres of enhanced transit, The Big Move's next wave of projects will continue Metrolinx's transformation of the region's transportation system by expanding the regional transit network as well as providing resources for local transit, roads, active transportation and more.

By 2031, over 6 million GTHA residents will live within two kilometres of rapid transit. It's the region's largest transit expansion in half a century and already we've got shovels in the ground.

**The Big Move means better buses, bigger subways, convenient light rail, more bike paths – and more transportation choices.**



# Not only transportation, but transformation

By 2033

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## 60%

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60% of children will walk or cycle to school

## 30%

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Per person, our emissions from passenger transportation will be reduced by 30% from what they are today.

## 1/3

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On average, one-third of trips to work will be taken by transit and one in five will be taken by walking or cycling

## 1

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A single fare card will be used for all transit trips throughout the GTHA, and all fares will be integrated

**The Big Move is more than just a plan to rebuild our ailing transportation system, it's a plan to rebuild pride in the place we call home.**



## Projects in Progress

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- Mississauga Bus Rapid Transit (BRT)
- Toronto York-Spadina Subway Extension
- The Georgetown South Project
- Union Pearson Express
- York Region vivaNext Bus Rapidways
- Toronto Light Rail Transit (LRT) Projects
- Union Station Revitalization

# 52

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52 kilometres of new light rail transit (LRT)

# 8.6

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8.6 kilometres of new subway extension

# 59

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59 kilometres of new bus rapid transit (BRT)

## Next Wave Projects

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- GO Rail Expansion: More Two-Way All Day & Rush Hour Service
- Electrification of GO Kitchener line and Union Pearson Express
- GO Lakeshore Express Rail Service - Phase 1 (including electrification)
- Downtown Relief Line
- Hamilton Rapid Transit
- Durham-Scarborough Bus Rapid Transit (BRT)
- Brampton Queen Street Rapid Transit
- Dundas Street Bus Rapid Transit (BRT)
- Hurontario-Main Light Rail Transit (LRT)
- Yonge North Subway Extension

# 713

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713 kilometres of rapid transit enhancements

# 33

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33 million new transit trips by 2031

# 8-9

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800,000 to 900,000 new jobs created between 2012 to 2031

## Meet the New Fleet

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By 2030 we will have added more than...



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120 new buses



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100 new light rail vehicles



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160 new subway cars



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300 new GO passenger coaches

# The Big Move: it's about time

## Union Pearson Express

The Big Move will get travellers of all types moving. The Union Pearson Express will take you from Canada's busiest airport to downtown Toronto in a stress-free 25 minutes.

## LRT in Toronto

The Big Move will get busy corridors moving. Sleek, new Light Rail Transit (LRT) lines will relieve some of the most congested areas in Toronto, such as Finch, Sheppard and Eglinton Avenues. Getting across town will be easier and, in some cases, travel time will be cut in half.

## Subway Expansion

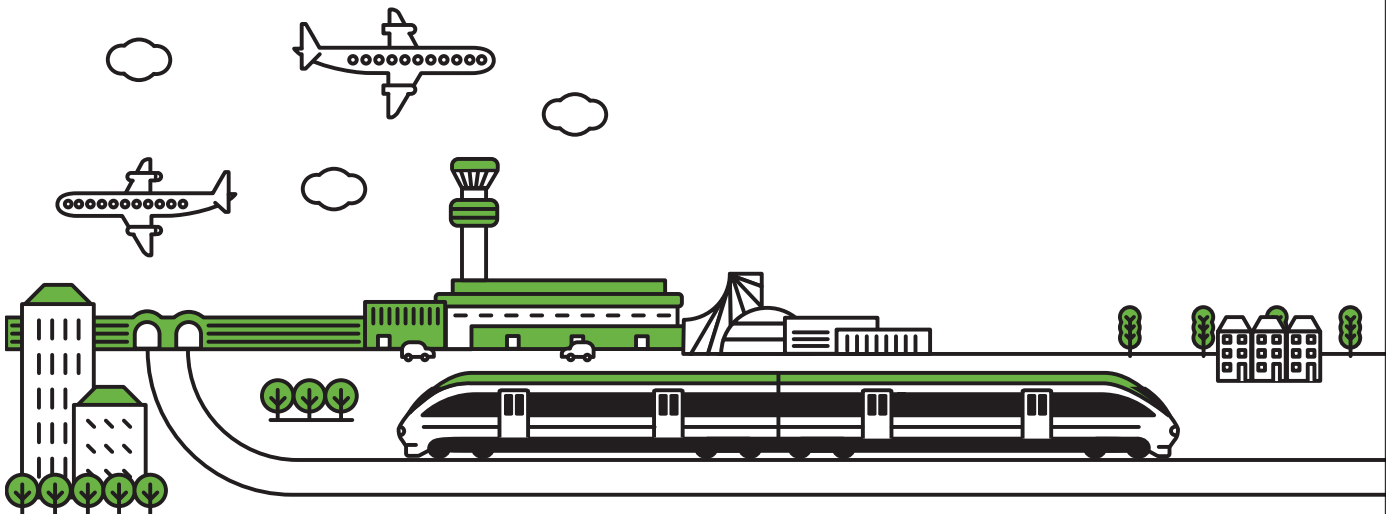
The already crowded Yonge subway is projected to experience a 25 per cent increase in ridership by 2031. Extension of the Spadina subway line to connect downtown to Vaughan is underway and estimated to be complete in 2016. Investments have been made in new signaling infrastructure and larger subway cars.

## Go farther with GO

The Big Move will get regional transit moving. Get around quickly and conveniently 7 days a week, any time of day. With more GO trains, you can zip from Hamilton to Oshawa and access areas like Kitchener, Niagara and Barrie.

## Bus Rapid Transit

The Big Move will get regions moving. Getting around York, Mississauga and Brampton will be faster and more reliable thanks to expanded and upgraded Bus Rapid Transit (BRT). More buses will travel more often – and in more dedicated bus lanes – connecting regional hubs and integrating our transit systems.



# The next 25 years

The Big Move is the blueprint for a more sustainable transportation future.

It's the culmination of years of strategic thinking and planning, our vision of an integrated and efficient transportation system.

Imagine being able to travel across the entire GTHA with only a single swipe of your PRESTO card.

Imagine being able to catch more trains and buses that arrive faster and go even farther.

**This is our vision of The Big Move. This is how we can get the GTHA moving again... and it's already underway.**





– The yellow lines represent how The Big Move will transform the GTHA.

# Discussion Questions

1.

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How does existing transportation infrastructure shape the choices you make in your work and personal life?

2.

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What are the best and worst features of the GTHA transportation system today?

3.

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How does the GTHA's regional transportation system compare to other metropolitan areas you have experienced?

4.

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Which current and expected Big Move projects do you think will have the biggest impact for yourself, your family, and for the region?

5.

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What do you like best about The Big Move? Do you think everyone throughout the region would share your response? Why or why not?

6.

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How important is it to ensure that all residents of the GTHA benefit more or less equally from the transportation expansions outline in The Big Move?

7.

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Projecting forward to 2031, describe how your daily commute might look if we implement every project proposed in The Big Move? What would it look like in 2031 if we stopped all transportation expansion right now?

8.

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Funding The Big Move will cost \$2 billion a year. This money will need to come from a variety of sources. Which of the following principles do you agree are most important to consider when proposing new sources of funding: equality among regional contributions and benefits; fairness in distributing costs; dedication of revenue; and transparency?

9.

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What kind of guarantees or assurances would you want to receive in order to feel good about supporting The Big Move plan?

10.

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Which revenue tools best reflect the principles that you think are most important for choosing how to pay for the next wave of Big Move projects?

**Visit [bigmove.ca](http://bigmove.ca) to learn more about specific projects that will get every wheel in the GTHA moving again. Connect with us on social media and tell us what you think needs to happen in your community. And most importantly, get the word out by telling your friends and family about The Big Move.**

# Transportation Systems Throughout The World



This booklet presents a profile of Metrolinx and six other regional transportation authorities (RTAs) from North America and Europe. These RTAs were selected based on similarities to Metrolinx and the GTHA in size, transportation services offered, location, and political context.

You can use this booklet to see how Metrolinx compares with other RTAs in a variety of categories, including revenue sources, ridership, services offered, and expansion plans. Notably, Metrolinx is one of the only large metropolitan RTAs that does not have access to dedicated transportation funding tools. Additional characteristics shared by other RTAs include a variety of non-fare revenue streams for capital & operation, the ability to independently issue debt based on dedicated future revenue streams, and revenue sources that encourage people to use transit, such as road tolls and gas taxes.

## How Other Regions Fund Transportation

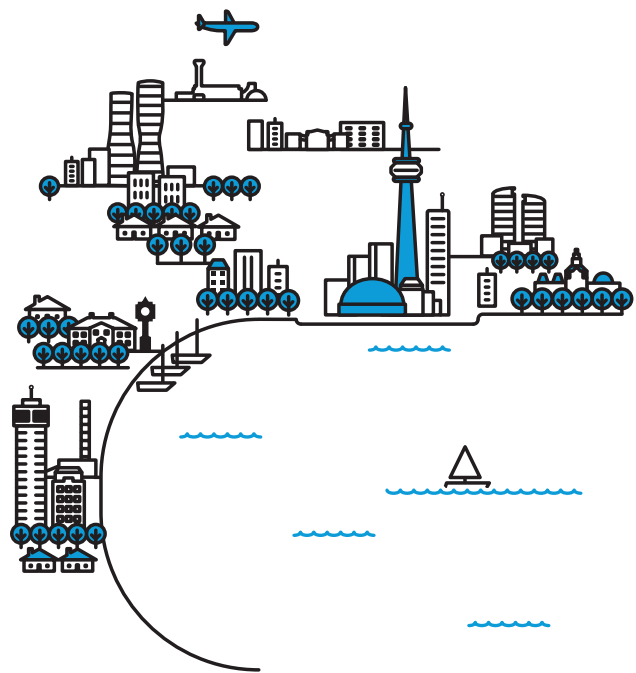
REVENUE SOURCE	GTHA	Vancouver	Montreal	Chicago	NYC	London	Paris
Congestion Charge						×	
Corporate Tax					×		
Fares	×	×	×	×	×	×	×
Gas Tax		×	×		×		
Land Value Capture						×	×
Parking Tax		×					
Payroll Tax					×		×
Property Tax	×	×	×				
Road Tolls		×		×	×		
Sales Tax				×	×		
Vehicle Registration Tax			×				

# Metrolinx

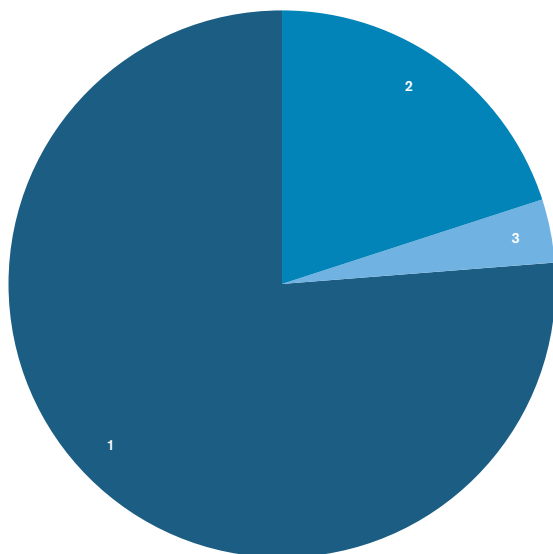
Created in 2006 as an agency of the Government of Ontario, Metrolinx is working to provide the Greater Toronto and Hamilton Area (GTHA) with an integrated transportation system that enhances prosperity, sustainability and quality of life.

Metrolinx also operates GO Transit, the regional public transit service. In addition, Metrolinx oversees construction of the Union Pearson Express that will connect downtown Toronto with Toronto Pearson International Airport when service begins in 2015, and Metrolinx operates the PRESTO fare card.

In 2008, Metrolinx launched The Big Move, a regional transportation plan for improving regional transit and transportation. The plan presents solutions that require coordination and integration of transit operators and transportation systems across the GTHA.



## Annual Revenue



- 1 77% Operating Revenue
- 2 20% Provincial Subsidy
- 3 3% Non-Fare Revenue

Source: 2011 Annual Financial Report  
(excluding contributions for capital expenditure)

## How big is the system?

### Annual Ridership

634 million (10 GTHA systems)  
(62 million GO Transit)

### Mandate Area

6.5 million residents

### % of Population Riding

22%

### Avg. Daily Commute Time

82 mins.

### Expansion plans

Currently building \$16B in capital projects across GTHA municipalities; no funding has been secured for Big Move projects beyond the scope of this first wave of investment.

## Who pays and how?

### Funding

Government contributions represent the primary capital funding source for Metrolinx. Revenue from fares and other sources, such as advertising and renting commercial space, are largely used to recover operational costs.

### Revenue Tool Features

Fares (Single GO Transit adult fare: \$4.20-33.05)

### Revenue by Source

Operating Revenue (77%); Provincial Subsidy (20%); Non-fare Revenue (3%)

# Vancouver TransLink

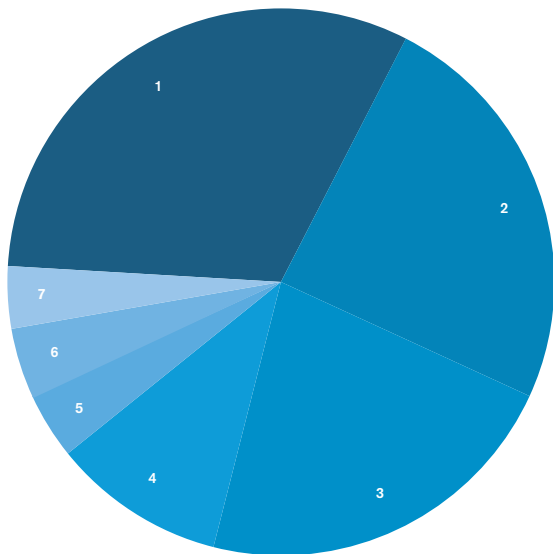
Created in 1999, TransLink plans and manages Metro Vancouver's transportation system. Service is delivered by three operating companies.

