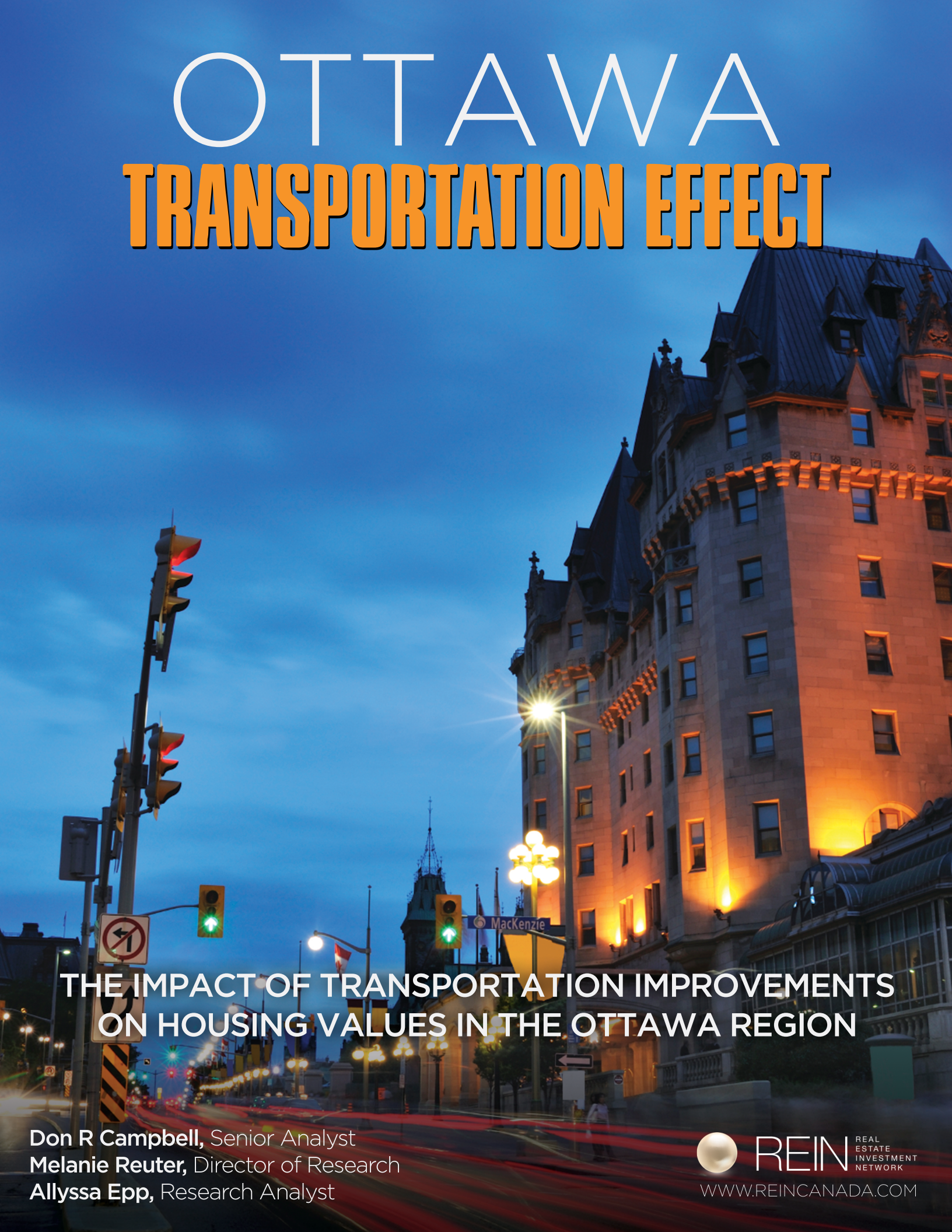
OTTAWA
TRANSPORTATION EFFECT



THE IMPACT OF TRANSPORTATION IMPROVEMENTS ON HOUSING VALUES IN THE OTTAWA REGION

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EXECUTIVE SUMMARY AND REPORT HIGHLIGHTS

- Ottawa 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 home values in Ottawa drop, these will drop by 10%–20% less.
- With the completion of Highway 417 and Highway 7 improvements, real estate prices in key neighbourhoods will increase more quickly than in other regions of the city due to improved transportation linkages. Improved accessibility drives real estate demand.
- Values in older and more established neighbourhoods are impacted more significantly than in newer developments.
- 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 800 metres of stations on the new transportation and 800 metres from exits on new major highway improvements.
- The areas that will be most significantly impacted by transportation upgrades are divided in to the 'Three Tiers of Impact'.

First Tier: These are areas that will experience the most positive impact from the transportation improvements. These neighbourhoods will feel the twin impact of highway improvements and new rapit transit access: Hampton Park, Wellington West, Hintonburg, Centretown, Downtown, Old Ottawa East, Sandy Hill, Hurdman's Bridge, Overbrook, Eastway Gardens, Cyrville, and Pineview.

Second Tier: Areas which will also feel a strong positive impact with one of the major improvements significantly increasing long term demand: Carleton Place, Arnprior, Champlain Park, Island Park, Mechanicsville, LeBreton, Lowertown, Byward Market, Dale Park, Riverview Park, McArthur, Cardinal Heights, Qualicum, Bayshore, Redwood, Parkway Park, Whitehaven, Queensway Terrace, Bel Air Park, Glabar Park, Braemar Park, McKellar Heights, Carlington, Laurentian View, West Centre Town, The Glebe, Robinson Field, Beacon Hill South, Gloucester, Convent Glen, Orleans, Sheffield Glen, Kanata, Stittsville, Huntley.

There may be negative effects (nuisance, property crime, noise, increased traffic, etc.) on properties located in the immediate vicinity of many stations.

TABLE OF CONTENTS

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 *Buying U.S. Real Estate for Canadians.* One hundred per cent of all of Don Campbell's author royalties are donated directly to Habitat for Humanity Edmonton and to date has raised over $900,000 for this worthy cause.

