



The GTA Transportation Effect

The Impact of Transportation Improvements on Housing Values in the Greater Toronto Area



Don R Campbell, Senior Analyst
Melanie Reuter, Director of Research
Allyssa Epp, Research Analyst
www.reincanada.com



**CUTTING
EDGE**
RESEARCH INC.

AUTHORS

Don R. Campbell, Senior Analyst, REIN Ltd
Melanie Reuter, Director of Research, REIN Ltd
Allyssa Fischer, Research Analyst, REIN Ltd

© The Real Estate Investment Network Ltd.
6 – 27250 58 Cr
Langley, BC V4W 3W7
Tel (604) 856-2825 Fax (604) 856-0091
E-Mail: info@reincanada.com
Web Page: www.reincanada.com

Important Disclaimer:

This Report, or any seminars or updates given in relation thereto, is sold, or otherwise provided, on the understanding that the authors – Don R. Campbell, Melanie Reuter, Allyssa Fischer, and The Real Estate Investment Network Ltd and their instructors, are not responsible for any results or results of any actions taken in reliance upon any information contained in this report, or conveyed by way of the said seminars, nor for any errors contained therein or presented thereat or omissions in relation thereto. It is further understood that the said authors and instructors do not purport to render legal, accounting, tax, investment, financial planning or other professional advice. The said authors and instructors hereby disclaim all and any liability to any person, whether a purchaser of this Report, a student of the said seminars, or otherwise, arising in respect of this Report, or the said seminars, and of the consequences of anything done or purported to be done by any such person in reliance, whether in whole or part, upon the whole or any part of the contents of this Report or the said seminars. If legal, accounting, tax, investment, financial planning or other professional advice or assistance is required; the services of a competent professional person should be sought.

The following content has been researched and published in good faith without warranty or liability for any erroneous, incomplete or misleading information.

All Rights Reserved. No part of this Report may be reproduced, or stored in a retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopying, recording or otherwise without the prior written permission of the publisher.

EXECUTIVE SUMMARY

- Greater Toronto transportation improvements will deliver a 10%–20% enhancement of real estate values in the regions most affected. In the future, these areas will outperform the rest. If the market goes up everywhere, these areas will increase by about 10%–20% more. If the values drop, these will drop by 10%–20% less.
- In studies of the effect of transportation improvements on real estate in other jurisdictions around the world, it was found that real estate value increases occur for properties located within 500-800 metres of stations of new transportation lines. Several Greater Toronto neighbourhoods will experience price increases when new rapid transit stations are completed.
- Real estate prices in key neighbourhoods will increase more quickly than other regions due to the improved transportation linkages provided. Improved accessibility drives real estate demand. As with rapid transit, accessibility to major highway and highway improvements proved to be a major determinant for increased property values in all studies. Studies show that, as highway networks are created and existing corridors to the CBD (Central Business District) are improved, the value of real estate in the area increases.
- Values in older and more established neighbourhoods are impacted more significantly than in newer developments.

Investors should only focus on regions where they know the projects are moving ahead or are already completed. With that in mind, this report has split the Greater Toronto Area communities into Primary or Secondary Impact Regions:

Primary Impact Regions, which will witness the most positive effects from several transportation improvements: Vaughan and Scarborough.

Secondary Impact Regions, which will feel positive impacts from one transportation improvement in the Greater Toronto Area: North Brampton, Richmond Hill, Kitchener, Waterloo, and Guelph.

*Read the full report for specific neighbourhoods.

- There are negative effects (nuisance, property crime, noise, increased traffic, etc.) on properties located in the immediate vicinity of many stations.
- The decision of which particular investment properties to acquire within a region still requires extensive analysis of the fundamentals of the specific property.

TABLE OF CONTENTS

Executive Summary	3
Overview Of The Transportation Effect	5
Peer-Reviewed Studies On Transportation And Real Estate Values	5
Background: Greater Toronto Area (GTA).....	7
Direct Effects Of Transportation Improvements On Real Estate Values	9
Light Rail Transit Expansion Impact On Residential Property Values	11
Rapid Transit In The GTA.....	14
Currently Under Construction.....	15
Remaining Metrolinx Move 2020 Transit Projects.....	19
Future GTA Rapid Transit Plans – “One City Transit Plan”.....	22
GTA Heavy Rail Transit	24
Currently Under Construction.....	25
Future GO Train Construction.....	27
Impact Of Highway And Bridge Construction On Property Prices	29
Major Road Improvements In Toronto	31
Recently Completed	31
Currently Under Construction.....	32
Future GTA Highway Construction	33



REIN's primary purpose is to provide expert assistance to its members and other Canadians to assist them in making sound decisions about purchasing principal residences and investment/recreational real estate. This Transportation Report is one such educational report, as are Don R. Campbell's best-selling books *Real Estate Investing in Canada (Version 2.0)*, *97 Tips for Canadian Real Estate Investors 2.0*, *51 Success Stories for Canadian Real Estate Investors*, *81 Financial and Tax Tips for the Canadian Real Estate Investor: Expert Money-Saving Advice on Accounting and Tax Planning*, *The Canadian Real Estate Cycle and Buying U.S. Real Estate: The Proven and Reliable Guide for Canadians*, *Real Estate Joint Ventures*, and *The Little Book of Real Estate Investing in Canada*. One hundred per cent of all of Don Campbell's author royalties are donated directly to Habitat for Humanity Edmonton and to date he has raised over \$1 million for this worthy cause.

All research can be accessed at www.reincanada.com.

OVERVIEW OF THE TRANSPORTATION EFFECT

As populations continue to grow in areas across Canada, governments and private sectors attempt to meet the infrastructure needs of its residents by providing road improvements and an increase in mass transit options. With these transportation improvements comes much discussion around the environmental, economic and social impacts of these projects; however, the effects of these changes on real estate is overlooked. The Real Estate Investment Network (REIN) first recognized the need to examine the impact of transportation changes on housing values with the BC Transportation Minister's announcement of new bridges and additional rapid transit lines in the Greater Vancouver Regional District. From the discoveries made in the original version of that report, the Real Estate Investment Network has completed detailed research into current and proposed transportation improvements in Edmonton, Calgary, the Kitchener-Waterloo-Cambridge region (KWC), Hamilton, and Ottawa.

Realizing the housing value impact for some communities over others, a study of the transportation effects in Greater Toronto Area was first undertaken in 2008. With frequent changes in the GTA region's transportation, a new edition was needed to update diligent real estate investors. This report focuses on answers to two very important questions that will have a direct financial impact on tens of thousands of Toronto residents. These questions are as follows:

- 1. How will the construction of proposed rapid transit lines in the GTA affect residential real estate values in different communities?**
- 2. How will the highway improvements affect property values in the GTA?**

For many Toronto residents, a vast majority of their personal net worth is tied to the value of their homes, so the answers to these questions are very important planning tools. As with our previous reports and books, the goal of this research is not only to assist investors and homeowners in gaining knowledge about how a project may affect their personal net worth, but to cut through the emotions and debate that surround transportation projects and answer these key questions from an objective, research-oriented point of view.

This will enable readers to see clearly how the new and proposed transportation projects will affect their personal real estate portfolio today and in the future, allowing them to plan long in advance of the programs' completions.

Peer-Reviewed Studies on Transportation and Real Estate Values

Our analysis is a summary of detailed studies conducted on transportation changes implemented in other regions across North America and Europe. These peer-reviewed journal articles provide us with a snapshot of what we can expect in terms of the impact on real estate prices in Toronto and the surrounding communities as projects are started and completed.

A synopsis of published works indicate that most studies showed commercial and residential property values generally rise the closer they are to light rail stations and major highway improvements. As accessibility increases, so do values. Other factors influence value such as: station design, quality of service, land market, socio-economic status of neighbourhood residents for example. Table 1 outlines a brief synopsis of some of the findings on the effects of light rail systems across the continent on property values.

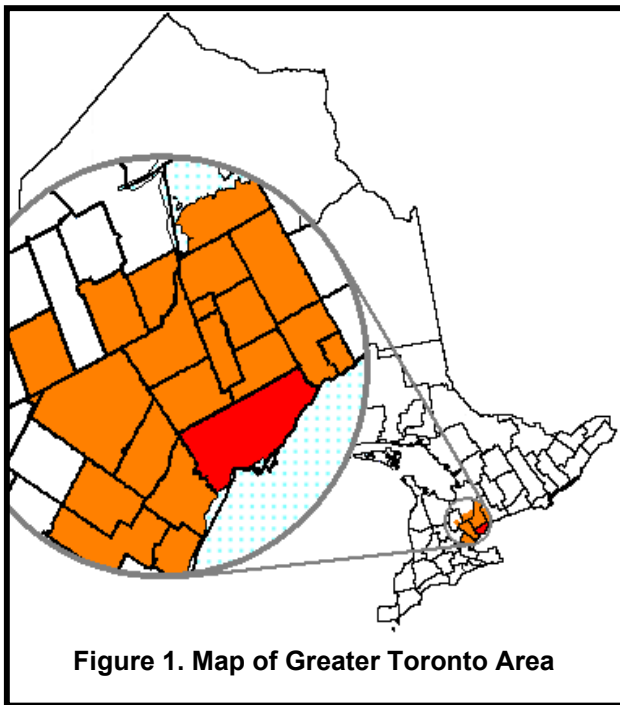
Table 1 - Effects of Light Rail Systems on Commercial Property Values

Light Rail System	Effect on Property Values
Dallas	
2003 Lyons & Hernandez	Value of properties rose 39% more than the control group not served by rail.
2002 Weinstein & Clower	Proximity to DART resulted in a 24.7% increase vs. 11.5% for non-DART properties for office buildings
2002 Weinstein & Clower	Median values of residential properties increased 32.1% near DART compared to 19.5% in the control group areas.
1999 Weinstein & Clower	There was a 5% penalty over time for units nearer stations, less than 1/4 mile.
1999 Weinstein & Clower	The value of offices less than 1.4 miles from a station increased by 10% & retail property increased by 30%
San Diego	
2002 Cevero & Duncan	A 72% premium resulted for parcels near stations in the Mission Valley
2002 Cevero & Duncan	17% and 10% premiums resulted respectfully for multi family homes near East Line and South Line stations.
2001 Cevero & Duncan	The value of condos and apartments from 1/4-1/2 mile from a station increased 2-18%; the value of single family homes decreased 0-4%.
1995 Landis & Huang	There were no significant premiums for property 1/4-1/2 mile from stations.
1995 Landis et al.	The typical home sold for \$272 more for every 330 ft. closer it was to a light rail station.
1994 Landis et al.	For every 1, 000 ft. closer to a station, prices increased \$337 or 1%, but decreased 4% for units closer than 900 ft. to a station.
Santa Clara/San Jose	
2000/01 Cevero & Duncan	Properties less than 1/4 mile from a station experienced a 23% premium
2001/2000 Weinberger	Rent for units within a 3/4 mile of a station increased 4-12%
Los Angeles	
2002 Cevero & Duncan	Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.
Portland (Eastside)	
1999 Dueker & Bianco	Median house values rose at increasing rates the closer to the station. The largest change, \$2, 300, was for homes up to 200 ft. from a station.
1998 Al-Mosaind et al.	A 10.6% premium for homes 500 meters from a station was observed.
1997 Lewis-Workman et al	Property values increased by \$75 for every 100 ft. closer to the station (within 2,500 - 5,280 ft. radius).
1996 Knapp et al.	The value of parcels located 1/2 mile of the alignment rose the farther they were from the line; values rose the closer parcels are to stations.
1993 Al-Musaind et al.	The value of homes within 500 metres increased by 10.6% or \$4, 324.
Sacramento	
1994/95 Landis et al.	There was no discernable positive or negative impact to property values (not statistically significant). Single family homes rose 0.4% for every 1, 000 ft. closer to a station, and 6.2% if very near a station.
Santa Clara/San Jose	
1994 Landis	The price of single family homes increased by 0.1% for every 1, 000 ft. closer to a station, but decreased 10.8% if closer than 900 ft.
Toronto	
1983 Bajic	There was a \$2,237 premium for the average home.
Vancouver	
1998 Ferguson	A \$4.90 premium per foot associate with proximity to station was found.
London	
2007 Savills	A one-minute reduction to commuter rail journey increaser the average home value by £1,000.
Source: Huang, H. (1996). "Land Use Impacts of Urban Rail Transit Systems" in <i>Journal of Planning Literature</i> , vol. 11, iss. 17.	