TransLink oversees and delivers commuter rail, light rail rapid transit, express and local buses, ferries, regional roads/bridges, and cycling services through contractors and wholly-owned operating companies including: Coast Mountain Bus Company, BC Rapid Transit Company, and West Coast Express. Coast Mountain Bus Company operates over 96 per cent of the region's buses, as well as the SeaBus passenger ferries. The West Coast Express gets commuters to and from downtown Vancouver each day. The SkyTrain connects downtown Vancouver to the airport and surrounding cities.

Since 1998, TransLink has embarked on an extensive expansion program including construction of the Millennium & Canada SkyTrain Lines, and service improvements and expansion on express and local bus routes.



## Annual Revenue



- 1 34% Transit
  - 2 24% Fuel Tax
  - 3 22% Property Tax
  - 4 10% Capital Contributions & Interest
  - 5 4% Parking Sales Tax
  - 6 3% Golden Ears Bridge Tolls
  - 7 3% Other (Includes AirCare)
- Source: 2011 Annual Report

## How big is the system?

### Annual Ridership

232 million trips

### Mandate Area

2.4 million residents

### % of Population Riding

11%

### Avg. Daily Commute Time

67 min.

### Expansion plans

TransLink is planning to reduce greenhouse gas emissions, increase the volume of housing and jobs along the transit network, and increase the number of trips made by transit, walking, and cycling.

## Who pays and how?

### Funding

TransLink receives funding from provincial and local government contributions and a variety of revenue tools.

### Revenue Tool Features

Fares (Single adult: \$2.50-5.00), Gas Tax (17 cents /litre), Parking Sales Tax (21%), Bridge Toll; Property Tax (rates for commercial and residential properties); Power Levy (approx. 6 cents/day)

### Revenue by Source

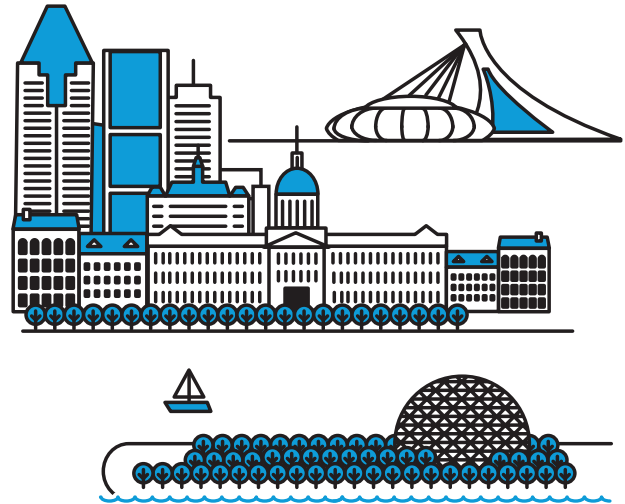
Fares (34%), Fuel tax (24%), Property tax (22%); Other (20%)

# Montreal AMT

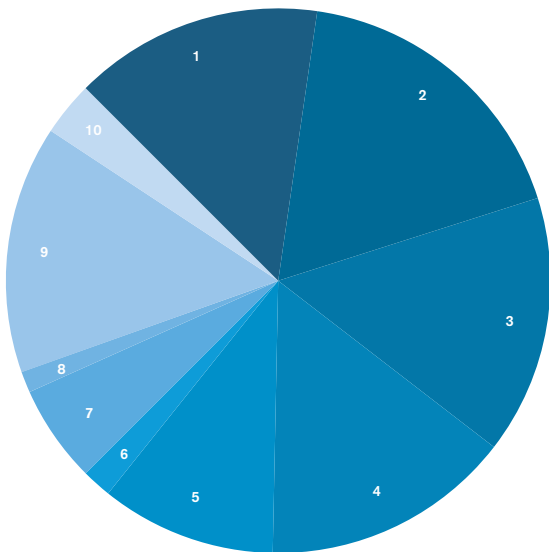
Created in 1996, the AMT is responsible for expanding public transit service and improving commuting efficiency in the Greater Montreal Area. It coordinates with 21 transit authorities.

In December 2007, it received funding from the Québec government to acquire 160 two-storey passenger cars from Bombardier. Delivery of the new fleet began in 2009; when the fleet renewal is complete, the new vehicles will help the AMT to increase passenger capacity by 70%.

Other major projects, such as rail electrification, BRT, and improved commuter train service, are projected to cost \$17B over the next ten years. In 2007, municipalities in the Greater Montreal Area agreed to share the costs of the metro's operating and capital deficit. The AMT receives additional government funding for public transit in the amount of \$55 million annually and revenue generated by a 3 cent per litre gasoline tax.



## Annual Revenue



<b>1</b> 15% Fuel Tax	<b>6</b> 2% Provincial Contributions
<b>2</b> 17% Vehicle Registration Tax	<b>7</b> 6% Grants
<b>3</b> 15% Fares	<b>8</b> 1% Commercial Revenues
<b>4</b> 15% Municipal Subsidy for Operational Expenses	<b>9</b> 15% Interest
<b>5</b> 11% Municipal Contributions to Capital Expenditures	<b>10</b> 3% Others

Source: AMT 2010 Financial Report and 2011 Budget

## How big is the system?

### Annual Ridership

452 million trips

### Mandate Area

3.9 million residents

### % of Population Riding

22%

### Avg. Daily Commute Time

76 min.

### Expansion plans

Since 1996, the AMT has added three new commuter rail lines, 21 stations, and 45km of BRT reserved lanes. It is projected to receive \$17B of fleet and infrastructure improvements over the next ten years.

## Who pays and how?

### Funding

The municipalities of the Greater Montreal Area share the costs of the metro's operating and capital deficit. The AMT also receives \$55 million in annual provincial funding.

### Revenue Tool Features

Fares (Single adult commuter rail/tram ride: \$4-7), Gas Tax (3¢/litre), Vehicle Registration Tax (\$30 + additional \$45 in the City of Montreal), Property Tax (1¢/ \$100 of property assessment)

### Revenue by Source

Integrated fares (25%), Commuter Rail Fares (14%), Fuel Tax (15%), Vehicle Registration Tax (16%); Other (30%)

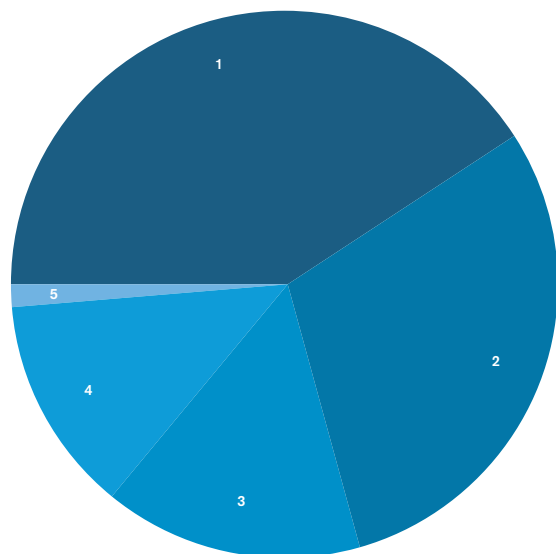
# Chicago RTA

Created in 1974, Chicago's RTA is the third largest public transportation system in North America. It provides oversight, funding, and coordination for the three transit operators that serve northeastern Illinois: Chicago Transit Authority bus and rail, Metra commuter rail, and Pace suburban bus and regional paratransit.

The resources required on an annual basis to operate the region's public transportation system total approximately \$2.2 billion. In addition, the RTA system has a five-year capital program funded at approximately \$5.1 billion.

Chicago's RTA is currently looking to strengthen and stabilize transit funding by increasing revenues for both capital and operations. As a result of gradual underinvestment in transit, its system is faced with aging infrastructure. While transportation funding has historically been focused on roadway investments, support is growing throughout the region for new and improved transit.

## Annual Revenue



- 1 40.9% Sales Tax
- 2 29.7% Notes and Bond Proceeds
- 3 15.2% Other Sources
- 4 12.8% Public Transportation Fund
- 5 1.4% Reduced Fare Reimbursement

Source: 2010 Annual Report



## How big is the system?

### Annual Ridership

640 million trips

### Mandate Area

8 million residents

### % of Population Riding

16% commute by transit, walking or cycling

### Avg. Daily Commute Time

61 min.

### Expansion plans

The Chicago Transit Authority, which operates bus and rail services, is currently modernizing existing rail lines, investing in extensions of three rail corridors, and building BRT infrastructure.

## Who pays and how?

### Funding

The Chicago RTA uses a combination of dedicated revenue tools and government support programs.

### Revenue Tool Features

Fares (Single adult: \$1.75-8.50), sales tax (1.25% in Cook County, 0.75% in surrounding counties), congestion relief program (includes tolls for all vehicles ranging from \$0.40-\$1 and \$1-\$4 per day for trucks)

### Revenue by Source

Sales Tax (40%); Proceeds from issued debt (30%); Public transportation fund (13%); Other sources (15%)

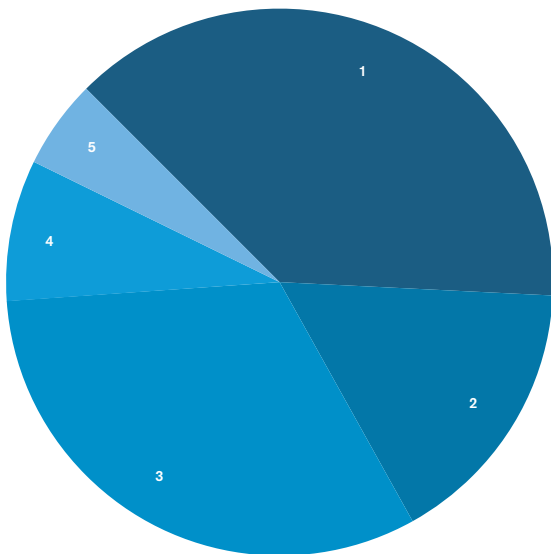
# New York MTA

Created in 1965 by the New York State Legislature, The New York Metropolitan Transportation Authority is North America's largest transportation network. Its service area includes New York City, Long Island, southeastern New York State, and Connecticut.

Almost 80% of rush-hour commuters to New York City's central business districts arrive on MTA subways, buses, and railroads. Annual ridership equals roughly a third of all mass transit users in the United States and two-thirds of the nation's rail riders. Since 1990, the MTA has committed \$72 billion to restore and improve the network, which is currently receiving its first substantial expansion in 60 years. Expected to cost \$22B, the expansion plan will receive funding from a variety of sources, including federal grants and loans, state and city funding, bond issues, and toll revenues from bridges and tunnels.



## Annual Revenue



- 1 38% Fares
- 2 17% Tolls
- 3 30% Taxes
- 4 9% Subsidies
- 5 6% Other

Source: 2009 Transport Politic (MTA approximate revenues)

## How big is the system?

### Annual Ridership

2.6 billion trips

### Mandate Area

13 million residents

### % of Population Riding

40% commute by transit, walking or cycling

### Avg. Daily Commute Time

68 min.

### Expansion plans

The 2011-2014 MTA Capital Program sets out a plan for \$22B in expansion and renewal for subway, train, and bus networks, as well as bridges and tunnels.

## Who pays and how?

### Funding

The MTA receives funding from local, state, and federal bodies and a variety of revenue tools.

### Revenue Tool Features

Fares (Single adult: \$2.25-\$25.00), Sales Tax (0.25%), Corporate tax (17%), Mortgage Recording tax (30 cents/\$100 of mortgage), Bridge and Tunnel tolls, Payroll Mobility tax, Petroleum & Transportation Industries Tax.

### Revenue by Source

Fare-box revenue (40%); Dedicated taxes (36%); Toll revenue (12%); State & local subsidies (8%); Other (4%)

# London TFL

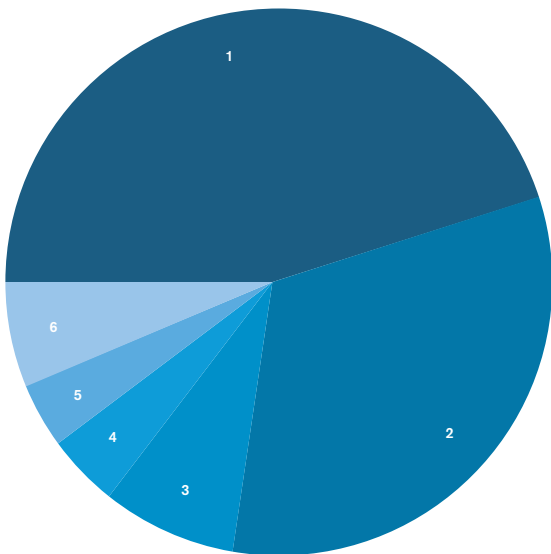
Created in 2000, Transport for London (TFL) is responsible for the planning, delivery and day-to-day operation of the city's public transport system. Services under its control include London's buses, Underground, Docklands Light Railway, Overground, Tramlink, River Services and Victoria Coach Station.

London's transit network received nearly £6.5B in investment ahead of the 2012 Olympics Games. 4.5 million journeys were made on the busiest days of the Olympics, made possible by upgrades and improved services.

TFL has invested heavily in rail expansion, providing new aboveground access routes cutting through London, and modernization and capacity improvements to the underground "tube". There are also new high-capacity double decker buses in service, and cycling and pedestrian programs.



## Annual Revenue



- 1 45% Fares revenue (London Underground)
  - 2 33% Fares revenue (bus network)
  - 3 8% Congestion Charging scheme
  - 4 4% Rent and commercial advertising
  - 5 4% Fares revenue (rail)
  - 6 7% Other income
- Source: 2011 Annual Report

## How big is the system?

### Annual Ridership

2.9 billion trips

### Mandate Area

8.5 million residents

### % of Population Riding

60% commute by transit, walking or cycling

### Avg. Daily Commute Time

74 min.

### Expansion plans

A multi-billion pound investment program is helping upgrade and expand London's transport system, which will provide 30 per cent more capacity across the network, including a major east-west rail link.

## Who pays and how?

### Funding

TFL's revenue comes mostly from fares and the city's congestion charge. The UK government provided a three-year rolling funding commitment.