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

OVERVIEW TO THE TRANSPORTATION EFFECT REPORT

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 are 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 Greater Toronto Area, the Kitchener-Waterloo-Cambridge region (KWC), and Hamilton.

With a number of transportation improvements on the table for Ottawa, a report was needed to help investors decipher which communities will see the most positive benefits and housing value increases. This report focuses on answers to two very important questions that will have a direct financial impact on tens of thousands of Ottawa residents. These questions are as follows:

1. **How will current LRT projects affect residential real estate values in the Ottawa region?**

2. **How will the highway improvements affect property values in Ottawa?**

For many Ottawa 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 Ottawa 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 the 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 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 respectively 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 discernible 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 a commuter rail journey increased the average home value by £1,000.
Source: Huang, H. (1996). "Land Use Impacts of Urban Rail Transit Systems" in Journal of Planning Literature, vol. 11, iss. 17.	

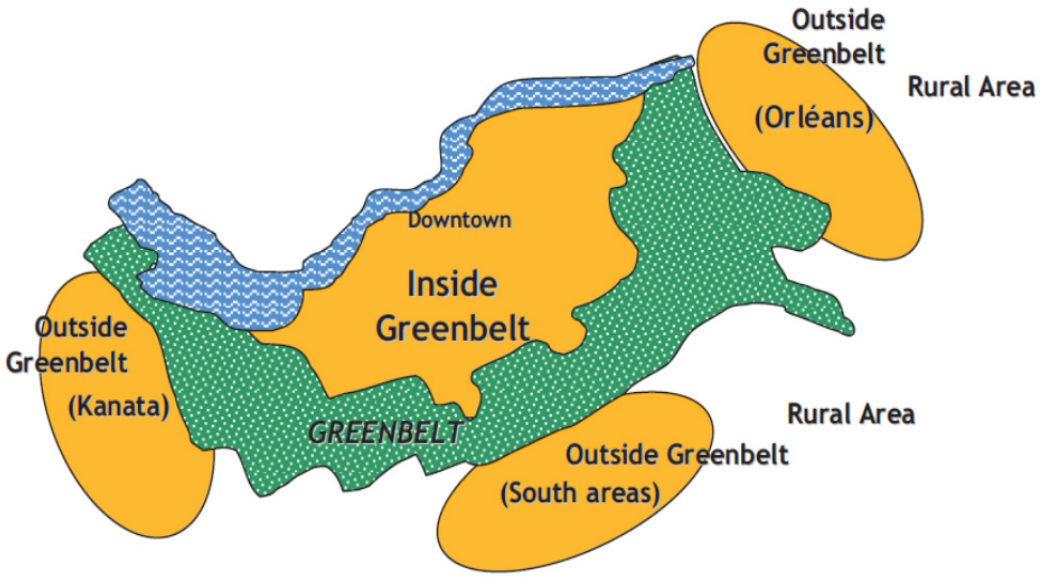
BACKGROUND: Ottawa

Nestled at the junction of the majestic Ottawa, Rideau and Gatineau Rivers, Ottawa is not only the nation's capital, but the economic centre of Eastern Ontario. Unlike other cities that rely on a small number of industries or sectors, Ottawa's diversity allows it to weather an economic storm better than other communities. The city consistently experiences low unemployment rates, and high average weekly earnings – attracting thousands of new residents to the city each and every year.

Ottawa is the fourth largest city in Canada and the second largest in the Province of Ontario. According to the latest Statistics Canada federal census data, the population of Ottawa was 883,391 in 2011, a growth of 8.8 per cent from 2006[1]. In comparison, the Province of Ontario witnessed a 5.7 per cent increase over the same time period. Ottawa is expected to continue its steady growth, reaching a population of 1,136,000 by mid-2031[2].

The City of Ottawa is split into two distinct sections by the Greenbelt - a 203.5 square kilometre swath of parkland in which real estate development is strictly controlled. Buildings located north of the parkland are referred to as being 'inside' the Greenbelt, where the city's downtown core is found. The city's population is expected to grow about 30 per cent between 2006 and 2031. Of the 265,000 new residents that will come to call the city home, 20 per cent will live inside the Greenbelt, 60 per cent will live in urban areas outside the Greenbelt, and the remaining 12 per cent will settle in rural areas[3]. This population increase will put significant pressure on Ottawa's existing transportation infrastructure as people attempt to travel across the city for work and leisure activities.

While the city currently offers a mix of public transportation options to its residents, some of these routes are at or near capacity. Ottawa's annual transit ridership of over 100 trips per capita is greater than almost any other Canadian city (only Montreal and Toronto boast higher levels of ridership), and all North American cities with a similar population size[4]. The city's estimates indicate that the total system ridership will increase from 93 million in 2005 to 164 million trips



Map of Ottawa

Source: City of Ottawa. (2010). "Annual Development Report 2009.

[1] Statistics Canada. (2011). "Ottawa, Ontario" (Code 3506008) (table). 2011 Community Profiles. *2011Census*. Retrieved from http://www12.statcan.gc.ca/census-recensement/2011/dp-pd/prof/details/page.cfm?Lang=E&Geo1=CSD&Code1=3506008&Geo2=PR&Code2=35&Data=Count&SearchText=ontario&SearchType=Begins&SearchPR=01&B1=All&Custom=&TABID=1

[2] Invest Ottawa. (2012). "Annual Development Report 2010".*City of Ottawa*. Retrieved from http://www.ottawa.ca/city_services/statistics/dev_report/pdf/adr_2010_en.pdf

[3] City of Ottawa. (November 2008). "Transportation Master Plan." Retrieved from http://app06.ottawa.ca/cs/groups/content/@webottawa/documents/pdf/mdaw/mti2/~edisp/cap126404.pdf

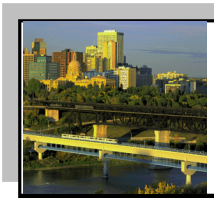
[4] Ibid.

per annum by 2013[5].