BACKGROUND: GREATER TORONTO AREA (GTA)

In addition to the City of Toronto, the Greater Toronto Area (GTA) encompasses the Regional Municipalities of York, Halton, Peel and Durham. The GTA is the 6th largest urban agglomeration on the continent with a population of over 6.3 million people. As of 2011, the population of the GTA accounted for 18.1% of Canada's total population¹. With a population larger than some of the provinces and territories in the country - it takes an enormous amount of transportation infrastructure to move people around.

And the population keeps rising. It is estimated that the area's population is increasing by approximately 100,000 people each year. By 2031, there will be three million more people living in the GTA – and they will be bringing with them an additional 1.5 million vehicles².



The City of Toronto recognizes that the growth of the GTA has put a serious strain on the existing transportation infrastructure³. In fact, the GTA is currently considered the sixth-most congested area in North America, trailing behind Los Angeles, Vancouver, San Francisco, Honolulu, and Seattle⁴. The average daily commute time for a Toronto resident is 80 minutes. This is higher than residents who live in the far larger cities of London, New York, Berlin, and Los Angeles⁵. Commuting in the GTA currently takes 32 per cent longer than it would in free-flowing conditions. The economic cost of congestion in the GTA is around \$2.2 billion per year. By 2031, without improvement, this cost will rise to nearly \$4.1 billion⁶.

Community and regional planners can and do use transportation to guide and inform growth. The Province's Places to Grow Act 2006⁷ outlines a plan to accommodate population growth through increased efficiency and use of public transit and the creation of compact urban centres,

wherein residents live and work within the same community. The Act also addresses the need to move not only people but also goods between communities and across the province. The Ministry of Transportation feels that the Places to Grow Act is not only supported by the increased efficiency of transit but also in the increased efficiency of highways.

In 2007, the Ontario government outlined an extensive transportation program titled 'MoveOntario 2020' which is designed to provide long term planning and funding for transportation changes throughout the province. Part

¹ City of Toronto. (February 8, 2012). "2011 Census: Population and Dwelling Counts". <http://www.toronto.ca/demographics/pdf/2011-census-background.pdf>

² Government of Ontario. (June 15, 2007). "MoveOntario 2020". <http://news.ontario.ca/opo/en/2007/06/moveontario-2020.html>

³ Toronto City Summit Alliance (February 2007). Transit and Transportation Infrastructure: Backgrounder for Toronto Summit 2007. http://www.torontoalliance.ca/summit_2007/pdf/Transportation_Backgrounder.pdf

⁴ Gorzelany, J. (January 8, 2013). "The Most Traffic-Congested Cities in North America". *Forbes*. Retrieved from <http://www.forbes.com/sites/jimgorzelany/2013/01/08/the-most-traffic-congested-cities-in-north-america/>

⁵ Globe and Mail. (March 25, 2011). "Compare Toronto's 80-minute commute with other major cities".

<http://www.theglobeandmail.com/news/national/toronto/compare-torontos-80-minute-commute-with-other-major-cities/article1944624/>

⁶ Government of Ontario. (2007). <http://www.premier.gov.on.ca/news/Product.asp?ProductID=1383&Lang=EN>

⁷ Ministry of Public Infrastructure Renewal. (2006). Places to Grow Act 2006. <http://www.placestogrow.ca/index.php?lang=eng>

of the MoveOntario 2020 transportation plan was the introduction of more Light Rail Transit (LRT) to the GTA's transportation infrastructure.

To date, the Government of Ontario has committed \$8.4 billion in support of new transit for Toronto⁸:

- The Eglinton Crosstown LRT from Mount Dennis (Weston Road) to Kennedy Station
- The Sheppard East LRT from Don Mills subway station to east of Morningside Avenue
- The Finch West LRT from the planned Finch West subway station at Keele Street to Humber College
- An extension of Bloor-Danforth subway line along McCowan Road to Sheppard Avenue

The expansion of Toronto's Rapid Transit system is designed to offer additional means of traversing the vast city, reducing commute times and helping ease inner city congestion.

Ontario is also undertaking major improvements to the province's highways, roads and bridges, in an effort to make travel easier for families and businesses. Key highway improvements in the Greater Toronto Area include⁹:

- Repairing 14 bridges along Highway 401 from Keele Street to Kipling Avenue
- Repairing six bridges within the Highway 401/400 interchange
- Repairing eight bridges along Highway 403 between Mississauga and Burlington
- Repairing three bridges along the Queen Elizabeth Way (QEW) in Hamilton

The highway improvements, once complete, will provide a much needed higher capacity road system with connections to major roadways leading into the heart of Toronto.

⁸ Metrolinx. (2014). Toronto light rail transit projects. Retrieved from <http://www.metrolinx.com/en/projectsandprograms/transitexpansionprojects/crosstownproject.aspx>

⁹ Government of Ontario. (May 17, 2013). Highway improvements underway in Greater Toronto Area. Retrieved from <http://news.ontario.ca/mto/en/2013/05/highway-improvements-underway-in-greater-toronto-area-1.html>

DIRECT EFFECTS OF TRANSPORTATION IMPROVEMENTS ON REAL ESTATE VALUES

Distance is Now Measured in Minutes, Not Kilometres

Over the past seventeen years, our research has revealed that real estate values are driven both up and down by eight clear fundamentals, of which transportation change is one of the most dramatic catalysts¹⁰. The basic theory in real estate is that the more attractive the location, the higher the value of the home. As the demand for homes in that area expands, the result is higher housing values. This location theory is often misunderstood, as location is not just a subjective desire (e.g., to be close to the beach), but is actually a combination of all eight fundamentals, each of which contribute to desirability. The key fundamental we are studying in this report is **Transportation Accessibility**.

Accessibility Drives Real Estate Prices

Generally, one of the attributes coveted by home buyers is nearness to the Central Business District (CBD). As saturation occurs and homes are no longer affordable, people begin to find locations outside the vicinity. Access to good highway systems, mass transit and commuter rail is sought in order to afford easy access to the CBD. Accessibility is a critical determinant of residential land values, and the improved access between urban centres and residential neighbourhoods greatly improves the value of homes¹¹.

As fuel prices continue to rise across the globe, commute times, commute costs and accessibility to job centres become key determinants for potential home buyers and commercial enterprises. Residents now measure their commute distances in minutes, not kilometres, a process that leads to higher demand for properties that are located farther from their jobs in distance, yet closer in terms of commute time.

Walkability

Further proving that minutes are becoming more important than kilometres is the growing popularity of walk scores. Launched in 2007, www.walkscore.com calculates an address's walkability by bestowing points for amenities located within a one mile (or 1.6 kilometre) radius. Such amenities include schools, nearby stores, restaurants, and parks.

Realtors are increasingly using walk scores as part of their MLS listings for homes for sale or as part of the advertising for homes for rent. Using an algorithm, the walk score provides a quantitative alternative to the traditional feature often found in ads of properties for sale or rent of "close to amenities". A high walkability score is a big draw for potential buyers. Current market turbulence means people are looking to save money any way they can. The option of saving gas by using mass transit such as bus and LRT adds allure to a property. Advertising nearness to transit and amenities is a huge draw and smart marketers are taking this free walking measure and running with it. Research indicates that a "walk and rider" living close to transit saves over \$1,200 per year¹². The research further posits that the group reaping the largest benefits are renters; wherein, the prices of real estate in areas with improved transit have not increased proportionately to the cost savings of using transit over car commuting and hence the premium has historically not been reflected in

¹⁰ Campbell, Don R. (2005) *Real Estate Investing in Canada* ISBN 0-470-83588-5 John Wiley & Sons Publishers: Toronto.

¹¹ Smersh, G.T. & M.T. Smith. (2000). "Accessibility Changes and Urban House Price Appreciation: A Constrained Optimization Approach to Determining Distance Effects" in *Journal of Housing Economics*, Vol. 9, No. 3, pp. 187–196.

¹² Baum-Snow, N. & M.E. Kahn. (2000). "The Effects of New Public Projects to expand Urban Rail Transit" in *Journal of Public Economics*, Vol. 77, pp. 241-263.

higher rents for these areas. Renters in these areas can save money in commuting and generally do not pay that difference in rent.

Realtors are increasingly using walk scores as part of their MLS listings for homes for sale or as part of the advertising for homes for rent. Using an algorithm, the walk score provides a quantitative alternative to the traditional feature often found in ads of properties for sale or rent of “close to amenities”. A high walkability score is a big draw for potential buyers. Current market turbulence means people are looking to save money any way they can. The option of saving gas by using mass transit such as bus and LRT adds allure to a property. Advertising nearness to transit and amenities is a huge draw and smart marketers are taking this free walking measure and running with it. Research indicates that a “walk and rider” living close to transit saves over \$1,200 per year¹³. The research further posits that the group reaping the largest benefits are renters; wherein, the prices of real estate in areas with improved transit have not increased proportionately to the cost savings of using transit over car commuting and hence the premium has historically not been reflected in higher rents for these areas. Renters in these areas can save money in commuting and generally do not pay that difference in rent.

As demonstrated throughout this report, this focus on time and accessibility has been confirmed in other studies conducted in major urban regions, whether the access improvements have been new rail transit or new highway expansion.

¹³ Baum-Snow, N. & M.E. Kahn. (2000). “The Effects of New Public Projects to expand Urban Rail Transit” in *Journal of Public Economics*, Vol. 77, pp. 241-263.

LIGHT RAIL TRANSIT EXPANSION IMPACT ON RESIDENTIAL PROPERTY VALUES

The benefits of light transit expansions go beyond the expected decreased commute times and a reduction in carbon emissions. In studies conducted across North America, the values of homes in neighbourhoods close to mass transit had premiums ranging between 3% and 40%, depending on the different types of housing and socioeconomic positions of the real estate owners¹⁴.

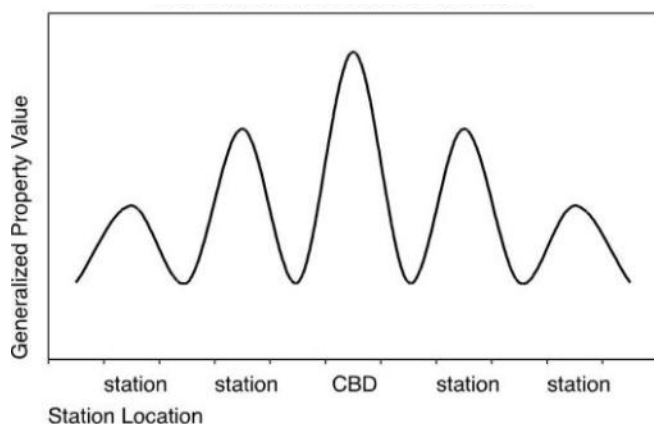


Figure 2. Peaks and Valleys of Property Values at Rail Stations in relation to the CBD

Studies show that there appears to be a higher positive impact on property values located near commuter railway stations over light and heavy railway¹⁵. The positive effects of proximity to rail transit, however, were limited to homes located within a one-half mile radius of stations. Even announcements of improvements that will shorten and ease commutes have resulted, historically, in high-valued housing developments — in comparison to new developments located a distance from these opportunities. Additionally, development sites near rail stations have tended to draw a higher density of development, resulting in a higher value or rent for these homes.