### Revenue Tool Features

Fares (Single adult ride: £1.90- £19, based on distance travelled) Congestion charge (£10 per vehicle /24 hrs.); Local improvement tax (variable)

### Revenue by Source

Fares (82%); Congestion Charge (8%)

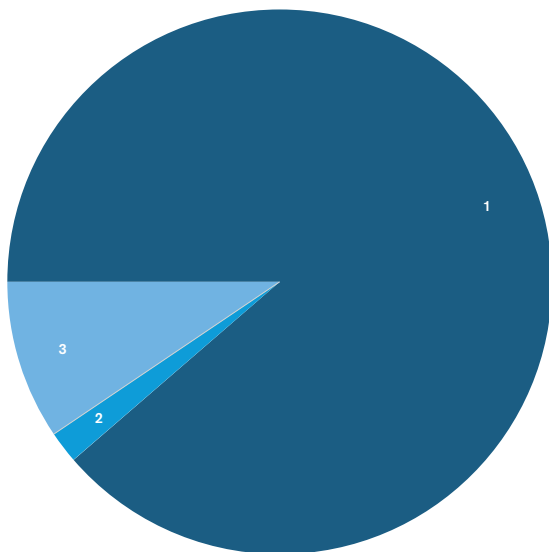
# Paris RATP

Created in 1948, the Paris RATP is responsible for most of public transport in Paris and its surrounding Île-de-France region. RATP's services include 16 lines of underground rapid transit and 300 stations; parts of the regional express railway network that connect the city to the rest of the region; as well as the Paris city bus system and three lines of the Paris tram system.

Paris' subway stations are the most closely spaced in the world, with 245 located within the city of Paris. As a result, every building lies within 500 metres of a metro station.

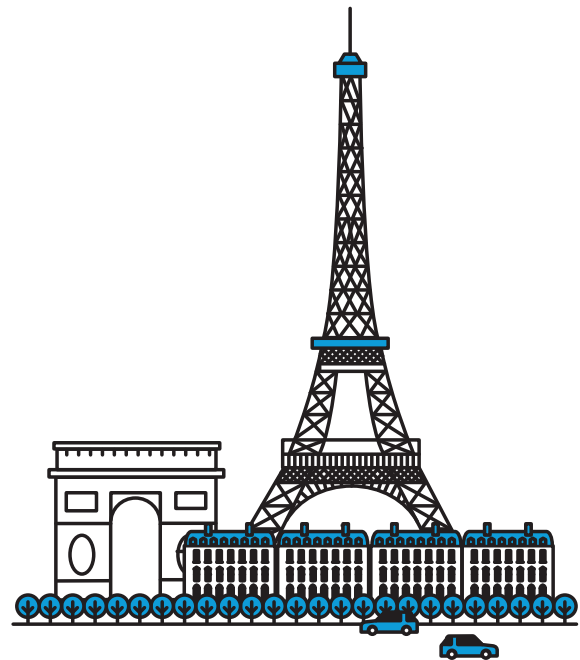
RATP carries over 3 billion passengers per year in the Île-de-France region, and has extended its operations to bus, tram, rapid transit and inter-city rail services, located in Europe, Asia, Africa and the Americas.

## Annual Revenue



- 1 88.5% Transport (Fares and government funding)
- 2 2.1% Transport-related
- 3 9.4% Non-Transport

Source: 2010 Financial Report (2010 Revenue Sources)



## How big is the system?

### Annual Ridership

3 billion trips

### Mandate Area

11.7 million residents

### % of Population Riding

75% of Parisians commute by transit, walking or cycling

### Avg. Daily Commute Time

Data not available

### Expansion plans

French parliament recently passed a law to create a "Greater Paris". The €25B plan includes construction of a 130-kilometre, 40 station "super-metro" running in a loop around outer Paris. RATP will play an advisory role during programme development and implementation.

## Who pays and how?

### Funding

RATP's revenue comes mostly from two sources: fares and an employer payroll tax

### Revenue Tool Features

Fares (Single adult: €1.70-€11); Employer payroll tax (2.6% in Paris); Land value capture (around new stations within Paris)

### Revenue by Source

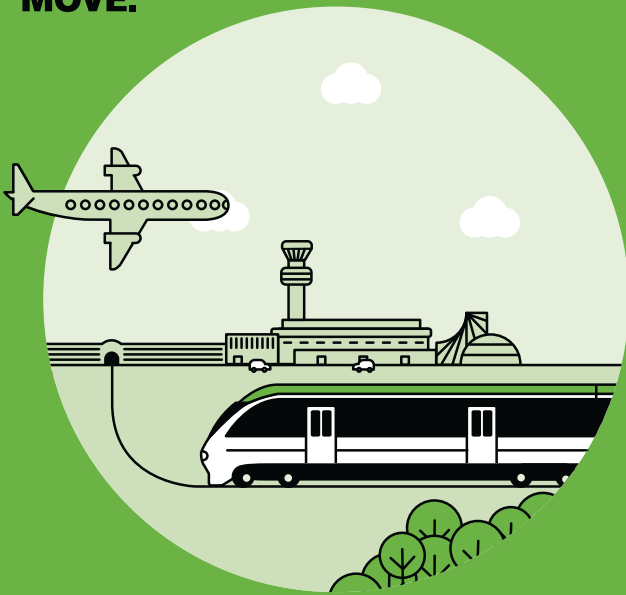
Operating Revenue (77%); Provincial Subsidy (20%); Non-fare Revenue (3%)

**THE  
BIG  
MOVE.**

# Current Projects

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Current Project

## Union Pearson Express



Current Project

## Union Pearson Express

Union Pearson Express will connect the GO Kitchener line to Toronto Pearson Terminal 1. Trains will depart Union Station and Toronto Pearson every 15 minutes and will make stops at Bloor and Weston GO stations. The total trip time between Toronto Pearson and downtown will be 25 minutes. The service will address a significant gap in airport-to-downtown travel in Toronto. It will operate on a 25-kilometre rail route. Twenty-two kilometres of the route will share Metrolinx's upgraded Kitchener GO railway corridor and a new three-kilometre rail spur is currently under construction.

### Regional and User Benefits

- More than five million cars travel between the airport and downtown each year and this number is expected to grow to nine million by 2020. The Union Pearson Express will significantly reduce the number of car trips on our roads.
- It will provide a quick, direct link between two of the country's busiest transportation gateways.

**\$456 million**

Total costs

### Project Status

Service will commence in 2015 in time for the Pan/Parapan American Games. 100% funded with a full commitment from the Government of Ontario.

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Current Project

## Eglinton Crosstown (LRT)



Current Project

## Eglinton Crosstown (LRT)

The Eglinton Crosstown LRT is an east-west light rail transit line that will run along and underneath Eglinton Avenue through the heart of Toronto from Jane Street/Black Creek Drive area in the west to Kennedy subway station in the east. Ten kilometres of the line will be tunnelled underground between Keele Street and Laird Drive (under review), and will continue eastward at surface in a dedicated right-of-way, separate from traffic. At the eastern end, passengers can transfer to the Scarborough Rapid Transit (RT) line at Kennedy Station.

### Regional and User Benefits

- The Crosstown will significantly reduce travel time along Eglinton and link to 54 bus routes, three inter-change subway stations and GO Transit.
- Crosstown stations will accept the new PRESTO payment card system. Stations and vehicles will be fully accessible.

### \$4.9 billion

Total capital costs

### Project Status

The Eglinton Crosstown LRT is currently under construction, and is expected to be complete by 2020.

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BIG  
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Current Project

## Mississauga Bus Rapid Transit (BRT)



Current Project

## Mississauga Bus Rapid Transit (BRT)

The Mississauga BRT will follow an 18-kilometre corridor of dedicated transit through the City of Mississauga, mostly along Highway 403. Both MiWay and GO Transit will operate buses along the transitway, which will connect Winston Churchill Boulevard in the west to Renforth Drive in the east. A total of 12 stations will serve the BRT and provide key connection points to other lines on the Mississauga MiWay and GO Transit networks.

### Regional and User Benefits

- The transitway will connect passengers to the airport, Kipling subway station and York University.
- It will support new growth and development around Mississauga City Centre, designated by the province as an Urban Growth Centre.

### \$259 million

Total capital costs

### Project Status

The eastern part of the corridor is currently under construction, expected to be complete in 2013. The project is fully funded through funding from all three levels of government.

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Current Project

## Sheppard East Light Rail Transit (LRT)



Current Project

## Sheppard East Light Rail Transit (LRT)

The Sheppard East LRT is a 13-kilometre light rail transit line that will run along the surface of Sheppard Avenue from Don Mills Station to Morningside Avenue. The line will operate in a dedicated lane in the centre of the street. In addition, the new Sheppard East Maintenance and Storage Facility will service the 100 light rail vehicles that will operate on the Sheppard East LRT and Scarborough RT. The 17,500-square-metre facility will be built on approximately 12.9 hectares of land located on the corner of Sheppard Avenue and Conlins Road in Scarborough.

### Regional and User Benefits

- The Sheppard East LRT will connect passengers to other rapid transit, such as the Sheppard subway line and the Scarborough RT extension.
- Projected ridership for 2031 is 3,000 people per hour in the peak direction.
- Part of a comprehensive light rail transit plan for Toronto that will connect the whole city and high density neighbourhoods that need it most.

### \$1 billion

Total capital costs

### Project Status

The grade separation at Agincourt GO Station – a key component of this project – was completed in December 2012. Construction on the Sheppard East LRT is expected to begin in 2017 and be complete by 2021.

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BIG  
MOVE.**



Current Project

## Finch West Light Rail Transit (LRT)



Current Project

## Finch West Light Rail Transit (LRT)

The Finch West LRT is one of four new light rail transit lines planned for the City of Toronto. The Finch West line will operate in a dedicated lane in the centre of the street, extending 11 kilometres along Finch Avenue from the planned Finch West subway station at Keele Street to Humber College.

### Regional and User Benefits

- The Finch West LRT will connect passengers to other Rapid Transit, such as the new Toronto-York Spadina Subway Extension.
- Projected ridership for 2031 is 2,800 people per hour in the peak direction.
- It will create 11 new kilometres of transit and provide rapid transit to neighbourhoods that need it the most.

### \$1 billion

Total capital costs

### Project Status

The Finch West LRT is fully funded and approved. Preliminary design and engineering work will be happening over the next few years. Construction is expected to begin in 2015 and be completed by 2020.

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BIG  
MOVE.**



Current Project

## Scarborough Rapid Transit (RT) Extension



Current Project

## Scarborough Rapid Transit (RT) Extension

The Scarborough RT project involves upgrading and extending the existing Scarborough RT. The current Scarborough RT, first opened in 1985, is at the end of its life and an upgrade of the system is necessary for the RT to continue operating. The upgrade will involve conversion to LRT technology, with the same light rail vehicles as will be used on the Eglinton Crosstown, the Sheppard East and Finch West LRTs. The new Scarborough RT will be extended from its current terminus at McCowan north-eastward along Progress Avenue to Centennial College and connect to the planned Sheppard East LRT line.

### Regional and User Benefits

- The construction schedule allows the Scarborough RT to remain in service during the Pan/Parapan American Games in the summer of 2015, after which the service will be closed for construction.
- The Scarborough RT Extension will connect passengers to other rapid transit, such as the Bloor-Danforth subway line, the new Sheppard East LRT and the new Eglinton Crosstown LRT.

**\$1.8 billion**

Total capital costs

### Project Status

Currently in the planning phase, the project is expected to begin construction in 2014 and be complete by 2020.

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BIG  
MOVE.**



Current Project

## Toronto–York Spadina Subway Extension



Current Project

## Toronto–York Spadina Subway Extension (TYSSE)

The Toronto–York Spadina Subway Extension (TYSSE) will provide an 8.6-kilometre northern extension for the existing TTC subway system from Downsview Station to Vaughan Metropolitan Centre. This line will be the first TTC rapid transit line to cross Toronto's municipal boundary. The 6.2-kilometre Toronto portion of the extension will connect Downsview Station to Steeles Avenue. The remaining 2.4-kilometre York portion will connect Steeles Avenue to the Vaughan Metropolitan Centre. A total of 6 stations will be built along the extension and the TTC will continue to operate this line as part of its current service.

### Regional and User Benefits

- Will provide the first rapid transit connection between City of Toronto and York Region.
- The subway will connect to other regional rapid transit lines, such as Brampton's Züm and York Region vivaNext BRT.
- It will support new growth and development around Vaughan Metropolitan Centre, designated by the province as an Urban Growth Centre.

### \$2.6 billion

Total capital costs

### Project Status

The extension is currently under construction and is expected to open in 2016. This fully-funded project is made possible through funding from all three levels of government.

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Current Project

## York Region vivaNext Rapidways



Current Project

## York Region vivaNext Rapidways

The new viva 'rapidways' will be a BRT system where viva vehicles will travel in dedicated bus lanes in the centre of the road for the majority of the route. The routes will also connect with other regional rapid transit, including GO Transit, Brampton's Züm service and the TTC's Spadina subway extension. New bus rapid transit service will be available on two significant corridors: east-west along Highway 7 and a north-south along Yonge Street, with a small east-west route along Davis Drive in Newmarket.

### Regional and User Benefits

- 41 kilometres of rapidway will connect residents to important York Region destinations, including the Vaughan Metropolitan Centre, the Southlake Regional Health Centre in Newmarket, and a proposed transit-pedestrian mall in Markham.
- The rapidway will also connect regional transit, including the GO network and the future Vaughan subway station on the Toronto-York Spadina Subway extension.

### \$1.4 billion

Total capital costs

### Project Status

Construction is underway. Segments will open as they are completed, with the first planned for 2013. The full project is expected to be complete by 2018.

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MOVE.**



Current Project

## Georgetown South Project



Current Project

## Georgetown South Project

The Georgetown South Project is a \$1.2 billion investment for infrastructure improvements along GO Transit's Kitchener rail corridor. It will meet existing ridership demands to accommodate future growth, including two-way, all-day service, and support the new Union Pearson Express shuttle to the airport. The project is a significant infrastructure expansion and includes installation of new tracks, construction of new underpasses and overpasses, as well as widening and modifying existing bridges and lowering the rail corridor in three locations.