With the city's urban expansion comes the need for infrastructure and transportation improvements to provide connectivity to the city and its jobs. City and Provincial planners are aware of pressing concerns and two major projects are currently underway to help Ottawa residents navigate their city: 1) the extension of the O-Train and 2) the expansion of Highway 417.

The expansion of the O-Train system to the east and west is designed to offer additional means of traversing the vast city, reducing commute times and helping ease inner city congestion. The expansion of Highway 417, once complete, will provide a much needed traffic capacity increase and provide connections to major roadways leading into the heart of Ottawa.

[5] Metropolitan Knowledge International. (June 2011). "Ottawa Light Rail Transit (OLRT) Updated Business Case – Projected Benefits Analysis." Retrieved from http://www.ottawalightrail.ca/media/pdf/OLRTBusinessCaseUpdate.pdf



DIRECT EFFECTS OF TRANSPORTATION IMPROVEMENTS ON REAL ESTATE VALUES

Distance is Now Measured in Minutes, Not Kilometres

Research indicates that real estate values are driven both up and down by eight clear fundamentals, of which transportation change is one of the most dramatic catalysts[6]. 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 homes[7]. 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 close by. 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 claiming "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 year[8]. 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.

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

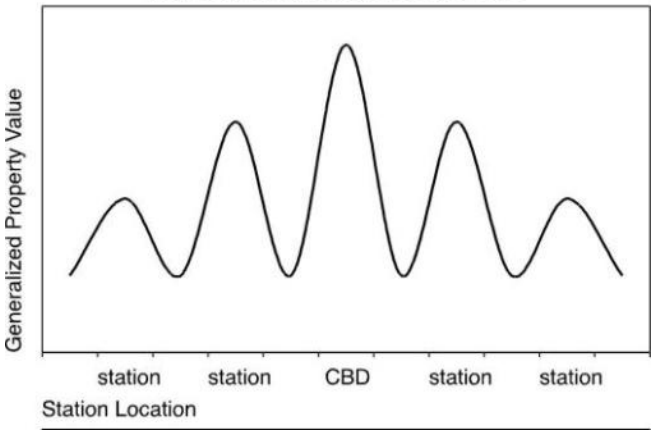
7 Smersh, G.T. & M.T. Smith. (2000). "Accessibility Changes and Urban House Price Appreciation: A Constrained Optimization Approach to Determining Distance Effects" in *Journal of Housing Economics, Vol. 9, No. 3*, pp. 187–196.

8 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.

#1 LIGHT RAIL TRANSIT EXPANSION IMPACT ON RESIDENTIAL PROPERTY PRICES

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 owners[9].

Figure 1. 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 railway[10]. 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 1[11], 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 foot[12].

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 neighbourhoods[13]. 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.

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

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

11 Ibid.

12 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.

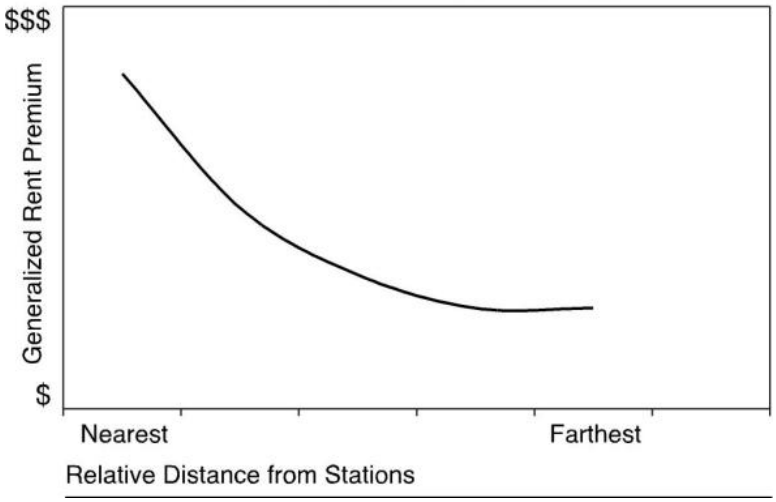
13 Cervero, R. (1996). "Transit-Based Housing in the San Francisco Bay Area: market Profiles and Rent Premiums", in *Transportation Quarterly*, *Vol. 50, No. 3, pp. 33-47.*

Overall, studies have found that rent decreased by approximately 2.5% for every one-tenth of a mile distance from the station[14].

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 services[15]. 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 tracts[16]. 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.

Figure 2. Residential Rental Premium versus Distance from Commuter Rail Station



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[17].

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 away[18]. 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 savings[19]. This is true even today, with a premium being placed on both rents and market values for properties located with walking distance (800 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 price as buyers are less attracted to these areas. The Savill report shows a positive correlation between the precentage of commuters in the area and average house prices[20].

[14] 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.

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

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

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

[18] 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.

[19] 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.

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

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 a city's proposed LRT 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 residents[21].

Impact of Commuter Rail on Commercial Property

Studies indicate that the proximity to mass transit has even more impact on the values of commercial properties[22]. 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 stations[23].

[21] 21 Weinstein, B. & T. Clower. (1999). *The Initial Economic Impacts of the DART LRT System.* Prepared for Dallas Area Rapid Transit.

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

[23] Ibid.

OTTAWA O-TRAIN TRANSIT SYSTEM

Current Ottawa Transit Network

Rapid Transit is becoming more and more attractive in Ottawa as commute times increase due to a population expansion and subsequent auto congestion around the city and suburbs. The City of Ottawa currently offers a mix of public transportation options to its residents: 1) regular buses that travel on a fixed route system and operate on public roadways, 2) a bus rapid transit (BRT) system that operates on a road network of mostly grade-separated dedicated bus lanes (known to Ottawa residents as the Transitway) and priority traffic signal controls, and 3) a light rail transit (LRT) system known to Ottawa residents as the O-Train.