Areas in which the average income of the residents was at or below the median incomes of the whole region received the largest percentage increase in property values. As the average income of an area increased above the median, rail links did not have as much effect. This is due generally to increased reliance on transit as a means of primary transportation for people with incomes at or below the median.

As detailed in Figure 1¹⁶, the property values nearest to the stations had a dramatic increase in their average value. This effect was maximized in a zone of 500 metres surrounding each station. One study on the impact of the Los Angeles Metro Rail system revealed that properties located within one-quarter mile of a rail station enjoyed a value premium of \$31 per square foot¹⁷.

Proximity to Rail Transit and Housing Values and Rents

In areas in which the average incomes were at or below the median, the closer a dwelling was located to transit, the higher its resale value and rent. In San Francisco, for example, one-bedroom apartment units located within one-quarter mile of a suburban Bay Area Rapid Transit System (BART) rented for 10% more per square foot than other one-bedroom units in similar neighbourhoods¹⁸. The demand for two-bedroom units was even stronger, and they were renting for a 16% premium over similar two-bedrooms not directly associated with the BART station.

14 Diaz, R. (n.d.) *Impacts of Rail Transit on Property Values*. www.apta.com/research/info/briefings/documents/diaz.pdf.

15 Debrezion, G., E. Pels, & P. Rietveld. (2003). *The Impact of Railway Stations on Residential and Commercial Property Value*. Tinbergen Institute Discussion Paper.

16 Ibid.

17 Fejarang, R. A. (1994). *Impact on Property Values: A Study of the Los Angeles Metro Rail*, Transportation Research Board, 13th Annual Meeting, Washington, D.C.

18 Cervero, R. (1996). "Transit-Based Housing in the San Francisco Bay Area: market Profiles and Rent Premiums", in *Transportation Quarterly*, Vol. 50, No. 3, pp. 33-47.

Overall, studies have found that rent decreased by approximately 2.5% for every one-tenth of a mile distance from the station¹⁹.

A study examining the long-term effects of the BART system on housing prices over a twenty-year period indicated that homes closer to the system were valued 38% higher than similar homes not located near any BART services²⁰. In Alameda County, house prices rose by \$2.29 for every metre a house was located closer to a rapid transit station.

New Jersey experienced similar positive effects. The median prices for homes located in census tracts immediately served by the rail line were 10% higher than those in other census tracts²¹. Similar effects were seen in Portland, where homes within 500 metres of light rail sold for 10.6% more than houses located 500 metres or more away.

A study conducted by the University of Buffalo's Architecture and Planning department found that proximity to a rail station in the Buffalo region was the fourth property characteristic that potential buyers considered in their housing purchases. Property value was assessed at premium in neighbourhoods close to most stations, even when the study factored in house size, number of bedrooms, nearby parks, and average crime rate in the area.²²

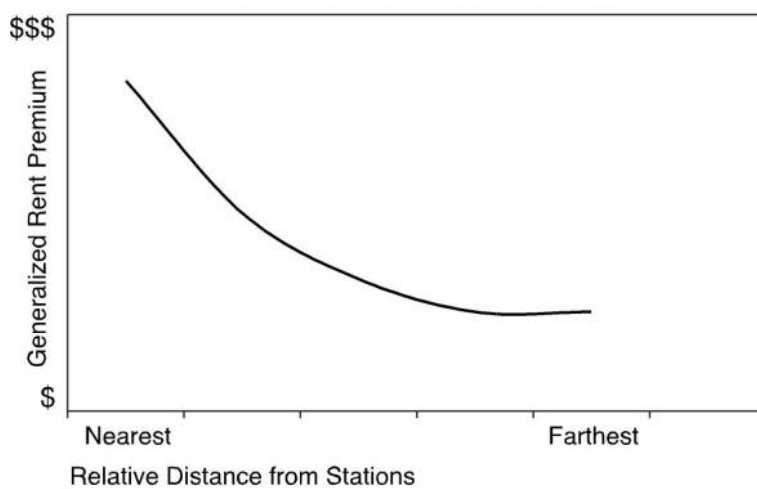


Figure 3. Residential Rental Premium versus Distance from Commuter Rail Station

In anticipation of the implementation of Chicago's Midway Line, one study found that the collective increase in the value of homes located near new transit stations was US\$216 million more than properties located farther away²³. A study conducted in the 1980s in Ontario found that, in Metropolitan Toronto, the savings realized from living in an area that afforded a shorter and easier commute using transit translated into a willingness to pay more for homes that delivered these time savings²⁴. This is true even today, with a premium being placed on both rents and market values for properties located with walking distance (500 metres) of the subway and commuter train stations.

A report by Savills published in 2007 shows that a one-minute reduction in commuter rail journey in London increases the average value of a home by approximately £1,000. At the same time, the report noted that homes right next to a commuter rail station or a main road may experience a decrease in the average home

19 Benjamin J.D., Sirmans G. S. (1996). "Mass Transportation, Apartment Rent and Property Values" in *The Journal of Real Estate Research*, Vol. 12, Issue 1.

20 Landis, J. & R. Cervero. (1995). "BART at 20: Property Value and Rent Impacts." Transportation Research Board, 74th Annual Meeting, Washington, D.C.

21 Voith, R. (1991). "Transportation, Sorting and House Values" in *AREUEA Journal*, Vol. 117, No. 19.

22 Donovan, Patricia. (2007). "Housing Prices Higher Near Most Buffalo Metro Rail Stations". On University of Buffalo website: <http://www.buffalo.edu/news/8669>

23 McMillen, D. & McDonald, J. (2004). "Reaction of House Prices to a New Rapid Transit Line: Chicago's Midway Line, 1983-1999" in *Real Estate Economics*, Vol. 32, p. 463.

24 Bajic, V. (1983). "The Effects of a New Subway line on Housing Prices in Metropolitan Toronto" in *Urban Studies*, Vol. 20, No. 2 May, pp. 147-158.

16 Weinstein, B. & T. Clower. (1999). *The Initial Economic Impacts of the DART LRT System*. Prepared for Dallas Area Rapid Transit.

price as buyers are less attracted to these areas. The Savill report shows a positive correlation between the percentage of commuters in the area and average house prices²⁵.

In the majority of the studies reviewed, commuter railway stations have had a significantly higher impact on property values than light or heavy railway stations. This allows us to analyze the impact of the CTrain's new lines with a significant degree of accuracy.

Negative Effects of Rail Transit on Property Values

There were some impacts from transit that negatively affected housing values as well. Noise, nuisance, associated crime and increased traffic combined to decrease property values in the *immediate* vicinity of stations. In two communities in Atlanta, there were two very different effects of rail on housing prices, based solely on the existing median incomes of the areas.

In a neighbourhood south of the tracks, whose population had a lower median income, residents put more value on access to rail transit. Therefore, home values increased by \$1,045 for every 100 feet closer to a rail station. Conversely, in a neighbourhood north of the tracks with a higher median income, housing prices dropped by nearly the same amount the closer they were to the stations. This is likely explained by this group's reliance on personal vehicles versus mass transit, in addition to increased noise and associated crime. In the southern (lower median income) neighbourhood, these issues were mitigated by the ease of travel using mass transit.

In studies that found transit accessibility had little impact on home values — such as that conducted on the Dallas Area Rapid Transit system — it was determined that these cities had well-maintained, efficient highway networks already available to the residents²⁶.

Impact of Commuter Rail on Commercial Property

Studies indicate that the proximity to mass transit has even more impact on the values of commercial properties²⁷. The movement of a large number of people is conducive to increased retail activities, expanding the attractiveness of the area to commercial investors and retailers. Whereas the value of homes located immediately adjacent transit stops is often less than areas beyond eyesight, the value of retail property is only higher when directly adjacent rail stations²⁸.

²⁵ Cook, L., Barnes, Y., Ward, J., Hudson, N., Rose, L. (2007). "Commuter impact on property". Savills Research.

²⁶ Weinstein, B. & T. Clower. (1999). *The Initial Economic Impacts of the DART LRT System*. Prepared for Dallas Area Rapid Transit.

²⁷ Debrezion, G., E. Pels, & P. Rietveld. (2003). *The Impact of Railway Stations on Residential and Commercial Property Value*. Tinbergen Institute Discussion Paper.

²⁸ Ibid.

RAPID TRANSIT IN THE GTA

Rapid Transit is becoming more and more attractive in the GTA as commute times increase due to a population explosion and subsequent auto congestion around the city and suburbs. The current Subway and RT, which consists of both underground and elevated rail lines, is operated by the Toronto Transit Commission (TTC). The system opened in 1954 on Yonge Street, with a total of 12 stations.

Since then, the system has expanded to become Canada's largest rapid transit rail network, and its busiest²⁹. As of December 2013, the system sees an average of 1,621,000 passengers each weekday. The three busiest stations are Bloor (211,300), on the Yonge-University-Spadina line; Yonge (190,000), on the Bloor-Danforth line; and St George (129,400), on the Bloor-Danforth line³⁰. The expansion of the system will make rapid transit even more popular and accessible to Greater Toronto residents.

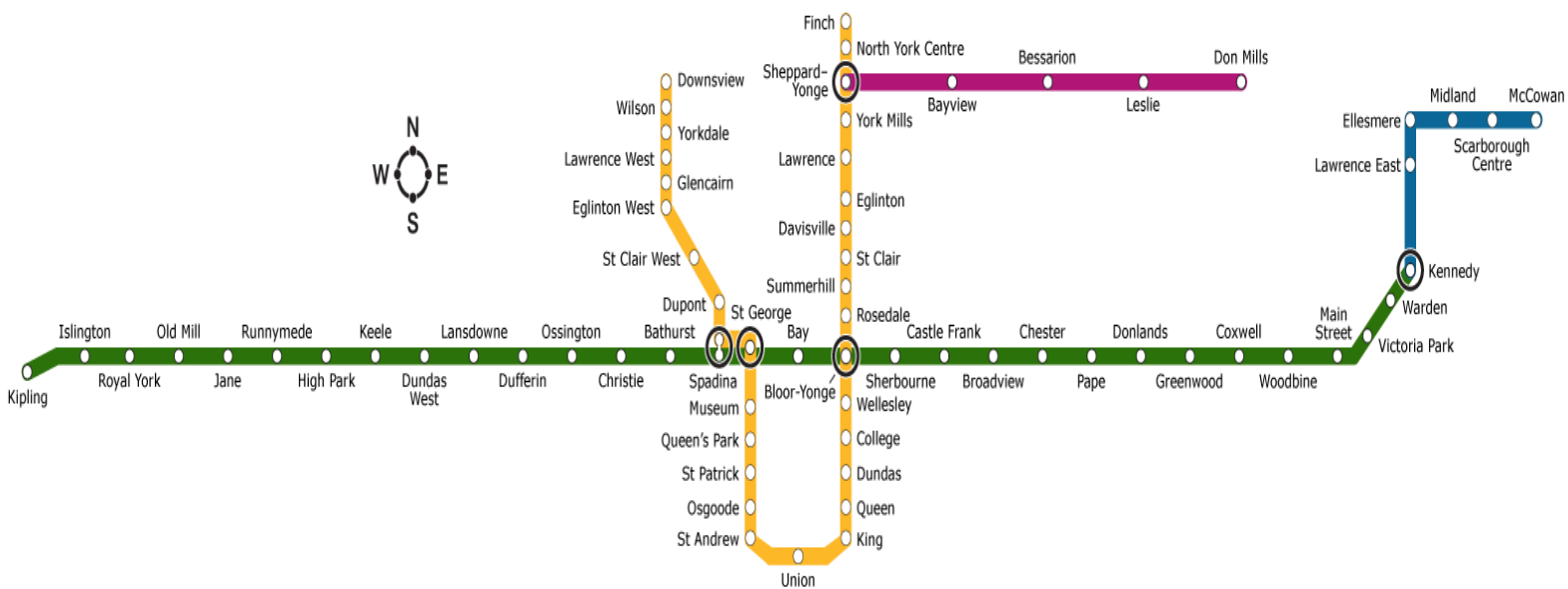


Figure 4. Map of the Current GTA Subway/RT Lines
Source: Toronto Transit Commission

On June 15, 2007, the Premier and Minister of Transportation announced "MoveOntario 2020", a 12 year plan to fund 52 transit projects to improve transit services provided in southern Ontario by GO Transit, the Toronto Transit Commission, and other regional transportation agencies.