### Regional and User Benefits

- The Georgetown South Project will meet existing ridership demands and accommodate future growth by adding 10 GO trains for a total of 29 trains on the Kitchener line in 2015.
- The Union Pearson Express will depart Union Station and Toronto Pearson every 15 minutes and make stops at Bloor and Weston GO Stations. The total trip time between Toronto Pearson and downtown will be 25 minutes.

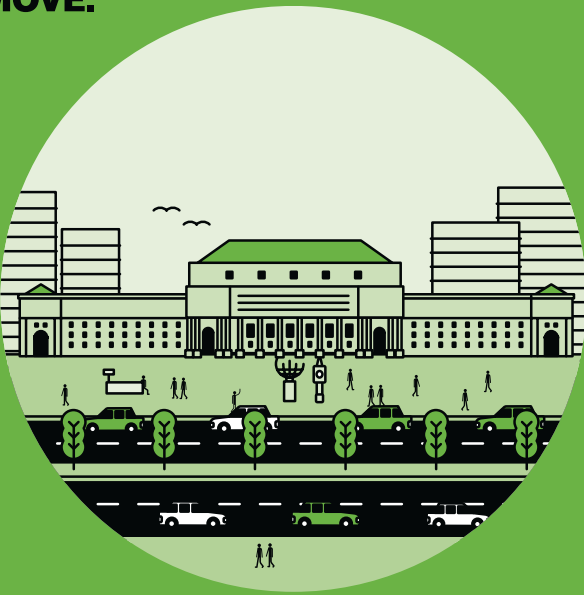
### \$1.2 billion

Total capital costs

### Project Status

Construction on the Georgetown South Project began in 2010, and will be completed by 2015. This project is fully funded through funding from the Province of Ontario and the Government of Canada.

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BIG  
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Current Project

## Union Station - Train Shed Revitalization



Current Project

## Union Station-Train Shed Revitalization

The City of Toronto, along with the TTC and GO Transit are involved in a major, extensive revitalization of Union Station, built nearly a century ago and now the busiest passenger transportation hub in Canada. GO Transit is working on several improvements to the train shed and train shed roof, including an impressive glass atrium in the central area of the train shed roof, track replacements and new elevators and stairs. These improvements will help to meet growing GO ridership demands and help to make the commuting experience more comfortable and convenient for passengers.

### Regional and User Benefits

- New stairs and elevators will improve passenger access to and from trains.
- New glass atrium of the train shed roof will provide daylight at platform level and create a visual connection to the waterfront.
- New train shed roof will feature an environmentally friendly green roof with solar panels to generate electricity that will light the station and power elevators.

### \$250 million

Total capital costs

### Project Status

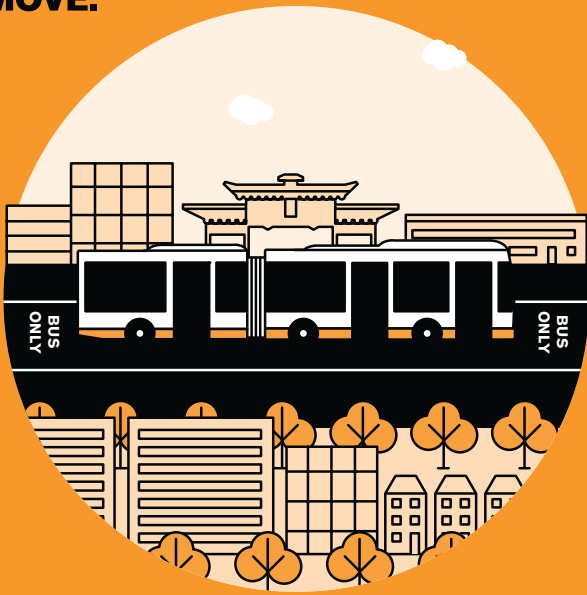
Construction work started in January 2010 and work has progressed to the point that the atrium construction is well underway. Work is expected to be completed in 2016.

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# Next Wave Projects

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Next Wave

## Dundas Street Bus Rapid Transit (BRT)



Next Wave

## Dundas Street Bus Rapid Transit (BRT)

Dundas Street is a major east-west corridor in the GTHA, linking Toronto, Mississauga and Halton Region. The proposed Dundas Street BRT will provide 40 kilometres of new dedicated bus rapid transit lanes on Dundas Street, from Brant Street in Burlington to Kipling Station in Toronto.

### Regional and User Benefits

- The proposed bus rapid transit route will benefit 13 million annual riders in 2031.
- In addition, this project will provide access to new development north of Dundas Street and transform the street into an attractive corridor for pedestrians and cyclists.

### \$600 million

Estimated capital cost

### Project Status

Dundas BRT is currently in the planning phase. The \$600 million for this project will be funded through the Investment Strategy.

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BIG  
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Next Wave

## Downtown Relief Line



Next Wave

## Downtown Relief Line

The Downtown Relief Line will provide relief to the Toronto transit system and provide residents with new rapid transit service into the downtown core. The line is also required to support the Yonge Subway extension to Richmond Hill. Many riders will shift to utilize the Downtown Relief Line, leaving room on the Yonge-University-Spadina line for those making trips from Midtown Toronto, Scarborough, North York, York Region and Richmond Hill. Many aspects of this project have yet to be determined and will come over the next year or two as we will work with the City of Toronto and York Region on more complete analysis to develop a proposal that can best address local and regional needs.

### Regional and User Benefits

- Will provide relief to the Toronto transit system, and provide residents with new rapid transit service into the downtown core.
- 91 million annual riders are projected to ride this line in 2031.
- In addition, this project will provide access to new development in Halton Region north of Dundas Street and transform the street into an attractive corridor for pedestrians and cyclists.

### \$7.4 billion

The total cost of the entire line will vary based on the scope of the project.

### Project Status

Work on the line is in an early planning phase. The \$7.4 billion for this project will be funded through the Investment Strategy.

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Next Wave

# Yonge North Subway Extension



Next Wave

## Yonge North Subway Extension

The Yonge North Subway Extension and capacity improvement project is part of the region's plan to provide better transit service to its residents and connect Toronto to the Richmond Hill/Langstaff Gateway Urban Growth Centre. By 2031, the extension will benefit 50 million riders annually. Located in both the City of Toronto and York Region, the six-kilometre subway extension will alleviate traffic congestion along Yonge Street north of Finch Avenue and will encourage development at Richmond Hill/Langstaff Gateway. The result will be a major transit hub where transit riders will be able to make seamless and convenient connections to York vivaNext, GO and the TTC.

### Regional and User Benefits

- Projected ridership in 2031 is 54 million annual riders.
- This project will support new growth and development in Richmond Hill/Langstaff, designated by the province as an Urban Growth Centre.

### \$3.4 billion

Estimated capital costs

### Project Status

The Yonge North Subway Extension is currently in the planning phase, as we work with the City of Toronto and York Region to assess local and regional needs. The \$3.4 billion for this project will be funded through the Investment Strategy.

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BIG  
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Next Wave

## Hurontario–Main Light Rail Transit (LRT)



Next Wave

## Hurontario–Main Light Rail Transit (LRT)

The Hurontario–Main LRT project is part of the City of Mississauga and the City of Brampton's vision for LRT in their cities. The LRT is intended to provide a catalyst for economic and residential development along these corridors through Mississauga and Brampton. When the cities developed a plan for the corridor, LRT was identified as the best transit option to support the vision for a vibrant, modern street. Today, Brampton Züm and Mississauga MiExpress bus services operate along the route. The LRT service will move more people, faster, through these corridors than the existing bus service.

### Regional and User Benefits

- Projected ridership is 29 million annually by 2031.
- The Hurontario–Main LRT will support new growth and development in downtown Mississauga, designated by the province as an Urban Growth Centre.

### \$1.6 billion

Estimated capital costs

### Project Status

In March 2010, the cities of Mississauga and Brampton completed a master plan which now informs the environmental assessment phase of the project. The \$1.6 billion for this project will be funded through the Investment Strategy.

**THE  
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Next Wave

## Hamilton Rapid Transit



Next Wave

## Hamilton Rapid Transit

Today, rapid bus service in mixed traffic currently operates along the Main-King route. The proposed RT is part of a long-term vision to connect key origins and destinations across the City of Hamilton. The city's focus is to implement RT on King and Main Streets and to expand the existing B-Line bus service to be faster and more efficient. The project will help revitalize Hamilton's downtown core and improve public transit options in the city.

### Regional and User Benefits

- 14 kilometres of rapid transit along Main Street and King Street from McMaster University to Eastgate Square.
- Projected ridership is 8 million annually by 2031.

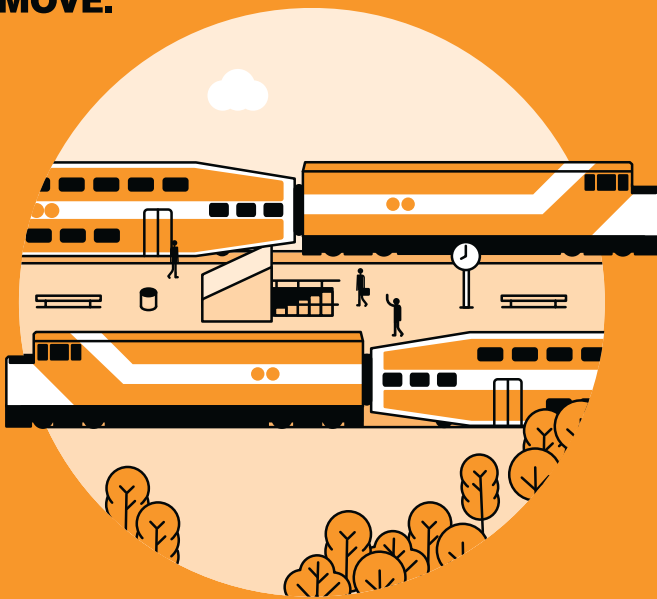
### \$1 billion

Estimated capital costs

### Project Status

The Hamilton RT is currently in the planning phase, with planning, design, and engineering work approved in December 2011. The environmental assessment was made possible through Metrolinx Quick Wins funding. This \$1 billion project will be funded through the Investment Strategy.

**THE  
BIG  
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Next Wave

## GO Rail Service Expansion: More Two-Way All-Day & Rush Hour Service



Next Wave

## GO Rail Service Expansion: More Two-Way All-Day & Rush Hour Service

Current two-way, all-day service on the Lakeshore lines already connects the areas of Burlington, Oakville, Toronto, Pickering and Oshawa. Expanding two-way, all-day service to all GO rail lines will bring fast and reliable regional transit service in and out of downtown Toronto through the day, in the evenings and on the weekends to additional communities in the region.

### Regional and User Benefits

- Projected ridership is 30 million annually by 2031.
- In addition to two-way, all-day service, making these changes will enable more peak-period or rush hour service, which will mean more frequent train service for every GO rider.

### \$4.9 billion

Estimated capital costs

### Project Status

Two major components required to deliver this service are underway: the Georgetown South Project and Union Station revitalization are currently under construction, with expected completion by 2015. This \$4.9 billion project will be funded through the Investment Strategy.

**THE  
BIG  
MOVE.**



Next Wave

## GO Lakeshore Express Rail Service – Phase 1 (Including Electrification)



Next Wave

## GO Lakeshore Express Rail Service – Phase 1 (Including Electrification)

The GO Lakeshore Express Rail project will provide more frequent, faster, and higher capacity service on the Lakeshore West and Lakeshore East lines by upgrading its existing trains from diesel to electric propulsion. This will mean service-level increase, and include shorter travel times for passengers and lower operating costs. The long-term goal is a transformative level of service that will operate much more frequently than service today, allowing passengers to arrive at their departing station without having to consult a schedule.

### Regional and User Benefits

- The existing Lakeshore service carries more riders than any other line in the GO rail system.
- Improved service along 121 kilometres of the Lakeshore West and Lakeshore East rail lines with service between Hamilton, Toronto and Oshawa.

### \$1.7 billion

Estimated capital costs

### Project Status

The Lakeshore Express Rail project is currently in the planning stage to determine how best to provide further service enhancements and faster service. The \$1.7 billion for this project will be funded through the Investment Strategy.

**THE  
BIG  
MOVE.**



Next Wave

## Durham-Scarborough Bus Rapid Transit (BRT)



Next Wave

## Durham-Scarborough Bus Rapid Transit (BRT)

This service will attract more transit passengers and reduce traffic congestion along Highway 2 in Durham Region, a primary transit corridor that connects to the City of Toronto and serves important destinations in Durham. The Durham-Scarborough BRT will not only serve Durham's busiest corridors, but will also serve Ellesmere Road in the City of Toronto. The line will provide an important connection to Scarborough Centre and the Scarborough Rapid Transit line.

### Regional and User Benefits

- 36 kilometres of new rapid bus service along Highway 2 and Ellesmere Road from Scarborough Town Centre to Downtown Oshawa.
- The Durham-Scarborough BRT will benefit 17 million annual riders in 2031.

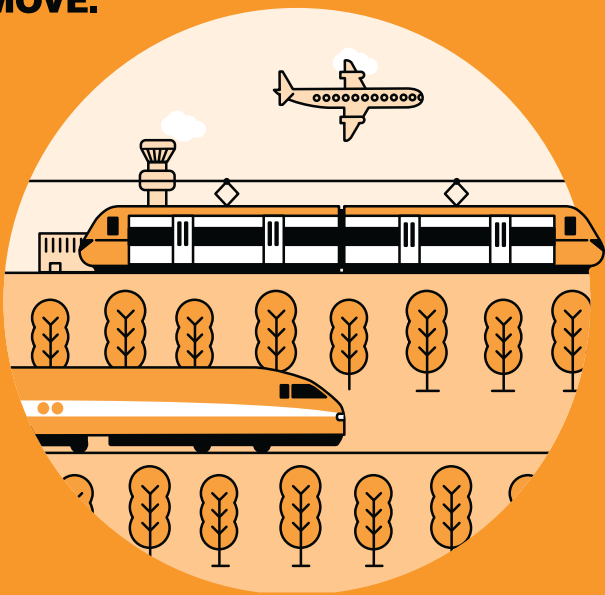
### \$500 million

Estimated capital costs

### Project Status

The Durham-Scarborough BRT is currently in the planning phase. The first phase of the project is expected to launch in July 2013. The \$500 million for this project will be funded through the Investment Strategy.