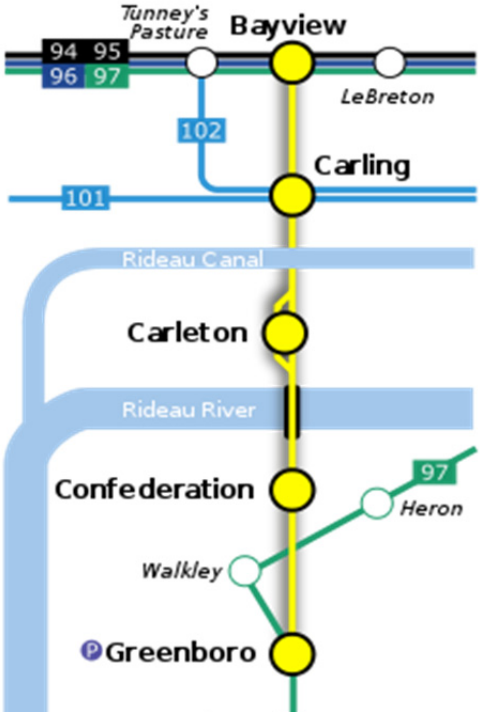


Figure 3. Existing O-Train Line
Source: OC Transpo. (2012).

Ottawa is currently serviced by the O-Train, an 8 kilometre light rail service running from Greenboro Station in the south to Bayview Transitway station near downtown Ottawa (see Figure 3). With over 140 million passenger trips a year, the five-station line is the third busiest transit system in Canada[24].

Improvements

On June 25, 2011, the Ottawa Transit Commission (OC Transpo) voted to move ahead with a $59 million plan to expand light rail service within the city. Two new passing loops will be added and signaling upgraded, effectively doubling train frequency from the current fifteen minute schedule to eight minutes. In addition, six new trains were purchased to increase the line's capacity from 1,100 passengers per hour in each direction to approximately 2,000[25].

Unfortunately, the entire O-Train line will need to be shut down in order for these improvements to be installed. OC Transpo has scheduled an 18-week shutdown of the O-Train from April 27 to September 2, 2013. OC Transpo will provide a replacement bus service running parallel to the O-Train line to ferry commuters during the service disruption[26]. Short term pain is long-term gain as commuters will certainly benefit from improved service after construction has been completed.

EXPANSIONS

The construction of new O-Train routes.

Confederation Line

[24] Metropolitan Knowledge International. (June 2011). "Ottawa Light Rail Transit (OLRT) Updated Business Case – Projected Benefits Analysis." Retrieved from http://www.ottawalightrail.ca/media/pdf/OLRTBusinessCaseUpdate.pdf
[25] Railway Gazette. (25 June 2011). "Ottawa O-Train expansion plan approved. Retrieved from http://www.railwaygazette.com/news/single-view/view/ottawa-o-train-expansion-plan-approved.html
[26] Willing, John. (30 August 2012). "Transpo schedules 18-week O-Train shutdown in 2013." *Ottawa Sun*. Retrieved from http://www.ottawasun.com/2012/08/30/transpo-schedules-18-week-o-train-shutdown-in-2013

Talks of expanding the O-Train have gone back and forth for the past six years. Original plans to expand the O-train were quashed in 2006 when new council came to office, citing the project would be too costly. However, talks of expanding the O-Train or adding some form of light rail to the city began surfacing again almost immediately after. On December 19, 2012, Ottawa city councilors voted unanimously in favour of creating a second O-Train line, converting the existing Transitway into an LRT route. The 12.5 kilometre Confederation Line will run from Tunney's Pasture in the west, connect with Bayview Station on the existing O-Train line, and terminate at Blair Station in the east[27]. The new line will include a 2.5 kilometre underground tunnel beneath the city's downtown core beginning just after Lebreton Station and ending near the University of Ottawa (see Figure 4). There will be a total of 13 new stations; ten above ground and three underground in the tunnel. Construction on the project will begin in late February 2013 and is expected to be completed by 2018[28].

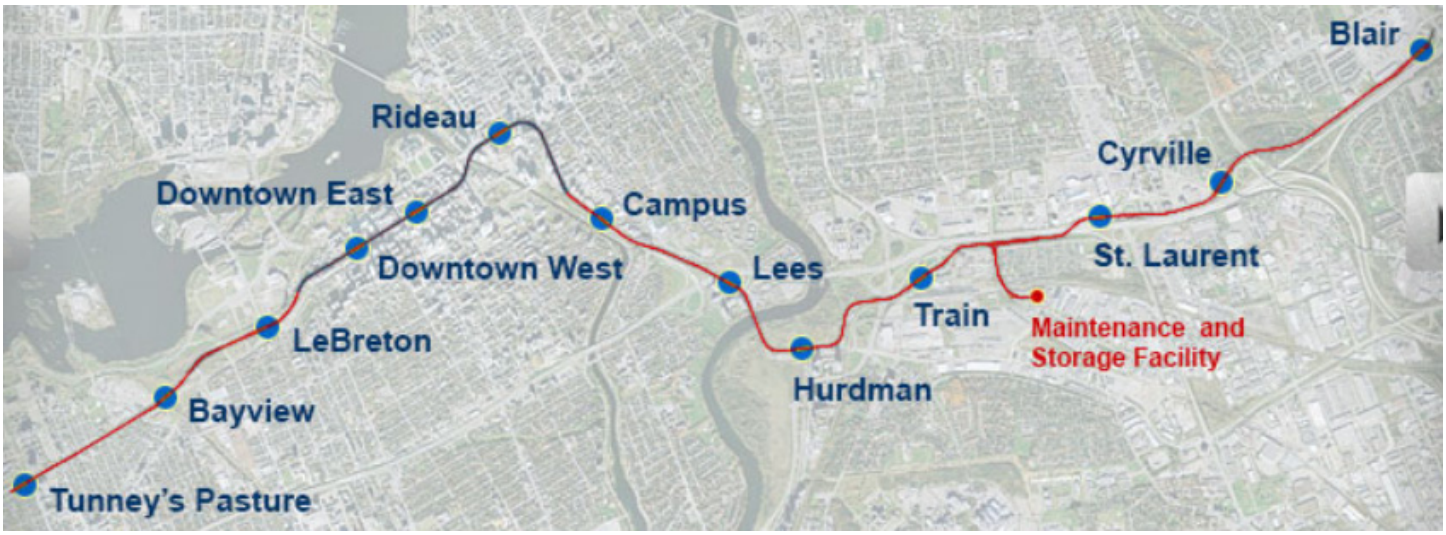


Figure 4. The Confederation Line
Source: City of Ottawa. (2012). Light Rail.