Although these projects were approved and officially announced by both the province and city, civic elections got in the way. The new Mayor, Rob Ford, requested that the Toronto Transit Commission develop a new plan that is consistent with his platform. What followed was two years of raging debates between council members over whether or not LRT should be included in the city's future plans – all of which Toronto Mayor Rob Ford fervently ended by stating he would not support LRT over subways. On March 22, 2012, Toronto City Council voted in favour of Light Rail transit for the City of Toronto, putting all of Metrolinx's original plans back on the

²⁹ APTA. (February 26, 2014). "Public Transportation Ridership Report – Fourth Quarter 2013".

<http://www.apta.com/resources/statistics/Pages/ridershipreport.aspx>

³⁰ Toronto Transit Commission. (2013). "System Quick Facts". https://www.ttc.ca/About_the_TTC/Operating_Statistics/2012.jsp

table³¹. However, the two year debate put Metrolinx's transit plans far behind the original completion schedule and it won't be until 2020 that the City of Toronto reaps the benefits when the first of the transit projects, the Eglinton Crosstown RT, has been completed.

These projects show the prudence of waiting until the shovel hits the dirt before making any investment decisions, as governments and spending priorities change.

CURRENTLY UNDER CONSTRUCTION

Rapid Transit projects that are currently under construction in the Greater Toronto Area.

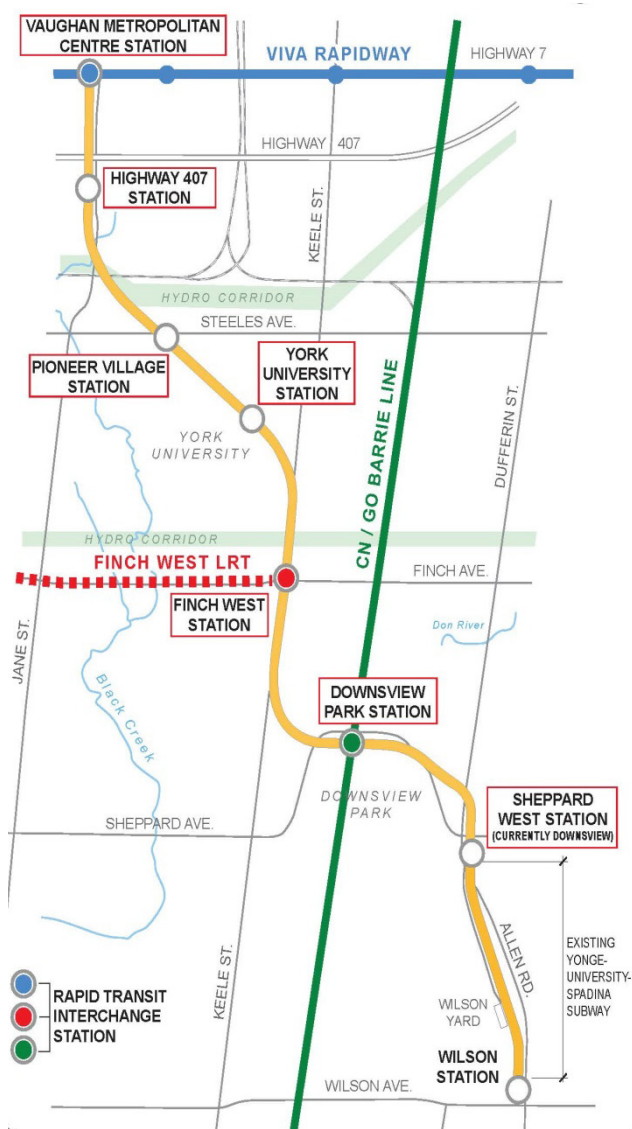


Figure 5. Map of the Spadina Line Extension
Source: Toronto Transit Commission

Spadina Subway Extension

The Toronto-York Spadina Subway extension project will provide a critical extension of the existing Spadina subway line from Toronto into the York Region. The 8.6 kilometre extension will begin at Downsview Station (name will be changed to Sheppard West) and travel northwest through York University and north to the Vaughan Metropolitan Centre, with trains arriving every four minutes. The six-station project will be the first TTC project to cross the City of Toronto boundary. Construction on the project has already begun and service is planned to begin in the fall of 2016³². The six new stations that will open along this line are:

Downsview Park

The station is located in Parc Downsview Park lands, adjacent to the Barrie GO Transit Line's Sheppard West



Figure 6. Downsview Park Station

³¹ Church, Elizabeth & Grant, Kelly. (March 23, 2012). "Toronto's Mayor Ford vows to 'lead the charge' in halting light-rail transit". http://www.theglobeandmail.com/news/national/toronto/torontos-mayor-ford-vows-to-lead-the-charge-in-halting-light-rail-transit/article2379209/?utm_medium=Feeds%3A%20RSS%2FAtom&utm_source=Home&utm_content=2379209

³² Toronto Transit Commission. (2014). "Toronto-York Spadina Subway Extension Overview". Retrieved from http://www3.ttc.ca/Spadina/About_the_Project/Overview.jsp

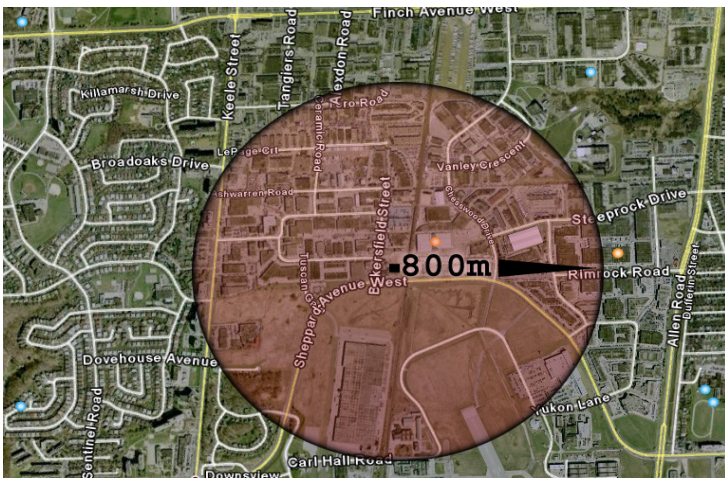


Figure 7. Finch West Station

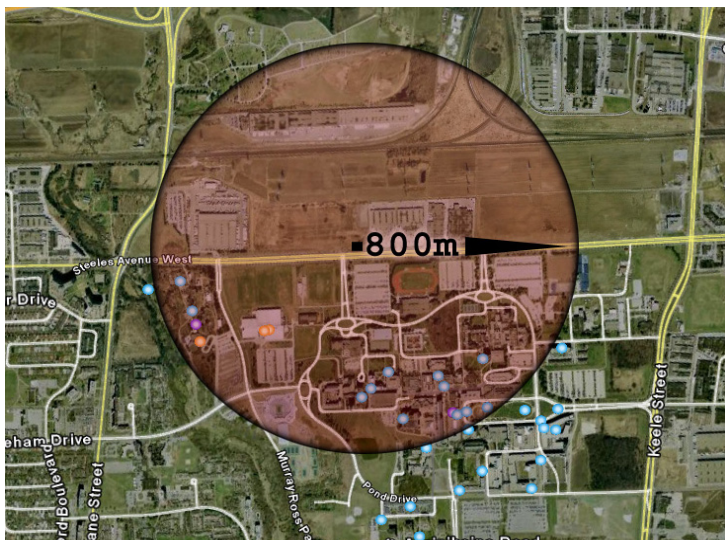


Figure 8. York University Station

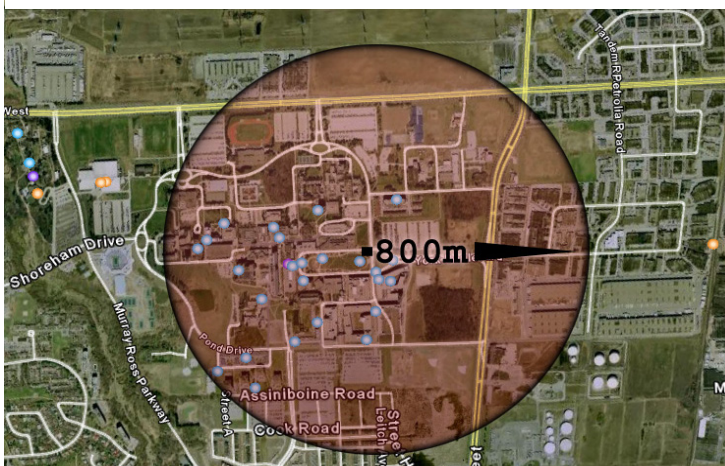


Figure 9. Pioneer Village Station

station³³. The Sheppard West and Downsview regions will enjoy one of the strongest increases in demand for property over the coming decade, as it will be serviced by two major transit systems, the GO Train and TTC system. Within two years of this new transit station's completion, commuters will begin to discover the convenience of the area and therefore increase demand on properties in the region. The largest impact will be felt within 800 meters of the new station, however because of the combination of two transit systems; the area outside of this 800 meter radius will also feel the positive impact.

Finch West

Located at the corner of Keele Street and Finch Avenue, this station will also have a park and ride lot with 400 spaces to encourage commuters to use the subway system³⁴. Homes in the vicinity of Bratty Park, Derrydowns Park, and York University Heights will experience price premiums.

York University

York University station will be located at the east end of the York University Common where nearly 2000 buses a day (from the TTC, GO, VIVA, and BT) currently serve transit users³⁵. This station will benefit students traveling to the university from the communities surrounding Toronto.

Pioneer Village

Pioneer Village station will be located at North West Gate and Steeles Avenue, east of Jane Street. This station was originally named Steeles West, but the name was changed in September 2012 to reflect the tourist attraction of Black Creek Pioneer Village, which is less than a kilometre away from the station³⁶. The line will approach from York University station northwestward, directly under the university's main buildings, to meet the station. The station will include a park and ride lot with 1,900 spaces to accommodate commuters who live too far away to

³³ Ibid.

³⁴ Ibid.

³⁵ Urban Toronto. (2013). "York University Station." Retrieved from <http://urbantoronto.ca/database/projects/york-university-station>

³⁶ Peat, D. (July 24, 2013). "TTC renames new subway stop Pioneer Village station." *Toronto Sun*. Retrieved from <http://www.torontosun.com/2013/07/24/ttc-renames-new-subway-stop-pioneer-village-station>

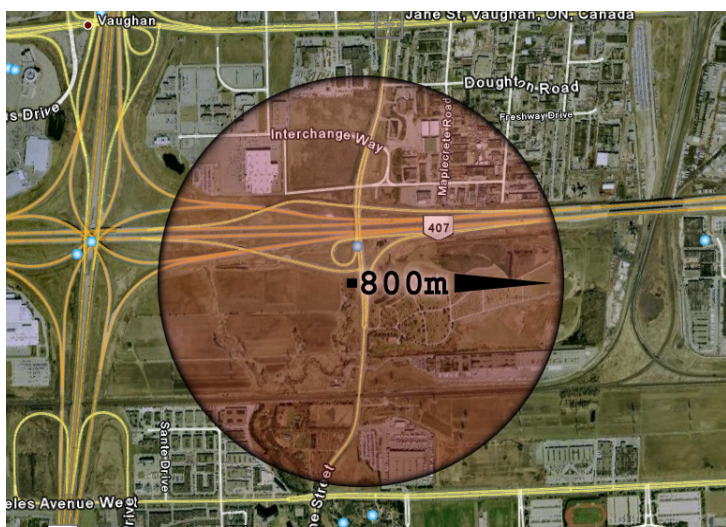


Figure 10. Highway 407 Station

walk³⁷. Houses in the Black Creek area should experience an increase in property values.