**THE  
BIG  
MOVE.**



Next Wave

## Electrification of GO Kitchener Line & Union Pearson Express



Next Wave

## Electrification of GO Kitchener Line & Union Pearson Express

Both the Kitchener line and the Union Pearson Express are proposed for conversion from diesel to electric equipment. This will mean service-level increase, and include shorter travel times for passengers and lower operating costs. The environmental assessment (EA) for electrification of the Union Pearson Express is currently underway. It is expected to be complete by 2014.

### Regional and User Benefits

- Improved service to Union Station from Downtown Brampton and other points on the Kitchener line, as well as service on the Union Pearson Express.
- This electrification project will provide improvements to 14 million riders annually by 2031.

### \$900 million

Estimated capital costs

### Project Status

The electrification project was initiated by the GO Electrification Study, completed in January 2011. Electrification of the Lakeshore line was also recommended. The \$900 million for this project will be funded through the Investment Strategy.

**THE  
BIG  
MOVE.**



Next Wave

## Brampton Queen Street Rapid Transit



Next Wave

## Brampton Queen Street Rapid Transit

Current Züm bus service along Queen Street began in September 2010 and operates in mixed traffic. The new proposed Züm expansion would be a rapid transit service operating in its own dedicated lane, and would therefore be faster and more reliable service. Upgrading to a rapid transit service along the Queen Street corridor is a key component of Brampton's long-term vision for transportation in the city. It is expected that ridership along the corridor will reach 17 million by 2031. The upgrade will build on work already implemented by Züm, including its real-time 'next bus' information system and future express service to the Spadina subway extension.

### Regional and User Benefits

- Connections to TTC and GO services in Mississauga, York Region and Toronto.
- Potential to attract and accommodate new growth and development in downtown Brampton, designated by the province as an Urban Growth Centre.

**\$600 million**

Estimated capital costs

### Project Status

The \$600 million for this project will be funded through the Investment Strategy.

# THE BIG MOVE.



Next Wave

## Municipal transit, regional highways, and other transportation initiatives



Next Wave

## Municipal transit, regional highways, and other transportation initiatives

The Big Move allocates a quarter of its Next Wave budget to local transit projects, roads and highways and other projects, including: \$180 million annually to help municipalities accelerate road improvements, provide more bus service, and integrate transit service across municipal borders; \$60 million annually to improve the system of High Occupancy Vehicle (HOV) lanes on provincial highways throughout the GTHA; and \$60 million annually to complete walking and cycling networks, connect mobility hubs, and integrate transit fares.

### Regional and User Benefits

- Travellers can cross municipal boundaries or transfer between modes without fare duplication
- Integrated transit service across municipal borders
- Travel-time savings and greater reliability on 400-series highways

## \$300 million

Total costs

### Project Status

The \$300 million for these projects will be funded through the Investment Strategy.

**THE  
BIG  
MOVE.**

# Transportation Vehicles

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# THE BIG MOVE.



Transportation Vehicles

## Subway



Transportation Vehicles

## Subway

Subways are high-capacity systems that are fully grade-separated from other traffic. They predominantly run underground on fully dedicated tracks. Most subway trains today are operated manually but many new subway lines are now automated. The first segment of Toronto's subway system opened in 1954. The latest system expansion was the Sheppard line in 2002, which added 5.5 kilometres of track. Today, the entire system has 4 lines, 69 stations, and a total length of 68 kilometres.

### Fuel

Electric

### Average Speed

25-50 km/h

### Frequency

As often as every 90 seconds

### Peak Hour Capacity

25,000-40,000 persons per hour

**\$300-500**  
**million**

Cost per kilometre

### Getting Around

- Does not stop at intersections
- Unaffected by car traffic
- 0.5-2km between stops

**THE  
BIG  
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Transportation Vehicles

## Regional Rail



Transportation Vehicles

## Regional Rail

Regional Rail includes rail passenger services that operate on standard railway tracks serving predominately longer-distance trips. Trains can share tracks with freight and/or intercity trains, or run on their own. Regional train services can operate all day in both directions at various frequencies like GO Transit's two-way, all-day service on the Lakeshore lines, or service can operate in one direction in the morning and return in the evening like the peak period services offered on all of GO's other rail lines. Trains can be pulled by diesel-electric locomotives like current GO Transit trains or by electric locomotives as in New York or Montréal.

### Fuel

Diesel or Electric

### Average Speed

30-50 km/h

### Frequency

As often as every 10 minutes

### Peak Hour Capacity

5,000-20,000 persons per hour

### \$4-5 million\*

Cost per kilometre

### Getting Around

- Does not stop at intersections
- Unaffected by car traffic
- 2-5km between stops

\* For a new track on an existing corridor. Does not include yards or additional vehicles.

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MOVE.**



Transportation Vehicles

## Express Rail



Transportation Vehicles

## Express Rail

Express Rail comprises high-speed trains serving primarily longer-distance regional trips. Trains typically run on grade-separated tracks. Express Rail does not currently exist in Canada, but examples from other cities include the RER (Réseau Express Régional) network in Paris. Compared to Regional Rail, Express Rail typically offers faster and more frequent service. Express Rail trains are generally electric and capable of offering two-way all-day service.

### Fuel

Typically electric

### Average Speed

50–80 km/h

### Frequency

As often as every 5 minutes

### Peak Hour Capacity

25,000–40,000 persons per hour

### \$20–50 million\*

Cost per kilometre

### Getting Around

- Does not stop at intersections
- Unaffected by car traffic
- 2–5km between stops

\* For a new track on an existing corridor. Does not include yards or additional vehicles.

# THE BIG MOVE.



Transportation Vehicles

## Conventional Bus



Transportation Vehicles

## Conventional Bus

Buses can vary in length. Standard buses are 40 to 45 feet long and carry about 50–60 passengers, but articulated buses can reach 60 feet and carry up to 110 passengers. Buses can be powered by conventional diesel engines, diesel-electric hybrid engines or natural gas. Conventional buses can provide faster service when improvements are brought to operations, such as signal priority that allows the operator to extend a green light, or queue jump lanes that allow buses to bypass stopped traffic at an intersection.

### Fuel

Diesel, hybrid or natural gas

### Average Speed

10–30 km/h

### Frequency

Varies

### Peak Hour Capacity

2,000 – 3,000 persons per hour

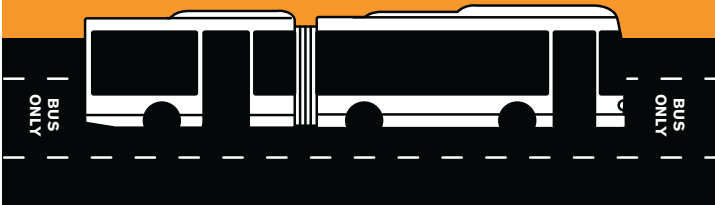
**\$400,000 –  
1 million**

Cost per vehicle

### Getting Around

- Stops at intersections
- Affected by car traffic
- 250m between stops

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BIG  
MOVE.**



Transportation Vehicles

## Bus Rapid Transit (BRT)



Transportation Vehicles

## Bus Rapid Transit (BRT)

BRT features premium vehicles with real-time information systems, enhanced station amenities and express boarding. BRT offers riders more frequent and faster service as vehicles operate in dedicated lanes, uninhibited by traffic. BRT typically uses more specialized or larger vehicles than conventional bus services. Bus Rapid Transit is used all over the world, including Los Angeles County, which operates a BRT line known as the Orange Line.

### Fuel

Diesel or Hybrid

### Average Speed

20-40 km/h

### Frequency

As often as every 90 seconds

### Peak Hour Capacity

2,000-7,500 persons per hour

## \$25-50 million

Cost per kilometre

### Getting Around

- Stops at intersections
- Unaffected by car traffic
- 500m between stops

**THE  
BIG  
MOVE.**



Transportation Vehicles

## Light Rail Vehicle



Transportation Vehicles

## Light Rail Vehicle

Light Rail Transit (LRT) operates on dedicated tracks to provide service that is fast, reliable and comfortable. LRT is easily integrated with the existing streetscape. LRT is also one of the most flexible transit systems and can run underground, on the surface, or along an elevated structure.

### Fuel

Electric

### Average Speed

20-40 km/h

### Frequency

As often as every 90 seconds

### Peak Hour Capacity

2,500-20,000 persons per hour

### \$60-85 million

Cost per kilometre (surface)

### Getting Around

- Stops at intersections
- Unaffected by car traffic
- 500m between stops

### \$200-250 million

Cost per kilometre (underground/elevated)

# THE BIG MOVE.



Transportation Vehicles

## Streetcar



Transportation Vehicles

## Streetcar

Streetcars include urban rail transit services that operate mostly in mixed traffic. Like conventional buses, streetcars are typically used for local trips or as feeders to the rapid transit network. In some cases, with signal priority and turning restrictions, streetcars can provide an enhanced level of service. Toronto's streetcar system began operating in 1861 and is the largest legacy streetcar system in North America. It has 11 lines, a total length of 300km, and carries nearly 330,000 people daily.

**Fuel**  
Electric

**Frequency**  
Varies

**Average Speed**  
10–15 km/h

**Peak Hour Capacity**  
2,000 persons per hour

**\$25 million**

Cost per kilometre

**Getting Around**

- Stops at intersections
- Affected by car traffic
- 250m between stops

# THE BIG MOVE.



Transportation Vehicles

## Automobile



Transportation Vehicles

## Automobile

Driving is the number one mode of transportation in the GTHA. Currently, more than two million automobile trips are made during the peak travel period each morning in the GTHA, with that number forecast to approach three million trips by 2031. Between 1986 and 2006 the number of trips made by automobile in the GTHA grew by 56 per cent.

### Fuel

Gasoline, Diesel, Electric

### Frequency

N/A

### Average Speed

Posted speed limits range from 30 km/h to 100 km/h on 400-series highways

### Peak Hour Capacity

The average car on the GTHA's roads transports just under 1.2 people during the peak period. Assuming 1.2 people per car, one freeway lane carries 2,200 persons/hour; one arterial road lane carries 800 persons/hour.

**The annual cost to own and operate a car can be upwards of \$9,000.**

### Transporting Goods

- Commercial trucks make about one million trips each day in the GTHA
- In a single day, there are approximately one million movements by medium-sized and heavy trucks to, from, within and through the GTHA – about 10 % of all traffic trips.
- At its peak, Highway 401 handles about 36,000 trucks each day

**THE  
BIG  
MOVE.**

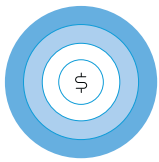
# How Other Regions Fund Transportation

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# How Other Regions Fund Transportation



In the last generation, the GTHA has not sufficiently invested in our transportation network. We need to continue to invest if we want to remain a competitive region. A global scan of other jurisdictions identifies a number of revenue tools that have been used to fund transit and transportation needs. Below are just some examples of the choices other regions have made to fund their transportation systems.



## Cordon Charge

### How It Works:

Motorists are charged a toll for entering and/or exiting certain cordons (or zones). Multiple cordons can be established with tolls set and collected for each.

### Where It's Used:

- Cordon Charges exist in Stockholm, Sweden and in the central areas of London



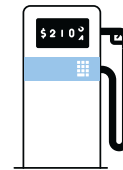
## Employer/Employee Payroll Tax

### How It Works:

Employers automatically withhold either a flat tax or a percentage of gross pay from an employee's pay to remit to the government.

### Where It's Used:

- A payroll tax is used in Paris and in New York to support transportation



## Fuel Tax

### How It Works:

An additional tax is applied to the sale of transportation fuels, as a flat rate per litre of fuel purchased.

### Where It's Used:

- Fuel taxes are used throughout North America and Europe to raise revenue for transportation
- The Greater Montreal Area uses a fuel surcharge to fund regional transit operators



## Highway Tolls

### How It Works:

Motorists pay a toll per kilometre travelled on designated highways.

### Where It's Used:

- The United Kingdom and several U.S. states use highway tolls



## Land Transfer Tax

### How It Works:

Property buyers pay a percentage tax at the time of purchase, based on the amount paid for properties within the GTHA.

### Where It's Used:

- Land Transfer Taxes are used by many provincial governments and U.S. municipalities
- The City of Toronto uses a municipal land transfer tax to generate funds for general revenues

Use these principles to evaluate each revenue tool:

### Equality among regional contributions and benefits

Communities everywhere in the region need to feel the benefits of short, medium and long term investments.

### Dedication of revenue

New revenue sources are dedicated to achieve specific project outcomes and improvements.

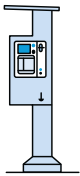
### Fairness in distributing costs

Cost and benefits need to be fair and equitable among citizens, users and beneficiaries.

### Transparency

Decisions, administration of funds and reporting on results need to be transparent.

# How Other Regions Fund Transportation



## Parking Space Levy

### How It Works:

A daily levy is charged to a property owner based on the amount of non-residential offstreet parking spaces owned.

### Where It's Used:

- Vancouver implemented a parking levy in 2006 but replaced it with a parking sales tax in 2008
- In Australia, the cities of Melbourne, Sydney and Perth currently employ parking levies



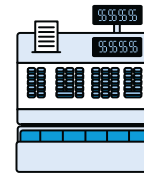
## Property Tax

### How It Works:

A percentage-based tax is applied on the value of property owned by individuals and organizations. Municipalities collect property taxes and remit a portion to the province to fund education.

### Where It's Used:

- A property tax is specifically used for funding transportation projects in Metro Vancouver
- Property taxes indirectly help support transportation funding in the GTHA



## Sales Tax

### How It Works:

A sales tax is a percentage rate applied on all goods and services, which can be collected and used to fund transportation infrastructure.

### Where It's Used:

- Sales taxes are used throughout the U.S.A to fund transportation infrastructure
- Most recently, residents of Los Angeles voted to raise sales taxes to pay for transportation projects



## Vehicle Kilometres Travelled (VKT) Fee

### How It Works:

Motorists would pay a charge for every kilometre that they travel within a designated area or in all areas. A driver's VKT is tracked through odometer readings.