Tunney's Pasture Station

Located to the west of the Scott Street and Holland Avenue intersection, Tunney's Pasture Station will act as the western terminus of the Confederation Line. Located mere minutes away from 49 hectares of federal government buildings at Tunney's Pasture, the station is destined to see heavy use right from the get-go. The station will include a large pedestrian plaza with retail, as well as an extensive cycling storage facility to integrate with current cycling and pedestrian networks. Homes located in the areas of Champlain Park, Island Park, Hampton Park, Wellington West, Hintonburg, and Mechanicsville will all enjoy not only quick access to the station, but also premiums above average home price increases thanks to this new transit access.

Figure 5. Tunney's Pasture Station.

[27] City of Ottawa. (2013). "Confederation line." *Ottawa Light Rail*. Retrieved from www.ottawalightrail.ca
[28] CBC News. (19 December 2012). "Confederation Line LRT project approved by council." Retrieved from http://www.cbc.ca/news/canada/ottawa/story/2012/12/19/ottawa-lrt-approved-confederation-line-light-rail-council.html

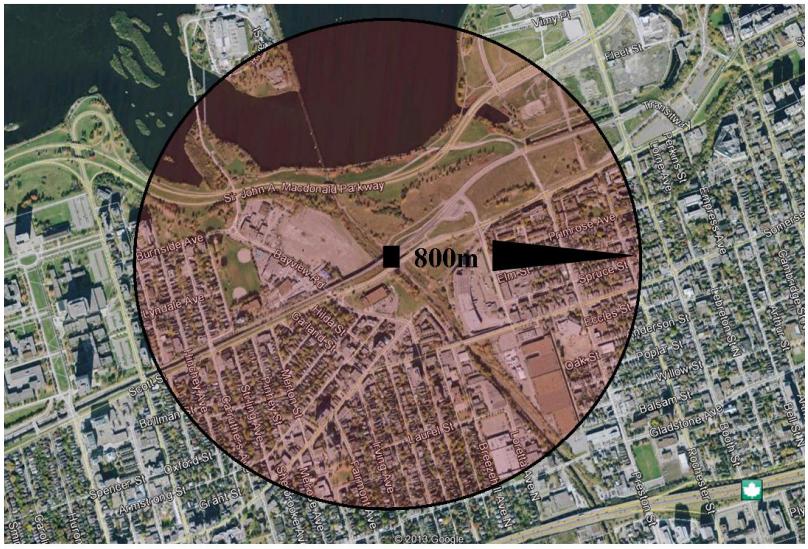


Figure 6. Bayview Station.

Bayview Station

Located on Albert Street to the east of Bayview Road, Bayview Station is the only pre-existing station on the Confederation Line. Bayview will act as a hub station, connecting the north-south O-Train line to the new east-west Confederation Line – making downtown even more accessible for transit users. The station will include pedestrian connections to Albert Street, Tom Brown Arena, and the multi-use pathways along the Ottawa River[29]. The communities of Hintonburg and Mechanicsville already benefit from this O-Train station.

LeBreton Station

The LeBreton Station will be located on the Transitway near the intersection of Booth Street. The station will be two levels: the top level connecting to the Booth Street Bridge and offering commuters stair access to the O-Train at ground level. The station will integrate with existing multi-use trails along the Ottawa River. The City of Ottawa plans to redevelop Booth Street in the not-so-distant future and it is hoped that the creation of LeBreton Station will play a major role in the long-term revitalization of LeBreton Flats[30]. Areas roughly 800 meters from the station which will enjoy increased real estate premiums (as well as access to LRT) include LeBreton and Ottawa's Chinatown.

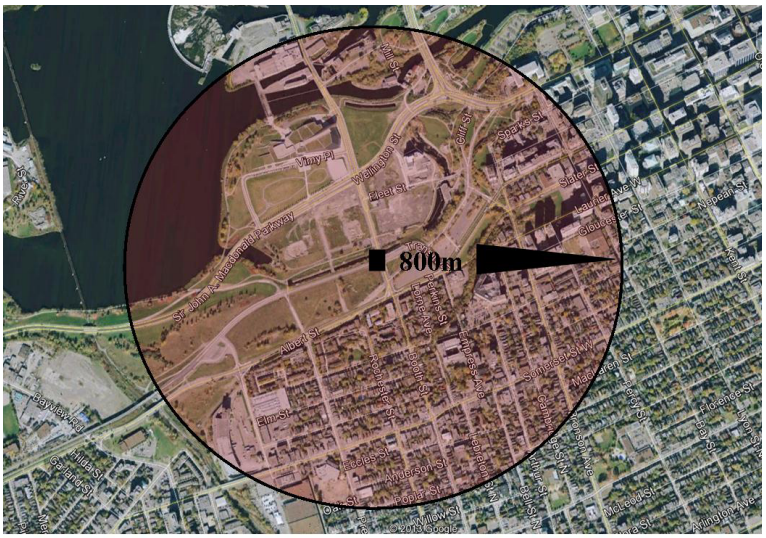


Figure 7. LeBreton Station.

Figure 8. Downtown West Station.