Highway 407

The Highway 407 Station will be adjacent to Jane Street and the Highway 407 ETR interchange. This station is intended to be a transit hub, with parking for 600 commuters, and an 18-bay bus terminal for York Region Transit and GO Transit. A new bridge structure will be constructed over Black Creek to provide access to the bus terminal and parking lot³⁸. Price premiums from this station will be experienced in the community of Edgeley.

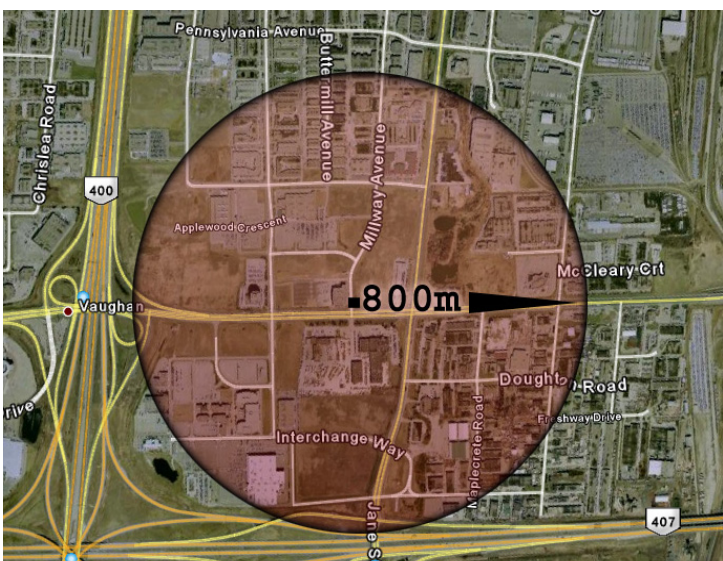


Figure 11. Vaughan Metropolitan Centre Station

Vaughan Metropolitan Centre

The terminus of the Spadina line will be located under Millway Avenue on the north side of Highway 7, west of Jane Street. The station will connect commuters with the York Region Transit Bus Terminal and the Viva Bus Rapid Transit route which will run along Highway 7³⁹.

The station will be located at the site of the proposed Vaughan Metropolitan Centre. The centre will be spread out over 442 acres and will include movie theatres, hotels, offices, residences, and pedestrian shopping areas. The development will be situated along the Avenue 7 corridor, just east of Highway 400⁴⁰.

The growth of the Vaughan Metropolitan Centre, with its proposed residences and commercial space will change the face of the whole region. The addition of this station will be a catalyst for growth and property demand, and although it is not slated to open until 2016, the announcement has already spurred enthusiasm for the completion of the project.

Eglinton Crosstown LRT

The Eglinton-Scarborough Crosstown LRT is a 19 kilometre light rail transit line that will run along Eglinton Avenue from Jane Street in the west to Kennedy Road in the east. The line will be tunneled for ten kilometres

³⁷ Ibid.y

³⁸ Toronto Transit Commission. (November 17, 2009). Toronto-York Spadina subway extension project highway 407 station approval of conceptual design. Retrieved from http://www3.ttc.ca/About_the_TTC/Commission_reports_and_information/Commission_meetings/2009/November_17_2009/Reports/TYSSE_Highway_407_St.pdf

³⁹ Toronto Transit Commission. (2014). "Toronto-York Spadina Subway Extension Overview". Retrieved from http://www3.ttc.ca/Spadina/About_the_Project/Overview.jsp

⁴⁰ City of Vaughan. (2012). "Vaughan Metropolitan Centre." Retrieved from https://www.v Vaughan.ca/business/General%20Documents/Vaughan_Metropolitan_Centre_brochure_May_2012_FINAL.pdf

between Keele Street and Laird Drive and will continue east at-grade on a right-of-way separated from traffic to Kennedy Station (HOV lanes will be removed to accommodate the line), at which point it will join with the converted Scarborough RT line. Construction on the \$8.2 billion project began in 2011 and the line is expected to be in service by 2020⁴¹.

The Crosstown line will significantly cut Toronto residents' travel times and conveniently link to 54 local bus routes, three TTC interchange subway stations (two Yonge-University Spadina Subway line stations and the Scarborough RT) and GO Transit (the Georgetown Line, the Barrie Line, The Richmond Hill Line, and the Stouffville Line)⁴². The projected ridership of the Crosstown is 5,400 passengers per hour in the peak direction by 2031⁴³.

Tunnel boring construction has only just begun, and station names and locations are still subject to change. Metrolinx has announced that "the Crosstown line will include up to 25 stations and stops⁴⁴." At the moment, properties in the Mount Dennis, York, Beechborough-Greenbrook, Keelesdale, Fairbank, Eglinton West, northern Oakwood, northern Cedarvale, Forest Hill, Chaplin Estates, Mount Pleasant West, Midtown, Davisville, Leaside, northern Thorncliffe Park, Flemingdon Park, southern Victoria Park Village, the Golden Mile, and Ionview communities within the 800m radius of the station will experience price premiums. See Figure 12 for the list of proposed stations along the Eglinton route.

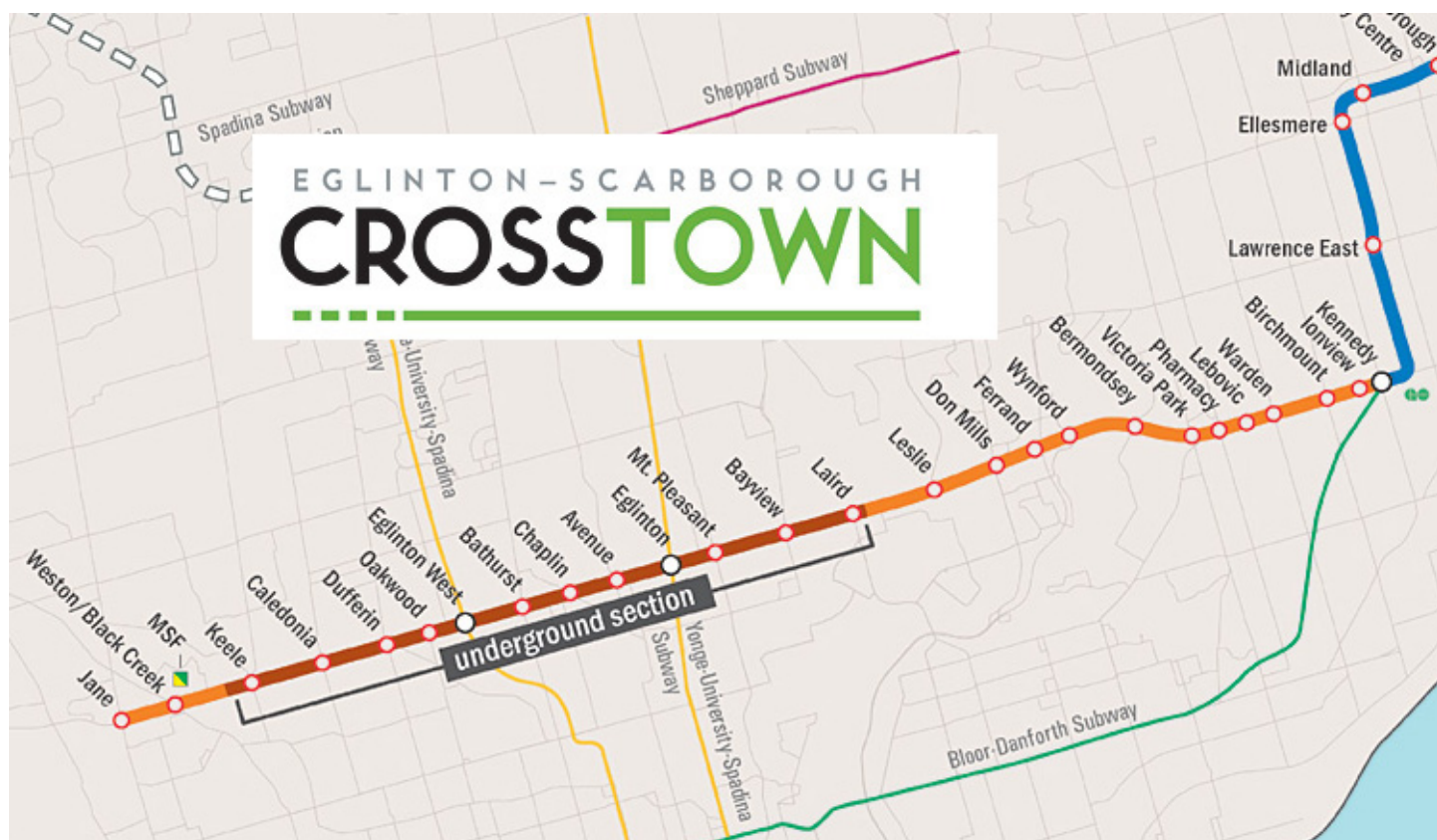


Figure 12. Map of the Eglinton-Scarborough Crosstown LRT
Source: Toronto Transit Commission

⁴¹ Metrolinx. (2013). "Eglinton-Scarborough Crosstown". Retrieved from <http://www.thecrosstown.ca/the-project/the-crosstown>

⁴² Ibid.

⁴³ Metrolinx. (2014). "What is the Crosstown?". Retrieved from <http://www.thecrosstown.ca/the-project>

⁴⁴ Metrolinx. (2014). "Eglinton-Crosstown Background". Retrieved from <http://www.thecrosstown.ca/the-project>

REMAINING METROLINX MOVE 2020 TRANSIT PROJECTS

The Greater Toronto Area will see transit access improve in the next decade after all of Metrolinx's Move 2020 lines finish construction.

Finch West LRT

The Finch West LRT line will be an 11 kilometre route along Finch Avenue from the Finch West subway station (currently under construction as part of the Spadina Subway Line extension) at Keele Street to Humber College. The LRT will replace an incredibly busy bus route, while providing fast and frequent service through North York and Etobicoke. The entire Finch West LRT is proposed to be aboveground, using reserved transit lanes in the centre of Finch Avenue⁴⁵.



Figure 13. Map of the Finch West LRT
Source: Toronto Transit Commission

When the shovel finally hits the dirt, several neighbourhoods stand to receive an increase in their average house prices. The communities of Bratty Park, Fountainhead Park, Derrydowns Park, Driftwood Park, southern Black Creek, Firgrove Park, Emery, Landyard Park, Bluehaven Park, Gracedale Park, Beaumonde Heights, Rowntree Mills Park, Highfield Park, Masseygrove Park, Rexdale, and Humber College will experience the highest property value increases.

Work on the Finch LRT line will begin in 2015 with the line in operation by 2020. The line is expected to accommodate 2,800 people per hour in the peak direction by 2031⁴⁶.

Sheppard East LRT

The existing Sheppard Line is a 5.5 kilometre subway running from Sheppard/Yonge Station on the Yonge-University-Spadina line to Don Mills station, near the intersection of Don Mills Road and Sheppard Avenue

⁴⁵ Toronto Transit Commission. (March 2010). "Notice of Completion of Environmental Project Report: Etobicoke-Finch West Light Rail Transit". http://www.toronto.ca/involved/projects/etobicoke_finch_w_lrt/pdf/2010_03-11_notice_of_completion.pdf

⁴⁶ Toronto Transit Commission. (2013). "LRT Plan for Toronto." Retrieved from http://www.ttc.ca/About_the_TTC/Projects_and_initiatives/Light_Rail_Projects/LRT_Plan_for_Toronto/index.jsp

East. The Toronto Transit Commission has plans to extend the line east in the form of light rail transit, from Don Mills Station to a new terminus at Meadowvale Road in northeast Scarborough⁴⁷.