### Where It's Used:

- VKT charges are applied to heavy trucks in Austria and Germany on federal motorways



## Vehicle Registration Tax

### How It Works:

A set fee is paid by vehicle owners when registering a new vehicle and renewing that registration annually.

### Where It's Used:

- Vehicle registration fees are used in New York State and Quebec
- A \$60 vehicle registration fee existed in the City of Toronto until January 2011

Use these principles to evaluate each revenue tool:

### Equality among regional contributions and benefits

Communities everywhere in the region need to feel the benefits of short, medium and long term investments.

### Dedication of revenue

New revenue sources are dedicated to achieve specific project outcomes and improvements.

### Fairness in distributing costs

Cost and benefits need to be fair and equitable among citizens, users and beneficiaries.

### Transparency

Decisions, administration of funds and reporting on results need to be transparent.

**THE  
BIG  
MOVE.**

Map

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# The Big Picture

How the Big Move will transform the GTHA

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# The Big Picture

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## The Next 25 Years

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Imagine being able to travel across the entire GTHA with only a single swipe of your PRESTO card. Imagine being able to catch more trains and buses that arrive faster and go even farther.

This is our vision of the Big Move. It will ensure that 81% of people live within 2 kilometres of rapid transit. It will encourage more people to walk and cycle. It will reduce congestion and commuting times and improve the quality of life for millions of people. And it will boost our economy and improve our competitiveness on the world stage.

The Big Move is how we can get every type of wheel moving again – not as thirty separate municipalities, but as one region we can all be proud of.

## Union Pearson Express

The Big Move will get travellers of all types moving. The Union Pearson Express will take you from Canada's busiest airport to downtown Toronto in a stress-free 25 minutes.

## Go farther with GO

The Big Move will get regional transit moving. Get around quickly and conveniently 7 days a week, any time of day. With more GO trains, you can zip from Hamilton to Oshawa and access areas like Kitchener, Niagara and Barrie.

## LRT in Toronto

The Big Move will get busy corridors moving. Sleek, new Light Rail Transit (LRT) lines will relieve some of the most congested areas in Toronto, such as Finch, Sheppard and Eglinton Avenues. Getting across town will be easier and, in some cases, travel time will be cut in half.

## Bus Rapid Transit

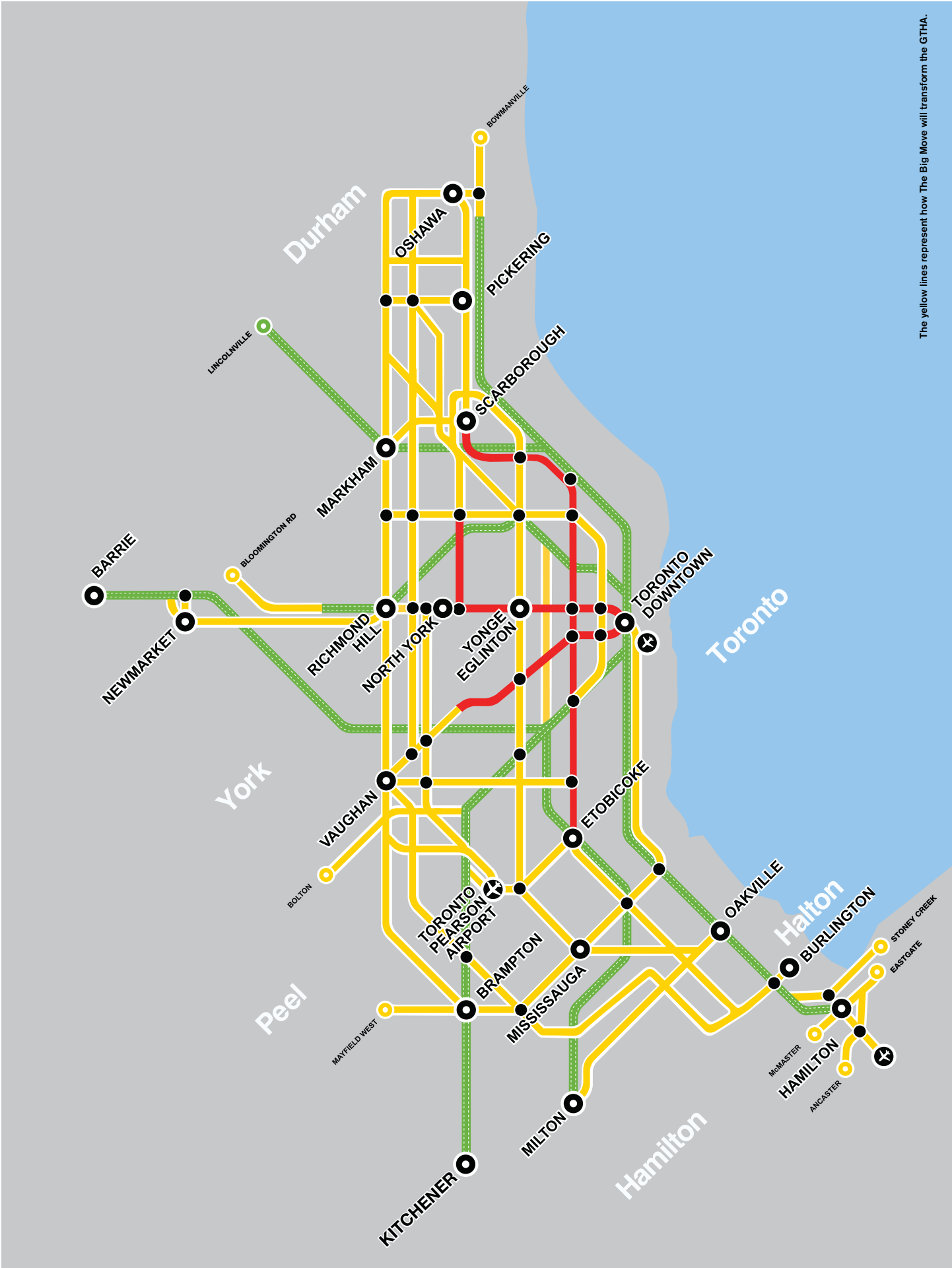
The Big Move will get regions moving. Getting around York, Peel, Halton, and Durham regions will be faster and more reliable thanks to expanded and upgraded Bus Rapid Transit (BRT). More buses will travel more often – and in more dedicated bus lanes – connecting regional hubs and integrating our transit systems.

## Subway Expansion

The already crowded Yonge subway is projected to experience a 25 per cent increase in ridership by 2031. Several improvements are currently underway to expand regional subway capacity. The Downtown Relief Line and other capacity improvements at Bloor-Yonge station will be phased in together with the proposed Yonge North Subway Extension to Richmond Hill.

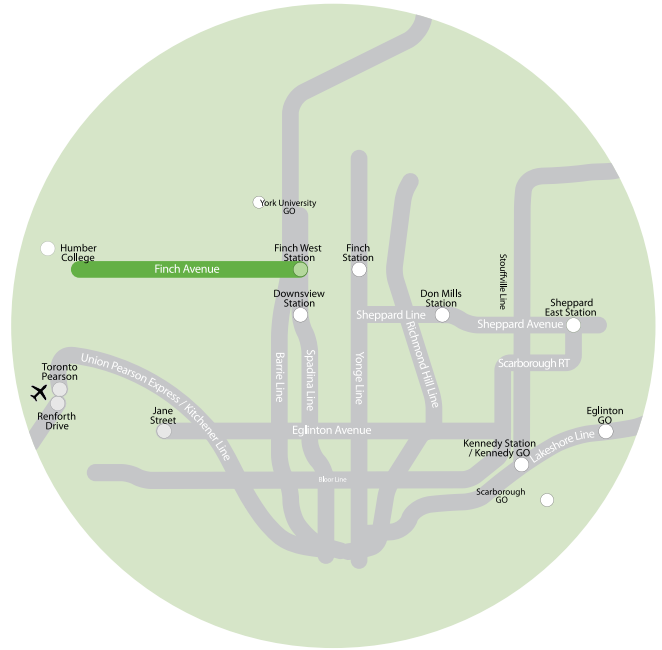
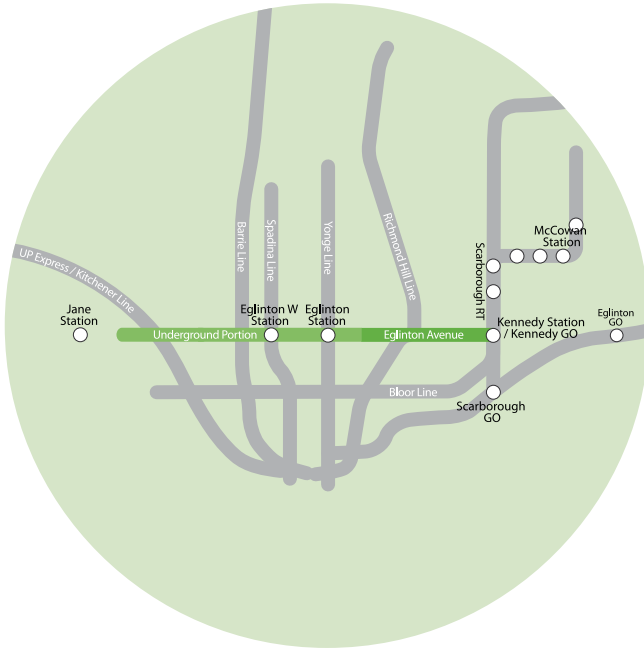
## Roads and Highways

The Big Move will help to get cars moving again on roads and provincial highways throughout the GTHA. Funding for improvements to road and highway systems will reduce traffic congestion and delays, and enable more efficient and reliable movement of people, goods and vehicles.



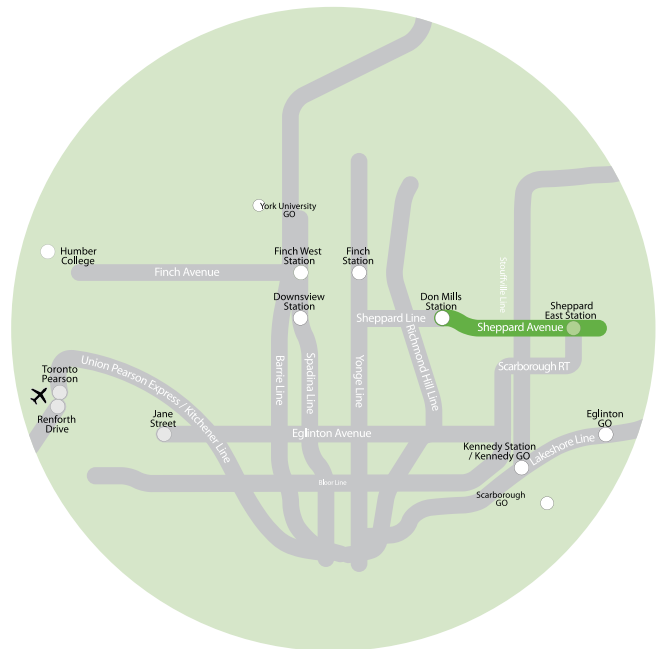
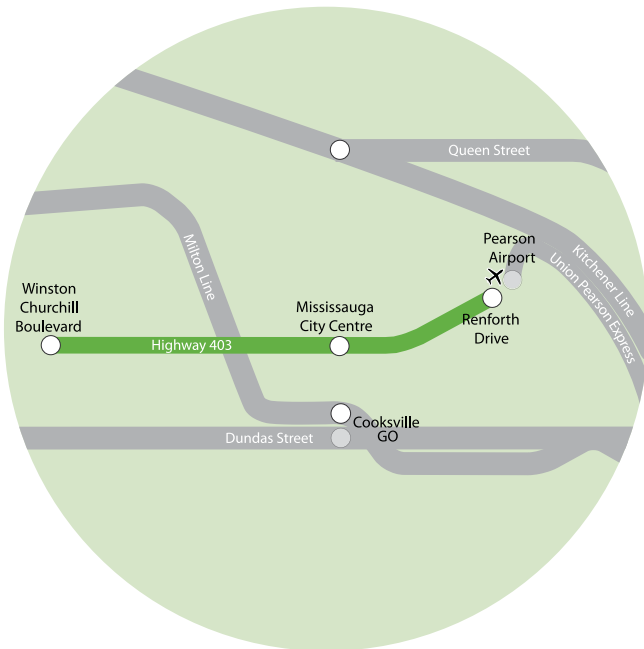
The yellow lines represent how The Big Move will transform the GTHA.