Downtown West Station

After LeBreton Station, the LRT will transition into an underground tunnel around Commissioner Street. Located at the intersection of Queen Street and Lyon Street, Downtown West Station will be the first underground station on the Confederation Line. Entrances to the station will be located on Queen Street and integrated into the Place de Ville complex[31]. Price premiums will be experienced in the communities of Centretown, and Downtown Ottawa.

[29] Ibid.
[30] Ibid.
[31] Ibid.

Downtown East Station

The Downtown East Station will be situated near the intersection of Queen Street and O'Connor Street. Steps away from Parliament Hill and Ottawa's downtown business district, the Downtown East Station is expected to be the busiest on the Confederation Line and will be designed to accommodate intense peak volumes. Entrances to the underground station will be located at the corner of Queen Street and O'Connor Street, and through the atrium of the Sun Life Building on Albert Street and O'Connor Street. Houses in the communities of Centretown, Downtown Ottawa, and the Golden Triangle should experience an increase in property values.

Figure 9. Downtown East Station.

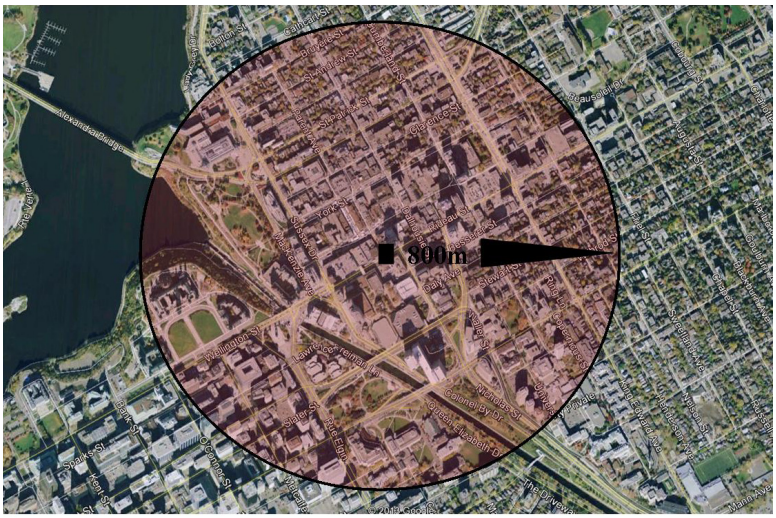


Figure 10. Rideau Station.

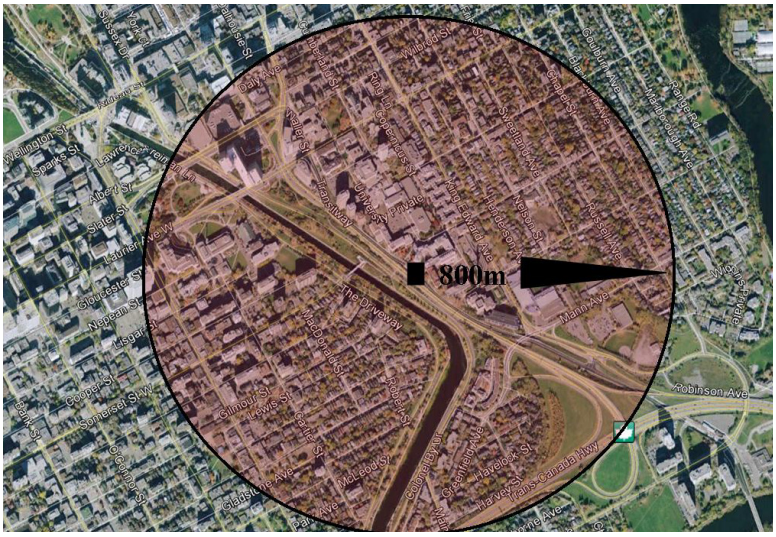


Figure 11. Campus Station.

Rideau Station

Rideau Station is located under Rideau Street, near the William Street intersection. This underground station will be close to many of Ottawa's most popular attractions, including: the Rideau Canal, the National War Memorial, the Ottawa Convention Centre, the National Gallery, the Rideau Centre, and Byward Market. Entrances to Rideau Station will be located in the northwest corner of the Rideau Centre at Rideau Street and Colonel By Secondary School and adjacent to the Williams Street Plaza. The city is planning to add future entrances to the station when the Rideau Centre expansion is completed[32]. Price premiums will be experienced in the communities of Lowertown, Byward Market, Golden Triangle, and east Sandy Hill.

Campus Station

Approximately halfway between Rideau Station and Campus Station, the LRT will transition from underground to street level. Campus Station is an aboveground station located on the Transitway next to Nicholas Street and adjacent to the University of Ottawa. With the creation of the Confederation Line, students will now be able to attend classes at the University of Ottawa and Carleton University with less than a half an hour

[32] Ibid.

commute. The station will be integrated with the existing Canal underpass and will include a new public plaza[33]. Homes located in the areas of Sandy Hill and the Golden Triangle will all enjoy not only quick access to the station, but also premiums above average home price increases thanks to this new transit access.

Lees Station

Lees Station will be situated within the existing Transitway trench between the Lees Avenue and Highway 417 overpasses and feature an at-grade public entrance plaza for commuters. The station will provide university students with quick access between the University of Ottawa's main and Lee's campuses. Students at nearby St. Paul's University also stand to benefit from improved transportation times. The station will also provide public transit access for nearby residential towers and is expected to be an anchor for future development in the area[34]. Residents of south Sandy Hill and Old Ottawa East will enjoy the close proximity to the O-Train and properties located within the 800 metre radius of the station can anticipate a 10% - 20% premium in their values.

Figure 12. Lees Station.