The Sheppard extension will not be a subway, but an LRT line. The LRT will run in reserved lanes down the middle of Sheppard Avenue between Consumers Road and Meadowvale road (this will require major road widening of Sheppard Avenue East between Pharmacy Road and Meadowvale Road). Further detailed design work needs to be completed to allow a final decision between two alternative LRT/subway connections to Don Mills Station:

1. An LRT tunnel under Highway 404 that will provide a direct connection at the subway platform level at Don Mills Station
2. An easterly extension of the Sheppard Subway line to Consumers Road with a connection to a surface LRT

Construction on the project is scheduled to begin in 2017 with the line up and running by 2021⁴⁸.

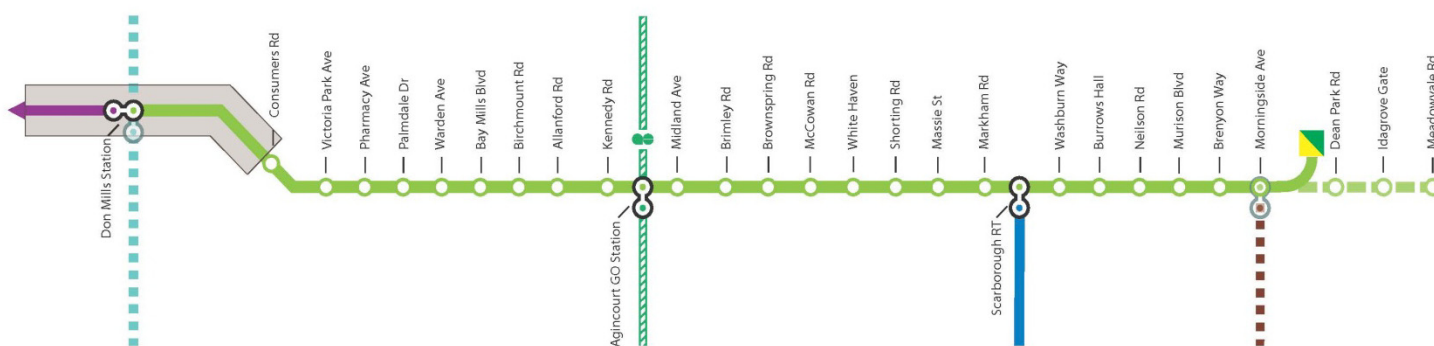


Figure 14. Map of the Sheppard East LRT

Source: Toronto Transit Commission

Regardless of where the line transitions from subway into LRT, neighbourhoods around the line are guaranteed to experience a positive increase. Homes located in the areas of Parkway Forest, southern Pleasant View, Vradenburg Park, Bridlewood Park, Scarden Park, Tam O'Shanter, Inglewood Heights, Agincourt, Scarborough, Malvern West, Malvern, Murison Park, Dean Park, and Rouge will all enjoy not only quick access to the station, but also premiums above average home price increases thanks to this new transit access.

Scarborough RT

The existing Scarborough Rapid Transit (RT) is a 6.5 kilometre line running from Kennedy Station to McCowan Road. Originally, the line was supposed to be upgraded to an LRT in order to merge successfully with the Eglinton Scarborough Crosstown LRT line⁴⁹. The line was to be extended from the current terminus at McCowan north-eastward along Progress Avenue to Centennial College and connect to the planned Sheppard East LRT line⁵⁰.

⁴⁷ City of Toronto. (2011). "Sheppard Avenue East Light Rail Transit (LRT) – Background." Retrieved from http://www.toronto.ca/involved/projects/sheppard_east_lrt/background.htm

⁴⁸ Toronto Transit Commission. (2013). "LRT Plan for Toronto." Retrieved from http://www.ttc.ca/About_the_TTC/Projects_and_initiatives/Light_Rail_Projects/LRT_Plan_for_Toronto/index.jsp

⁴⁹ Toronto Transit Commission. (October 2010). "Notice of Completion of Environmental Project Report: Scarborough Rapid Transit Conversion and Extension". http://www.toronto.ca/involved/projects/scarborough_rapid_transit/epr/notice_of_completion_epr_srt.pdf

⁵⁰ Metrolinx. (2011). "Scarborough RT Extension." Retrieved from http://www.bigmove.ca/wp-content/uploads/2013/01/InProgress_ScarboroughRT.pdf

However, in September of 2013, the Government of Ontario announced it would instead be replacing the RT with a subway that would terminate at Scarborough Centre. Provincial Transportation Minister Glen Murray says the province is prepared to pay \$1.4 billion to extend the current subway 6.4 kilometres from Kenney Station to Scarborough City Centre⁵¹.

The proposed extension would mostly run along the route of the existing Scarborough RT, most of it above ground. According to the Transportation Minister, the plan currently has “a minimum” of two stops⁵². At a news conference a few days later, Minister Murray said the project had a 30% contingency fund, and that “the budget considers options for multiple number of stations...that can accommodate three or four stations⁵³.”

While Toronto City Council voted in favour of a subway over Metrolinx’s proposed Scarborough LRT, the city was looking to build a 7.6 kilometre subway to Sheppard along a different route⁵⁴. However, the City of Toronto has shown some support for the province’s decision, approving a 1.6 percent property tax levy (to be phased in over three years) to pay Toronto’s share of the subway, estimated to cost between \$2.5 billion and \$3 billion⁵⁵.

As the city and the province have different views on the Scarborough route, heated debates are sure to occur over the next few years. Once again, this project shows the prudence of waiting until the shovel hits the dirt before making any investment decisions. Government opinion is divided on this line and spending priorities may change again.

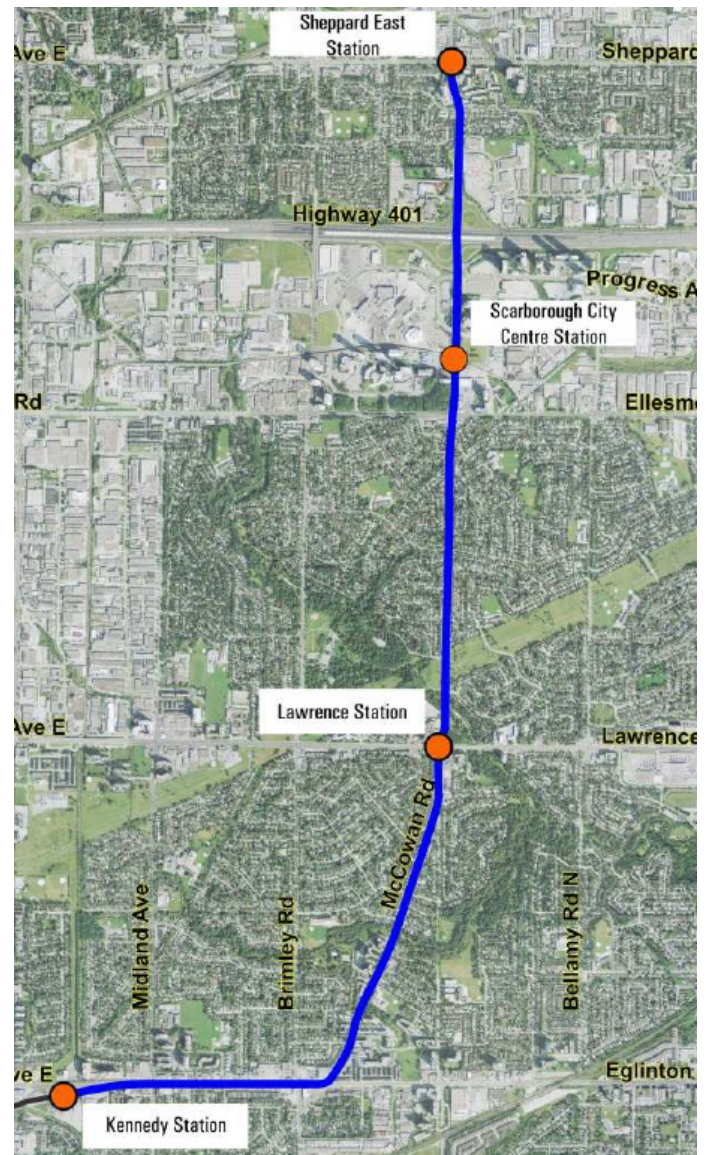


Figure 15. Proposed Route for Scarborough Subway
Source: Metrolinx

Regardless of whether the line is converted to an LRT or a subway, or how many stations are ultimately decided on, as long as it follows the existing Scarborough RT route, very few new communities will receive an increase in real estate demand after construction has been completed.

⁵¹ Moore, O. & Church, E. (September 4, 2013). Scarborough subway to be built with shortened route, Ontario announces. *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/news/toronto/scarborough-subway-will-be-built-with-shortened-route-ontario-to-announce/article14104101/>

⁵² Ibid.

⁵³ Mok, T. (September 5, 2013). “We can accommodate three or four stations”: Glen Murray wishes he had put a few more stops on that proposed subway map.” *National Post*. Retrieved from <http://news.nationalpost.com/2013/09/05/we-can-accommodate-three-or-four-stations-glen-murray-wishes-he-had-put-a-few-more-stops-on-that-proposed-subway-map/>

⁵⁴ Moore, O. & Church, E. (September 4, 2013). Scarborough subway to be built with shortened route, Ontario announces. *The Globe and Mail*. Retrieved from <http://www.theglobeandmail.com/news/toronto/scarborough-subway-will-be-built-with-shortened-route-ontario-to-announce/article14104101/>

⁵⁵ Kalinowski, T. & Powell, B. (October 8, 2013). “Scarborough subway confirmed by Toronto council.” *Toronto Star*. Retrieved from http://www.thestar.com/news/gta/2013/10/08/scarborough_subway_confirmed_by_toronto_council.html

FUTURE GTA RAPID TRANSIT PLANS – “ONE CITY TRANSIT PLAN

While the city will have its hands full for at least the next decade with the light rail transportation improvements already listed in this report, the TTC has outlined additional LRT and subway lines could be built in the future to further alleviate traffic congestion.

The following map shows the city's future transit plans, some of which are detailed below:



Figure 16. OneCity Transit Concept

Source: Toronto Transit Commission

Finch West LRT Phase 2 - to Finch Station on Spadina

On February 8, 2012, Toronto City Council affirmed its support for the “Finch West LRT from Humber College to the future Finch West Station on the Spadina Subway Extension at Keele Street”. This means that the line will most likely be built in two stages; with the LRT originating at Humber College and terminating at the Finch West LRT station on the Spadina Line to be completed by 2021 and Phase 2, from Finch West Station to Finch Station to be constructed several years later.

Don Mills Subway and LRT

The Don Mills line would be built in two phases. Phase 1 would see a new subway line begin at the Queen subway station and terminate at a Don Mills Station on the Eglinton-Crosstown LRT. This is the line that used to be dubbed the “downtown relief line.” Phase 2 would see the line continue on to Steeles Avenue, connecting to the Sheppard East LRT along the way.

Jane Street LRT

The Jane Street LRT will operate between the Bloor-Danforth subway line and Steeles Avenue. The line will make connections with the Eglinton Crosstown LRT line and Finch West LRT line and the new Pioneer Village Station on the Spadina subway extension.

Eglinton-Crosstown Phase 2

This line would extend from the existing Eglinton-Crosstown LRT terminus at Jane Station to the Pearson International Airport. The line would eventually continue north to meet up with the existing Finch West LRT terminus at Humber College.