# Current Projects



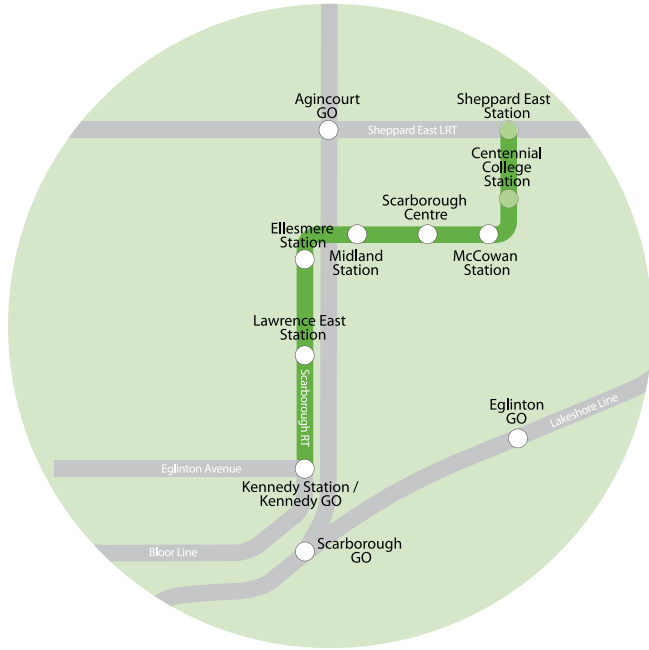
## Eglinton Crosstown (LRT)

## Finch West LRT

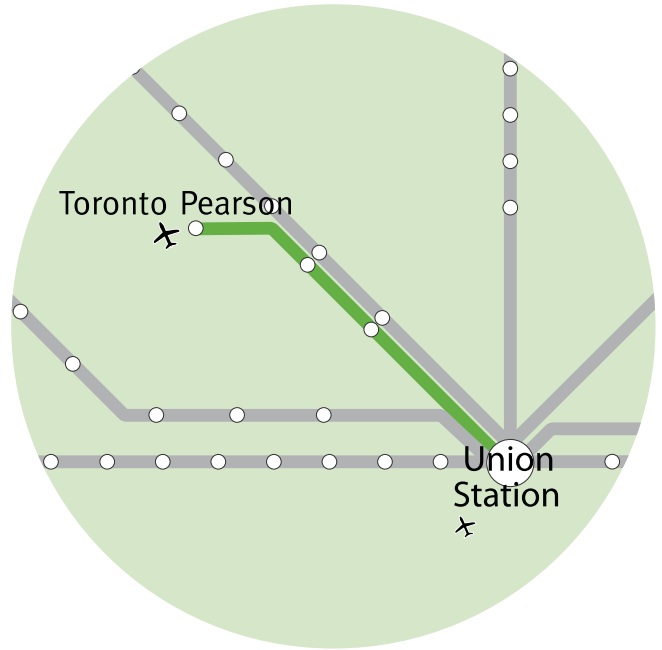


## Mississauga BRT

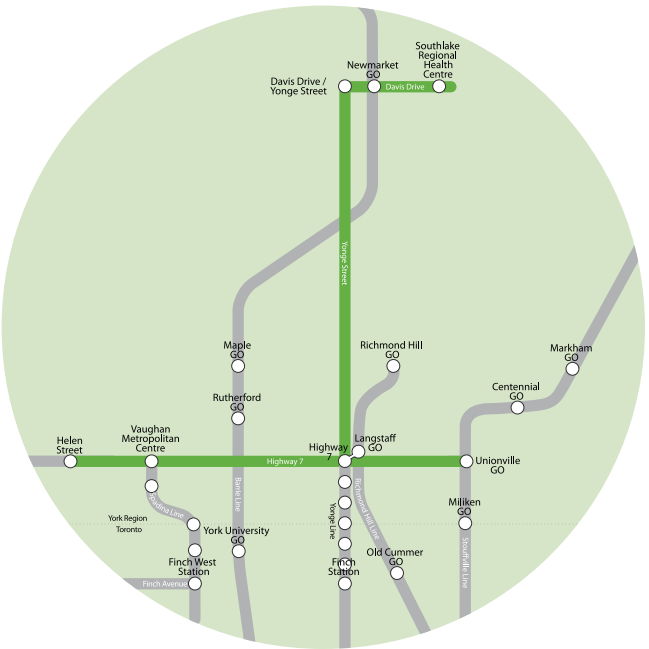
## Sheppard East LRT



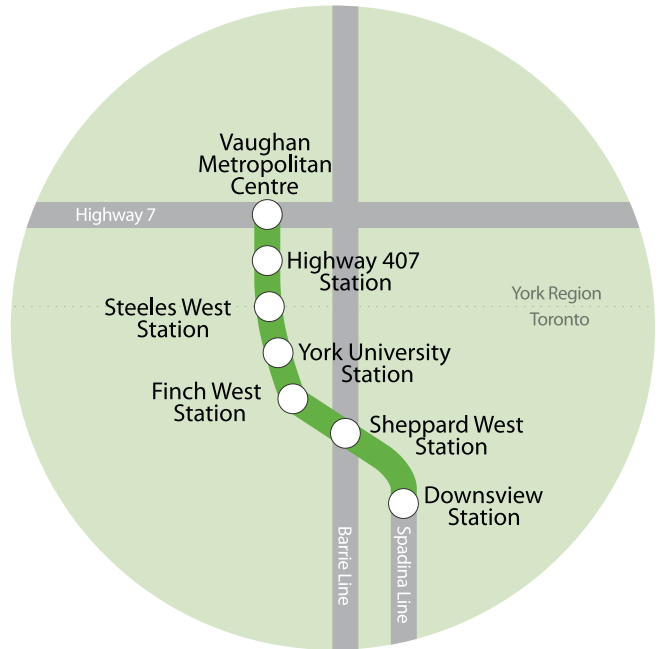
Scarborough (LRT)



Union Pearson Express (Rail)

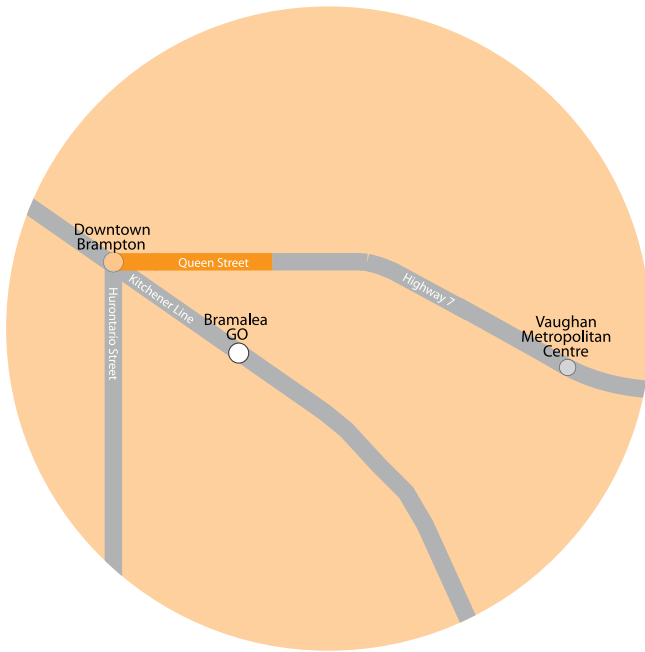


vivaNext (BRT)

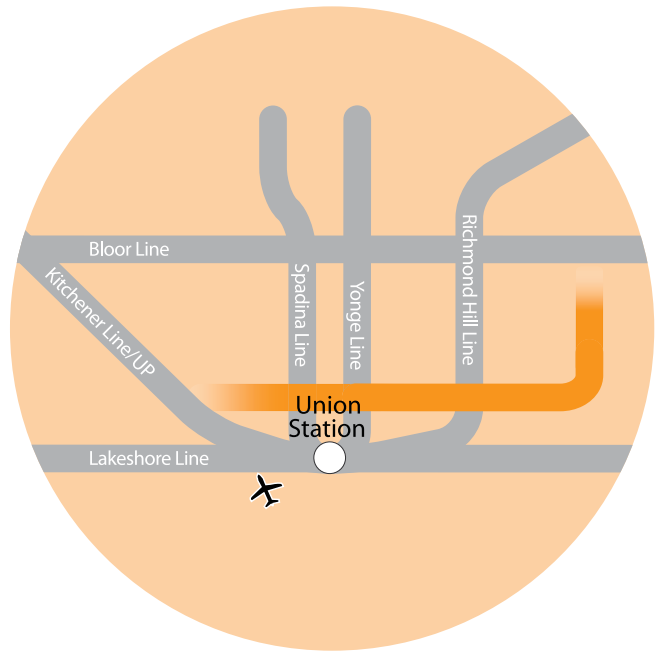


York Spadina Subway

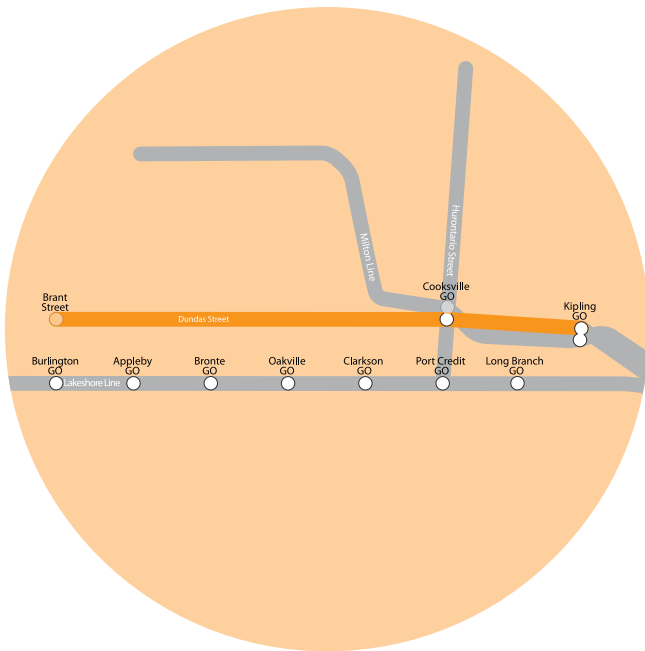
# Next Wave Projects



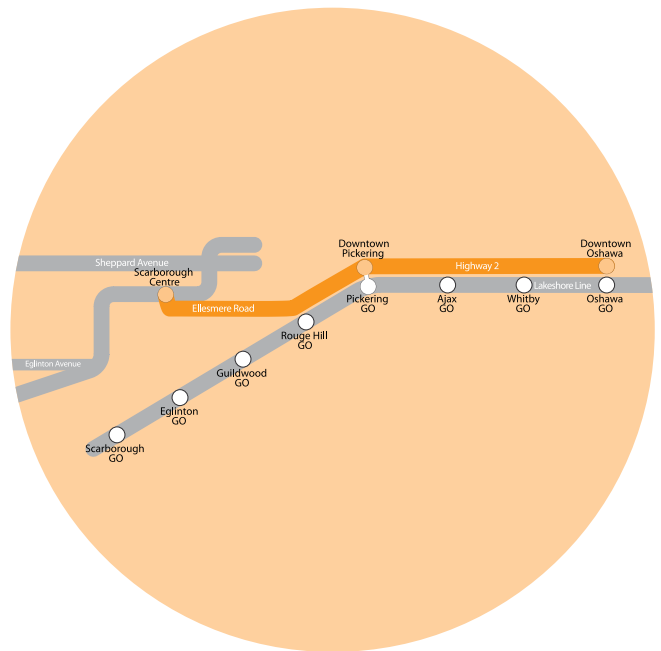
Brampton Queen Street RT



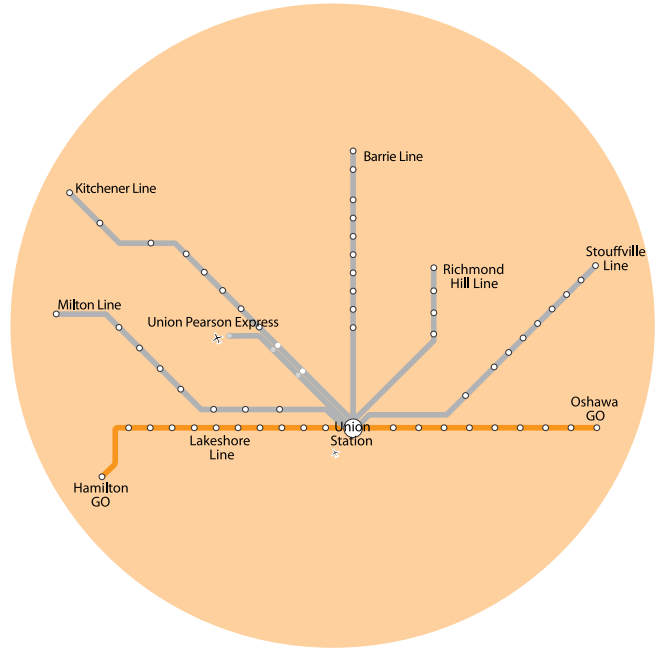
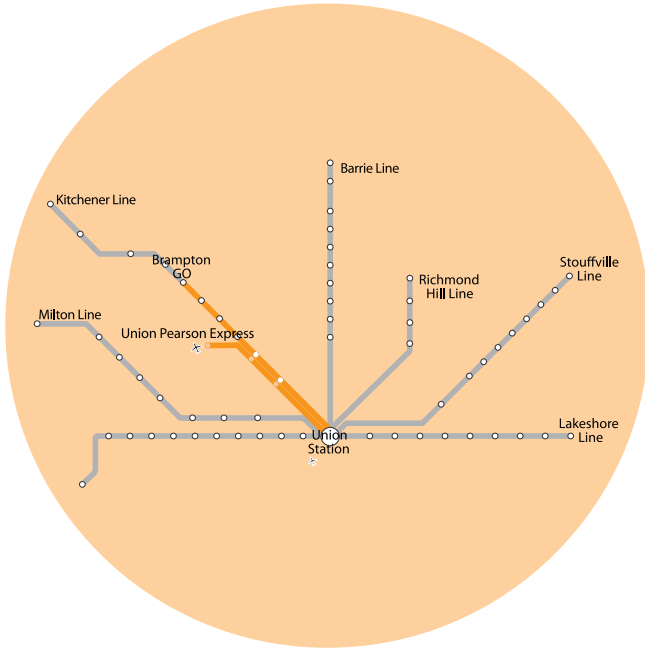
Downtown Relief Line (Subway)