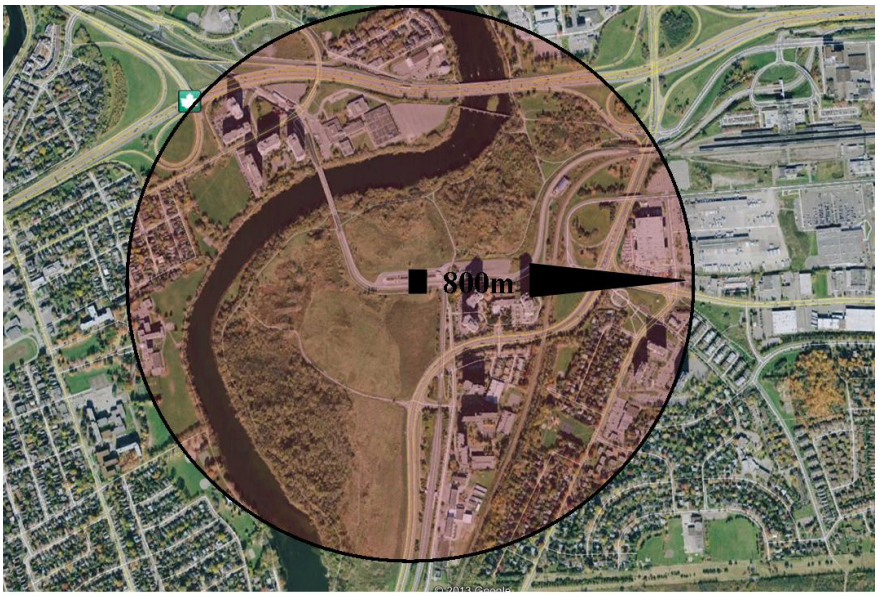


Figure 13. Hurdman Station.

Hurdman Station

Hurdman Station will act as a major connection hub between Ottawa's BRT and LRT. After Lee Station, the Confederation Line LRT crosses the Rideau River on the Transitway bridge. Hurdman Station will be an elevated station with a large public plaza at surface level located at the existing Hurdman BRT station near Industrial Avenue. The station will feature seamless BRT connections and concourse retail areas. The region is earmarked for future development and it is anticipated that the creation of Hurdman Station will play a large part in businesses choosing to locate in the area[35]. When the Confederation LRT line is constructed, properties in the communities of Dale Park and Riverview Park will experience price premiums.

[33] Ibid.
[34] Ibid.
[35] Ibid.

Train Station

After Hurdman Station, the LRT line will travel east, crossing under Riverside Drive. The aptly named Train Station will be adjacent to Ottawa's main VIA Rail Station on Tremblay Road. The station will also be connected to the Ottawa Baseball Stadium via the Conventry Pedestrian Bridge (once construction on the bridge has been completed). Construction on the at-grade station will include a covered walkway to the VIA terminal and a large public plaza to accommodate high special event ridership[36]. Areas roughly 800 meters from the station which will enjoy increased real estate premiums (as well as access to LRT) include south Overbrook, McArthur, Eastway Gardens, and Hurdman's Bridge.

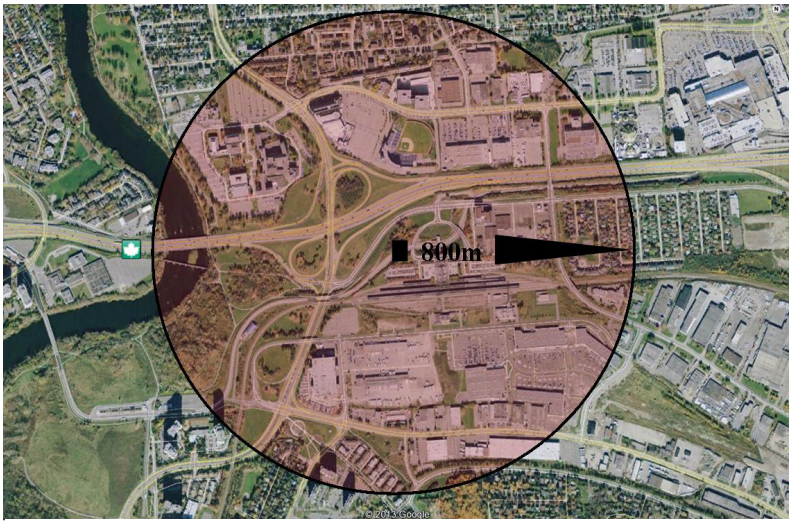


Figure 14. Train Station.

St. Laurent Station

The St. Laurent Station already exists as a BRT station on the North side of Tremblay Road, right before the St. Laurent Boulevard interchange. The station will be converted to a two-level station, with local buses arriving at surface level and the Confederation Line on a lower trenched platform. The station will have five entrances in total, with passengers able to safely cross the 417 via an underground walkway[37]. The communities of Eastway Gardens and south Overbrook will benefit most from this O-Train station.

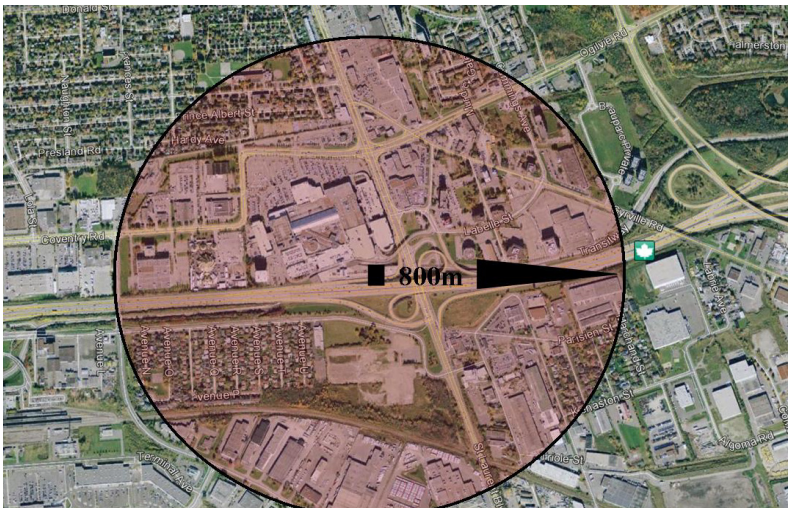


Figure 15. St. Laurent Station.