Waterfront West LRT

The Waterfront LRT line will be an extension of the existing Harbourfront streetcar and will provide service between Union Station, Exhibition Place, Parkdale, High Park and Long Branch Station in South Etobicoke.

GTA HEAVY RAIL TRANSIT

GO Transit is Ontario's interregional public transit system, servicing the GTA and Hamilton area. Go Transit operates seven train lines and a bus system that serve a population of over 7 million people within a 11,000 square kilometre area. GO currently runs 240 train trips and 2,061 bus trips daily, and carries approximately 251,000 passengers a day. 96% of GO Train commuters travel to and from Union Station in Toronto, while about 70% of bus trips made by commuters are to and from Toronto⁵⁷.

GO carries nearly 65 million passengers a year on a system of trains and buses that connect with each other and with regional transit across the Greater Toronto Area and Hamilton⁵⁸. The train system is a heavy rail commuter rail network that mainly operates only in peak rush-hour periods and then only in the primary direction of travel. The following map shows GO Transit service options throughout the GTA.



Figure 17. GO Transit System Map

Source: GO Transit. (January 2014). Maps.

⁵⁷ Go Transit. (January 2014). What is Go? Retrieved from <http://www.gotransit.com/public/en/aboutus/whatisgo.aspx>

⁵⁸ Ibid.

CURRENTLY UNDER CONSTRUCTION

GO Train projects that are currently under construction in the Greater Toronto Area.



Richmond Hill Line

The Richmond Hill GO Line runs from Union Station in downtown Toronto to Richmond Hill Station in the community of Richmond Hill. Stations along this line include: Union Station, Oriole, Old Cummer, Langstaff, and Richmond Hill. GO Transit completed an Environmental Assessment for the expansion of rail service on the Richmond Hill corridor in November 2009, with the intention of adding two new stations⁵⁹.

Gormley GO Station

The Gormley GO Station will be located just north of Stouffville Road and east of Leslie Street, near Highway 404. Construction on the project began in the summer of 2012 and the station is expected to be open to commuters by the end of 2014⁶⁰. The positive influence of this station will be felt not only in Gormley, but surrounding communities due to its proximity to Highway 404.

GO Transit plans to build a second station in Bloomington, but this portion of the project does not yet have funding.

Georgetown South Project

Construction is underway to extend a 3.3 kilometre rail spur from the Kitchener Line south to the Pearson International Airport as part of the Georgetown South Project. The trains will run on the same tracks as the Kitchener Line GO Trains, but will be referred to as The Union Pearson Express, only stopping at Bloor and Weston stations. Union Pearson Express trains will arrive every fifteen minutes and carry passengers on a 25 minute ride southeast through Toronto's suburbs before arriving at the Lester B. Pearson International Airport. The Union Pearson Express will be ready to carry our first guests in the spring of 2015 – in time for Toronto to host the 2015 Pan American Games⁶¹.

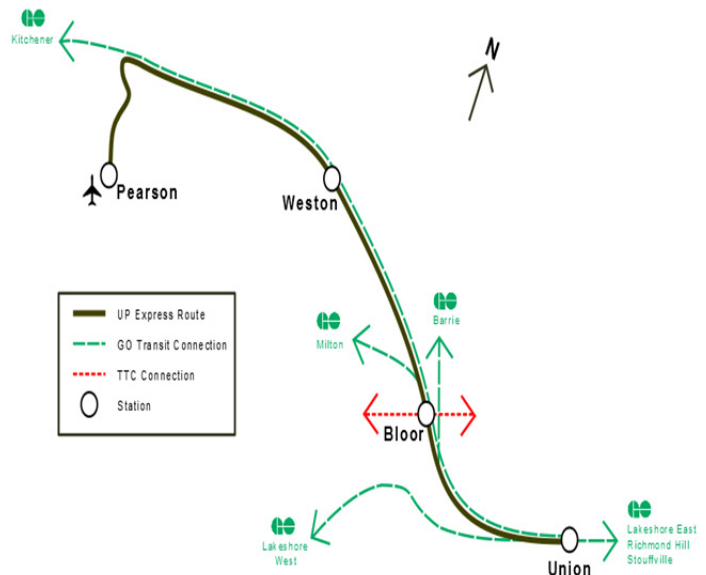


Figure 19. Union Pearson Express System Map

Source: Transit Toronto

⁵⁹ GO Transit. (2014). "Richmond Hill Rail Service Extension". <http://www.gotransit.com/public/en/improve/projects.aspx>

⁶⁰ Ibid.

⁶¹ Metrolinx. (2014). Union Pearson Express. Retrieved from <http://upexpress.com/en/information/information.aspx>



Figure 20. Artist's Rendering of Union Station

Source: Union Pearson Express

Union Station

Union Pearson Express passengers will board trains at a newly-constructed platform within the existing Skywalk in downtown Toronto. The new station will be connected to Toronto Transit Committee's (TTC) Union LRT Station via the Skywalk's interior walkway. This will enable guests to travel between the LRT and heavy rail terminals without having to walk outside⁶².

Bloor Station

The Union Pearson Express trains will travel along the Kitchener GO Train line, stopping at the Bloor GO Station just east of the Bloor Street/Dundas Street intersection. The Union Pearson Express trains will be located at one end of the GO platforms, but separate entrances will be constructed for Express passengers. One of the new entrances will be located along Bloor Street, while the other will link to the existing Dundas West TTC station as well as a passenger pick-up/drop-off area⁶³.

Weston Station

Weston Station is an existing GO Train station on the Kitchener Line and is one of only two stops the Union Pearson Express will make. The station has relocated to the south side of Lawrence Avenue West, just east of Weston Road. A new parking lot with 144 spaces was built to accommodate the increased ridership on the line. There are plans to increase the parking lot by 215 parking spaces in the near future. The parking lot at John Street remains available for overflow parking. The new station will be complete by 2015 and will include access from both sides of Lawrence Avenue West⁶⁴.



Figure 21. Artist's Rendering of Weston Station

Source: Union Pearson Express

Pearson Station

After stopping at Weston Station, Pearson Union Express trains will follow the Kitchener GO line until just after the trains cross beneath Highway 427. Here, the Pearson Union Express trains will then turn south. The trains will follow a three-kilometre-long spur that will rise above Highway 409 before stopping at a terminal located beside the roof of Terminal One at the Pearson International Airport – the current site of a cable-powered people mover. Passengers can then connect to the people mover and be taken to Terminal 3 or to the parking facilities near Viscount Road⁶⁵.

⁶² Metrolinx. (2014). Union Pearson Express – Stations. Retrieved from <http://upexpress.com/en/project/stations.aspx>

⁶³ Ibid.

⁶⁴ GO Transit. (2013). Georgetown South Project – Weston GO Station. Retrieved from http://www.gotransit.com/gts/en/project/weston_station.aspx

⁶⁵ Metrolinx. (2014). Union Pearson Express – Stations. Retrieved from <http://upexpress.com/en/project/stations.aspx>

Lakeshore East Line

The Lakeshore East GO line extends from Union Station in Toronto to Oshawa. Stations include: Union, Danforth, Scarborough, Eglinton, Guildwood, Rouge Hill, Pickering, Ajax, Whitby, and Oshawa. Plans are underway to extend the Lakeshore East line to Bowmanville. On September 20, 2012, ground was officially broken to extend the Lakeshore East line from Oshawa to Bowmanville⁶⁶. Four stations will be added to the line: Oshawa West GO Station (at Thornton Road), Central Oshawa GO Station (at Ritson Road), Darlington GO Station (at Courtice Road), and Bowmanville GO Station (at Martin Road)⁶⁷. Construction on the project began in September 2012 and is scheduled to be in operation in early 2017⁶⁸.

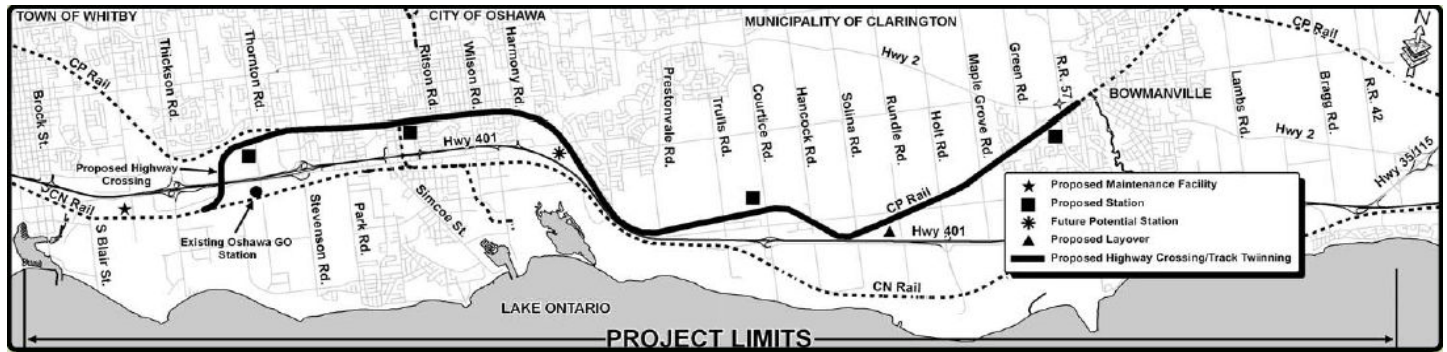


Figure 22. Map of the Lakeshore East Line Extension

Source: GO Transit

The communities of Whitby, Oshawa, Bowmanville, and Clarington will experience the highest property value increases.

FUTURE GO TRAIN CONSTRUCTION

Proposed GO Train projects that have not yet begun construction in the Greater Toronto Area.

Richmond Hill Line - Bloomington GO Station

GO Transit plans to extend the Richmond Hill line east from Gormley Station. The Bloomington GO Station will be located on the south side of Bloomington Road, on the east side of the Canadian National Railway (CNR) Line. The station will include a bus loop, a "Kiss & Ride", and up to 700 parking spaces. Access to the Bloomington GO Station will be provided via grade separation over the Highway 404 on-ramp, which will need to be relocated approximately 550 metres⁶⁹. A date has not yet been set for construction as the station has not yet received funding approval.

Niagara Peninsula

GO Transit has plans to create a new GO Train line, from Aldershot GO Station on the Lakeshore West Line in Burlington to the Niagara Falls region. Several potential routes were looked into during the Environmental Assessment study, and GO Transit is currently reviewing its options⁷⁰. The study proposes one of four possible scenarios for when the service starts⁷¹:

⁶⁶ GO Transit. (2013). "Oshawa to Bowmanville GO East". <http://www.gotransit.com/public/en/improve/projects.aspx>

⁶⁷ Jaworski, J. (April 29, 2012). "Lakeshore East GO train expansion to Bowmanville." Retrieved from <http://durhamhomesavvy.com/blog/Lakeshore+East+GO+Train+expansion+to+Bowmanville>

⁶⁸ GO Transit. (2012). "Oshawa to Bowmanville GO East". <http://www.gotransit.com/public/en/improve/projects.aspx>

⁶⁹ GO Transit. (August 2009). "Richmond Hill Layover Facility Environmental Assessment". http://www.gotransit.com/public/en/docs/ea/richmondhill/RichmondHill_EA.pdf

⁷⁰ GO Transit. (2012). "Niagara Peninsula Rail Service Expansion". <http://www.gotransit.com/public/en/improve/projects.aspx>

⁷¹ GO Transit. (March 2009). "Environmental Assessment and Preliminary Design". http://www.gotransit.com/public/en/improve/ea_niagara.aspx

- 1) Trains between Union Station and east-end Hamilton;
- 2) Trains between Union Station and Grimsby;
- 3) Trains between Union Station and St. Catharines; or
- 4) Trains between Union Station and Niagara Falls.

A final route for the line has yet to be chosen, so it is impossible to say exactly which neighbourhoods will receive a positive price impact. Stay tuned for more information on this project in future additions of this report.