Dundas Street BRT

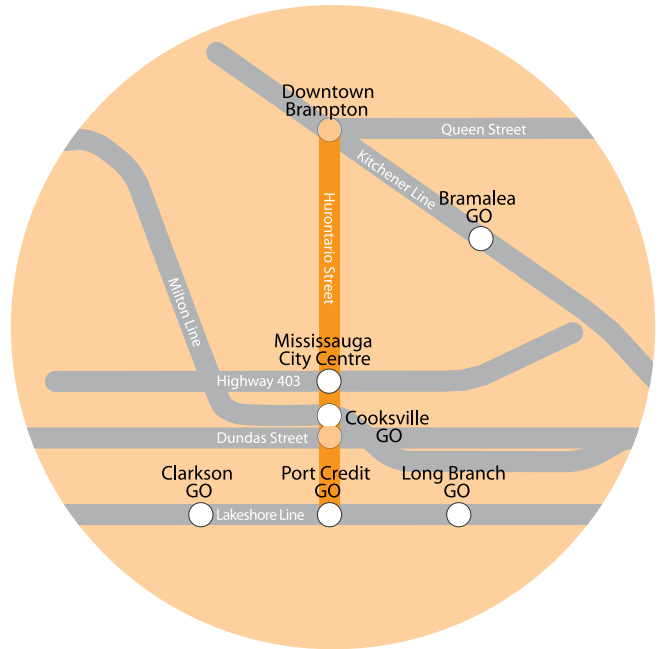
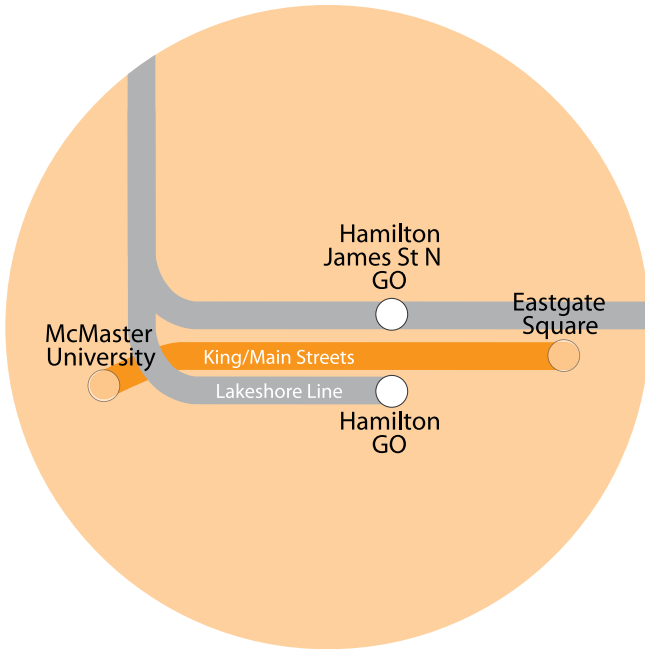


Durham-Scarborough BRT



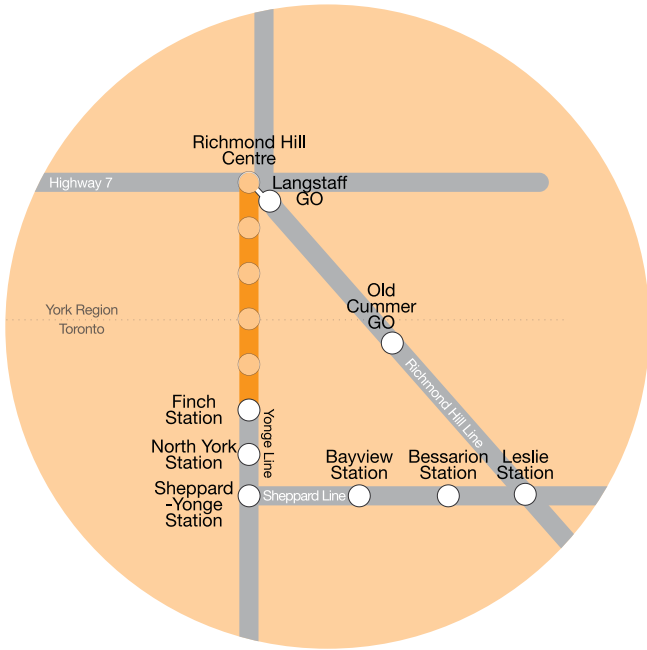
GO Kitchener Electrification (Rail)

Go Lakeshore Phase 1 (Rail)



Hamilton RT

Hurontario-Main LRT



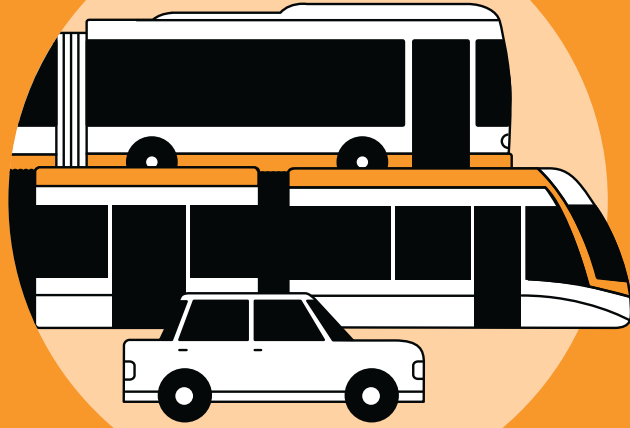
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## Yonge North Subway Extension

**THE  
BIG  
MOVE.**

# Big Questions

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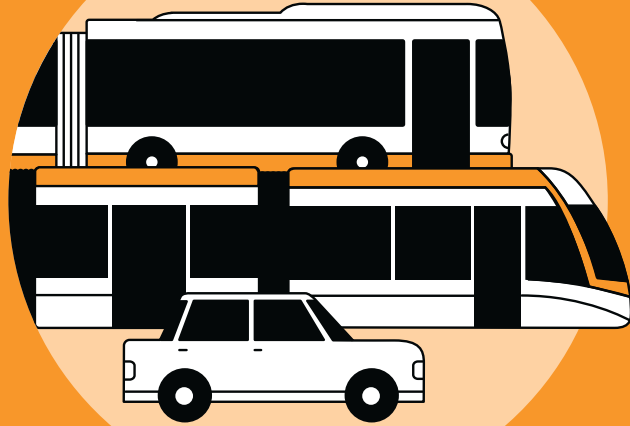
# Big Question No.1



The Big Question

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**How does existing transportation infrastructure shape the choices you make in your work and personal life?**



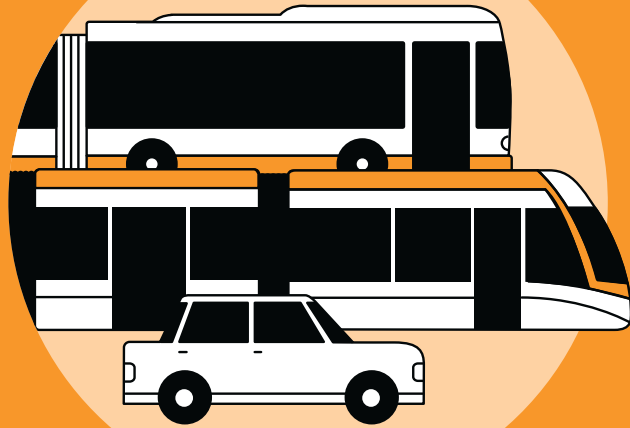
# Big Question No.2



The Big Question

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**What are the best and worst features of the GTHA transportation system today?**

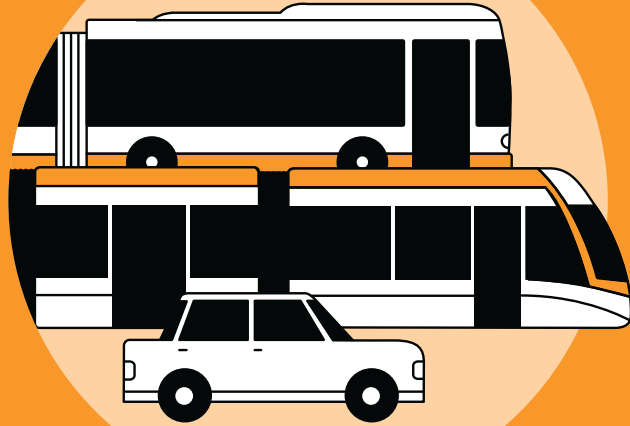


# Big Question No.3



The Big Question

**How does the GTHA's regional transportation system compare to other metropolitan areas you have experienced?**



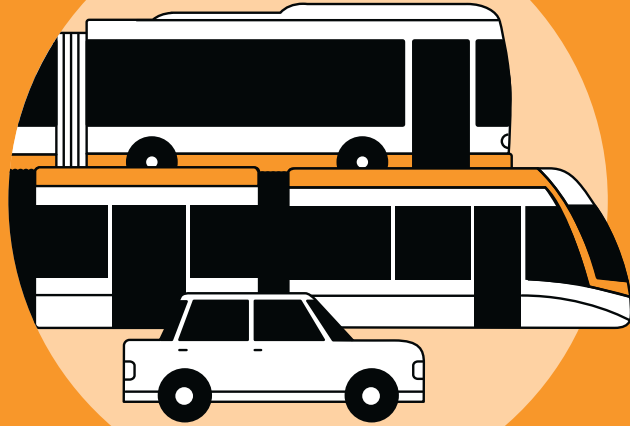
# Big Question No.4



The Big Question

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**Which current and expected Big Move projects do you think will have the biggest impact for yourself, your family, and for the region?**



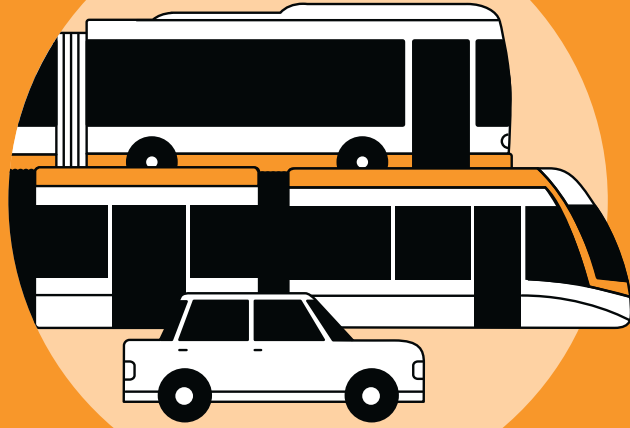
# Big Question No.5



The Big Question

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**What do you like best about The Big Move? Do you think everyone throughout the region would share your response? Why or why not?**

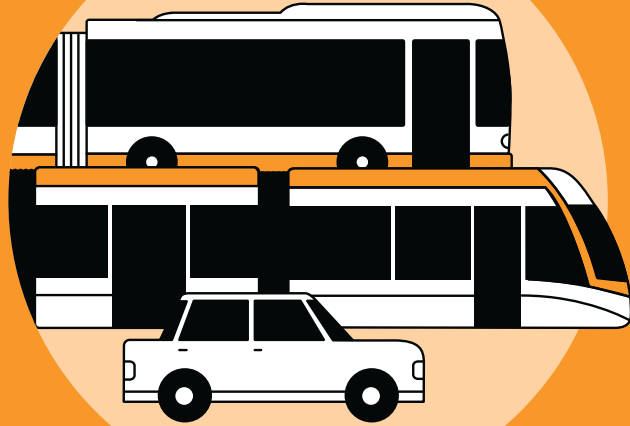


# Big Question No.6



The Big Question

**How important is it to ensure that all residents of the GTHA benefit more or less equally from the transportation expansions outlined in The Big Move?**



# Big Question No.7

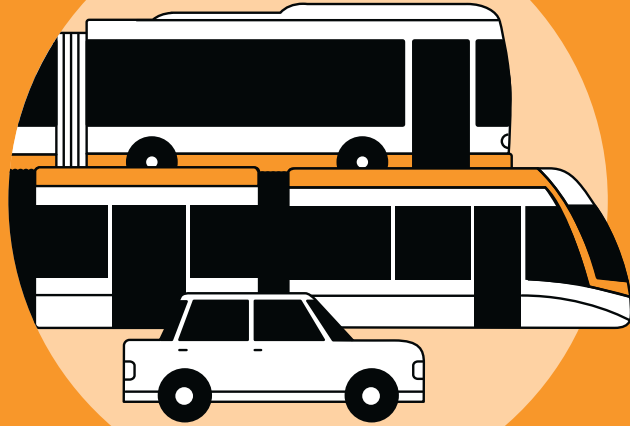


The Big Question

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**Projecting forward to 2031,  
describe how your daily commute  
might look if we implement every  
project proposed in The Big Move?**

**What would it look like in 2031  
if we stopped all transportation  
expansion right now?**



# Big Question No.8



## The Big Question

**Funding The Big Move will cost \$2 billion a year. This money will need to come from a variety of sources. Which of the following principles do you agree are most important to consider when proposing new sources of funding?**

### **Equality Among Regional Contributions and Benefits**

Communities everywhere in the region need to feel the benefits of short, medium and long term investments.

### **Dedication of Revenue**

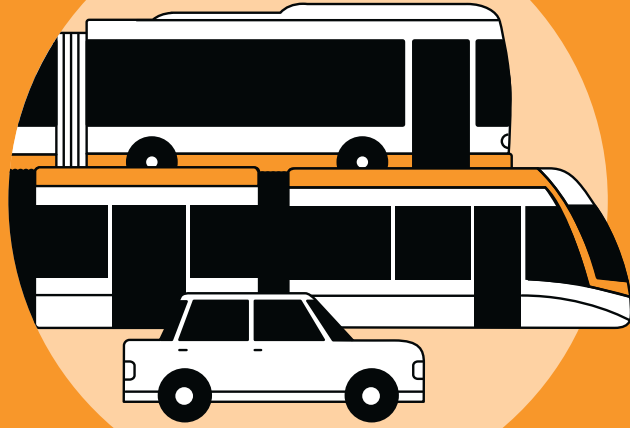
New revenue sources are dedicated to achieve specific project outcomes and improvements.

### **Fairness in Distributing Costs**

Cost and benefits need to be fair and equitable among citizens, users and beneficiaries.

### **Transparency**

Decisions, administration of funds and reporting on results need to be transparent.



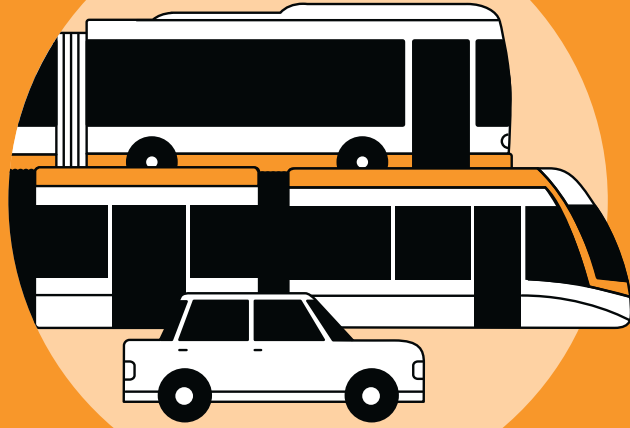
# Big Question No.9



The Big Question

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**What kind of guarantees or assurances would you want to receive in order to feel good about supporting The Big Move plan?**



# Big Question No.10



The Big Question

**Which revenue tools best reflect the principles that you think are most important for choosing how to pay for the next wave of Big Move projects?**