Figure 23. Map of the Niagara Peninsula Study Area

Source: GO Transit

IMPACT OF HIGHWAY AND BRIDGE CONSTRUCTION ON PROPERTY PRICES

As with rapid transit, accessibility to major highways, and highway improvements proved to be major determinants for increased property values in all studies. Studies showed that, as highway networks are created and existing corridors to the central business district (CBD) and major employment centres are improved, the value of real estate in the area increased⁷².

Under-priced Property

Classical economic theory posits that when a highway is initially built, large parcels of land that previously had poor accessibility — or none at all — are suddenly considered underpriced⁷³. This results in a rapid correction in the market, driving up the value of the land. Development is usually quick and the impact significant. Additionally, improvements to existing highways showed a positive increase to land prices, although to a lesser degree.

However, during the construction phase of the improvements, prices of homes fell⁷⁴. Noise, emissions, dust, and traffic delays negatively impact the sale price of land in areas immediately adjacent the construction; this price decrease ranges from \$0.05 to \$0.50 per square foot of land⁷⁵. In fact, one study showed that values did not reach pre-construction levels until *five years* after construction was completed⁷⁶.

When studying four key residential areas being affected by new major highway expansion (using over 18,800 property sales as research data), a direct correlation was determined between the accessibility increases provided by the highway and the value of residential property. The results showed that when a highway increased accessibility to the region by providing new access or shorter commute times, residential property values rose by 12%–15% over similar properties not affected by the new highway⁷⁷. This is a significant and permanent lift in values. In fact, according to one Texas study, of all types of land use, single-family residences showed one of the largest per-square-foot increases (approximately \$35.00 per square foot)⁷⁸.

Difference Between Light-Rail Improvements & Highway Improvements

Surprisingly, the main difference between the rapid transit findings and the highway findings is the impact of the noise factor from operating highways. The increase in value of residential properties located closest to the highways were partially offset by up to a 1.2% reduction for every two-decibel increase in highway noise level⁷⁹. However, counter-intuitively, houses with highway noise were not found to take any longer to sell than those farther removed.

72 ten Siethoff, B. & K. Kockelman. (2002). Property Values and Highway Expansions: An Investigation of Timing, Size, Locations, and Use Effects. Transportation Research Board, 81st Annual Meeting, Washington, D.C.

73 Giuliano, G. (1989). "New Directions for Understanding Transportation and Land Use" in *Environment and Planning A* 21, pp. 145-159.

74 Mikelbank, B. (2001). "Spatial Analysis of the Relationship between Housing Values and Investments in Transportation Infrastructure." Western Regional Science Association, 40th Annual Meeting, Palm Springs, CA.

74 ten Siethoff, *ibid*.

75 *ibid*.

76 Downs, A. (1992). *Stuck in Traffic*. The Brookings Institution: Washington, D.C.

77 Palmquist, R. (1980). *Impact of Highway Improvements on Property Values in Washington*, US Department of Transportation, Federal Highway Administration.

78 Lewis, C.A., J. Buffington, & S. Vadali. (1997). "Land Value and Land Use Effects of Elevated, Depressed, and At-Grade Level Freeways in Texas." Texas Transportation Institute Research Report Number 1327-2. Texas A&M University: College Station, TX.

79 Palmquist, R. (1980). *Ibid*.

This same study revealed that properties located in commercial–industrial areas serviced by these highway improvements experienced a 16.7% increase in value after the highway was opened. Research into the impacts of specific projects indicates some very pointed effects:

Design of the freeway is important:

- Depressed freeways contributed the most to residential property values, yet had limited impact on commercial property values, except for those located adjacent to exit and entrance ramps.
- At-grade designs had the most positive impact on commercial property values, while still providing a strong positive impact on residential values.
- Elevated highways had the least impact on all land values⁸⁰.

Commercial Property Values

Values of commercial properties located 800 metres or more from a freeway exit were valued at \$50,000 per acre of land and \$3 per square foot of structure less than properties located closer, proving once again that accessibility and visibility is key.

Overall, the completion or expansion of major arterial highways has a significant positive impact on accessibility and, therefore, property values. This ripples across all types of property from single-family and multi-family residential, to commercial and industrial

80 Lewis, C.A., J. Buffington, & S. Vadali. (1997), *ibid*.

MAJOR ROAD IMPROVEMENTS IN TORONTO

RECENTLY COMPLETED

Major road improvement projects that were completed in the Greater Toronto Area over the last two years.

Highway 401

Highway 401 is recognized as a key economic corridor in the GTA. It provides access across Ontario and into the U.S.A. Continued traffic growth has resulted in frequent congestion on the corridor.

Highway 403/410 Interchange to Hurontario Street

As the population of Toronto continues to grow, it is expected that traffic volumes on the 401 will exceed capacity by 2021 and create significant delays eastbound from Hurontario Street to Highway 410⁸¹.

In 2009, the city approved and began construction on Highway 401 improvements between the Highway 403/410 interchange to west of Hurontario Street. The construction includes:

- Widening of Highway 401 to a 12-lane core/collector system from west of Hurontario Street to the Credit River
- Construction of HOV lanes in both directions
- Full reconstruction of the Hurontario Street interchange
- Construction of a new carpool lot
- Upgrade of the illumination within the Highway 401/403/410 interchange

Construction on the project was completed in the summer of 2013⁸².

Homes located in the communities of Hanlan, Britannia, and Derby West should experience an increase in property values.

Keele Street to Kipling Avenue

The Highway 401 collector lanes between Keele Street and Kipling Avenue was also rehabilitated. The project's upgrades included highway widening to provide an additional lane between Highway 400 and Kipling Avenue, the rehabilitation of 14 bridges, and the installation and upgrading of roadway traffic signals and roadway illumination. The Islington interchange saw the most significant upgrades, with the E-S ramp realigned⁸³. Construction on the project began in March 2013 and was completed in December 2013⁸⁴.



Figure 24. Completed Hwy 403/410 Interchange
Source: Haljackey, Wikimedia Commons

⁸¹ Government of Ontario. (2012). "Highway 401 widening." Retrieved from <http://www.401expansion-mississauga.ca/background.html>

⁸² Government of Ontario. (March 2013). "Contract #: 2009-203." Retrieved from http://www.mto.gov.on.ca/english/traveller/trip/construction_reports-central.shtml#Contract2009-2031

⁸³ Ontario Ministry of Transportation. (2013). "Rehabilitation of Highway 401 westbound collector lanes." Retrieved from <http://www.my401.ca/html/projectbackground.html>

⁸⁴ Ontario Ministry of Transportation. (2013). "Upcoming work." Retrieved from <http://www.my401.ca/html/UpcomingWork.html>

The communities of North Park, Downsview, Maple Leaf, Pelmo Park, Humberlea, and Kingsview Village should all witness price premiums due to these improvements.



Figure 25. Construction of the Highway 7 Overpass

Source: Sonysnob, Sky Scraper Forum

Highway 7 now travels over Highway 407⁸⁵. The project was completed in 2013.

Highway 407/Highway 7

Highway 407 is an Express Toll Route (ETR) that begins at the junction of the Queen Elizabeth Way (QEW) and Highway 403 in Burlington, and travels northeast and east to its present terminus at Highway 7 and Brock Road (Durham Regional Road 1) in Pickering.

In 2010, construction began to widen Highway 7 to four lanes between Brock Road in Pickering to Highway 12. The 12-kilometre project included the construction of an overpass in order to remove a signalized intersection where the two highways meet and improve traffic flow. After the completion of the overpass,

Homes located in Pickering should experience an increase in property values.

CURRENTLY UNDER CONSTRUCTION

Major road improvement projects that are currently under construction in the Greater Toronto Area.

Highway 404

Highway 404 is a major Highway connecting Highway 401 and the Don Valley Parkway (DVP) in Toronto with Newmarket. Construction is currently underway on an extension of Highway 404 in East Gwillimbury. Once completed, the 13 kilometre four-lane divided highway will continue on from Green Lane to Ravenshoe Road. The project is scheduled for completion in the fall of 2014⁸⁶. Once completed, the extension will help alleviate congestion in the area.

Residents of East Gwillimbury, Mt. Alberta, and Queensville will witness positive price increases.



Figure 26. Construction on Hwy 404 - Boag Rd Underpass

Source: Asphalt Planet

⁸⁵ MMM Group Limited. (February 2013). Highway 407 East, Brock Road interchange. Retrieved from http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=5&ved=0CEAQFjAE&url=http%3A%2F%2Fwww.highway407east.com%2Fdocuments%2FHighway_407_East_Brock_Road_Interchange_DCR.pdf&ei=bsAoU8ndH8ztoASKpYGGQDA&usg=AFQjCNEkcxZ0leUIVYwFJdoWGaLS1uwpCQ

⁸⁶ Government of Ontario. (November 29, 2013). "Highway Construction Wraps Up in GTA." Retrieved from <http://news.ontario.ca/mto/en/2013/11/highway-construction-wraps-up-in-gta.html>

FUTURE GTA HIGHWAY CONSTRUCTION

Major road improvement projects that may begin in the Greater Toronto Area in the next decade.

Highway 427 to Major Mackenzie Drive

Highway 427 runs from immediately south of the Queen Elizabeth Way/Gardiner Expressway interchange in Toronto to Highway 7 in Vaughan and is currently just over 21 kilometres. It is Ontario's second busiest freeway by volume, and has no fewer than 12 lanes between the QEW/Gardiner and Highway 401. It is a primary feeder route to the Pearson International Airport. It also serves the western portion of Etobicoke (Rexdale) and the northeastern portion of Mississauga (Malton).

A proposed Highway 427 extension is in the works. The provincial government would like to see a 6.6 kilometre extension of Highway 427 north from Highway 7 to Major Mackenzie Drive. Six lanes are proposed from Highway 7 to Rutherford Road and four lanes from Rutherford Road to Major Mackenzie Drive. New interchanges would be constructed at Langstaff Road, Rutherford Road, and Major Mackenzie Drive, and a dedicated transitway would be built on the west side of the extension with three new transitway stations⁸⁷.

Since no time frame has been set for land acquisition or detailed design, it looks like it will be several years before the project begins. The earliest construction would begin on the project would be 2017, and take about three years to complete⁸⁸.

Highway 407 to Highway 35/115

Plans are underway to extend Highway 407 further east through Durham Region to Highway 35/115 as a provincially maintained highway. The highway will be extended 45 kilometres from Brock Road in Pickering to the intersection of Highway 35 and 115. The extension will also include two 10-kilometre north-south links (the 10-kilometre West Durham Link and the 10-kilometre East Durham Link) to connect Highway 401 to Highway 407 East⁸⁹.

While no time frame has been set for land acquisition or detailed design, the government would like to see the project completed by 2020.

Highway 410 Extension to Collingwood

The extension of Highway 410 towards Collingwood is in its conceptual stages. There is speculation that the long term plan for the highway includes continuing it on to Orangeville, Shelburne and Owen Sound.

Please Note: Not ALL properties in these regions will make for great investments, so make sure you complete your due diligence on all properties before you purchase.

⁸⁷ Government of Ontario. (2010). "Highway 427 Transportation Corridor." Retrieved from http://www.ene.gov.on.ca/environment/en/industry/assessment_and_approvals/environmental_assessments/projects/STDPROD_082704.html?page=3

⁸⁸ Kalinowski, T. (May 16, 2013). "Highway 427 extension north to Major Mackenzie Dr. to be built by 2020." Toronto Star. Retrieved from http://www.thestar.com/news/gta/2013/05/16/highway_427_extension_north_to_major_mackenzie_dr_to_be_built_by_2020.html

⁸⁹ Government of Ontario. (2010). "Highway 407 East." Retrieved from <http://www.mto.gov.on.ca/english/engineering/407-east/>