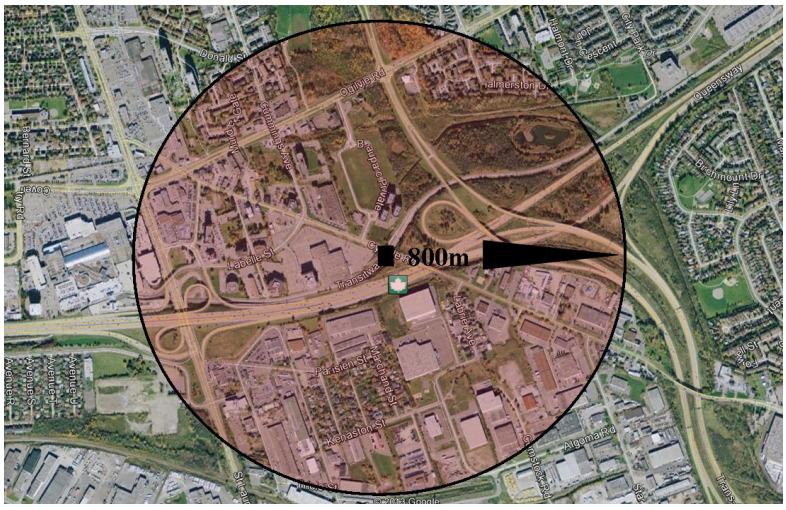


Figure 16. Cyrville Station.

Cyrville Station

The Cyrville Station platform will replace the existing BRT station on the Transitway under the Cyrville Road overpass. The two-level station will have entrances on both sides of Cyrville Road with stairs and elevators connecting passengers to the platform on the floor below. Cyrville Station will provide commuters with quick access to downtown Ottawa and is expected to spur local development[38]. Homes located in the areas of Cyrville and Pineview will all enjoy not only quick access to the station, but

[36] Ibid.
[37] Ibid.
[38] Ibid.

also premiums above average home price increases thanks to this new transit access.

Blair Station

The terminal of the Confederation Line, the Blair LRT station will integrate with the existing BRT station on the Transitway next to Gloucester Shopping Centre and immediately before the Blair Road/Queensway Interchange. Blair Station will be designed to allow commuters to move easily between BRT, LRT, and local commercial areas. Commuters on the south side of the Queensway will be able to access the station via a covered pedestrian walkway[39]. Residents of Pineview, Cardinal Heights, and Cyrville will enjoy the close proximity to the O-Train and properties located within the 800 metre radius of the station can anticipate a 10% - 20% premium in their values.

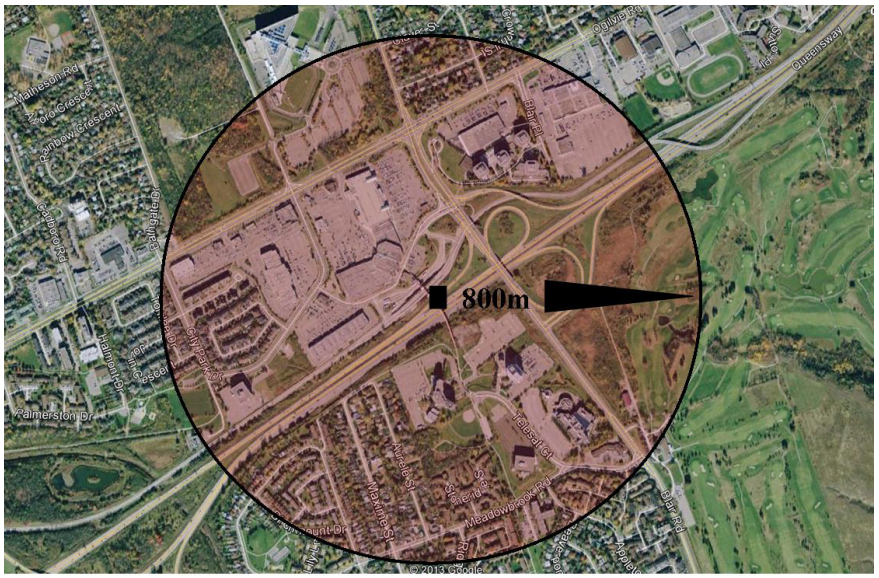


Figure 17. Blair Station.

FUTURE O-TRAIN EXTENSIONS

Given that the research indicates that commercial and residential properties increase in value within 800 metres of a light rail station, as a homeowner, business owner or real estate investor, it is prudent to know where the intended expansion and stations will be.

Main Ottawa Line South Extension

Ottawa city council members have already conducted a feasibility study that would see the main O-Train line extended from the current terminus at Greenboro Station eight kilometres south to serve the growing communities of Leitrim and Riverside South. The project is currently estimated at $76 million and would replace bus service between Bowesville and Hurman stations[40].

The Gloucester-South Nepean electoral district (which encompasses Leitrim and Riverside South) has seen the highest rate of growth in the City of Ottawa over the last five years, with the population more than doubling between 2006 and 2011. Rapid growth to the city's south end has added significant congestion to road networks around the Ottawa International Airport[41].

If O-Train service was added to Leitrim and Riverside South, it is estimated that the system would witness an additional 3.6 million passenger trips each year[42].

[39] Ibid.
[40] Rwema, E. (3 March 2012). "O-Train plan calls for 8-km extension to Riverside South." *Your Ottawa Region*. Retrieved from http://www.yourottawaregion.com/news/news/article/1310195
[41] Ibid.
[42] Ibid.

Confederation Line Southwest Extension

Construction hasn't even begun on the Confederation Line, but Ottawa's 2003 Transportation Master Plan shows plans to extend the line west from Tunney's Pasture and south to Baseline Road[43].

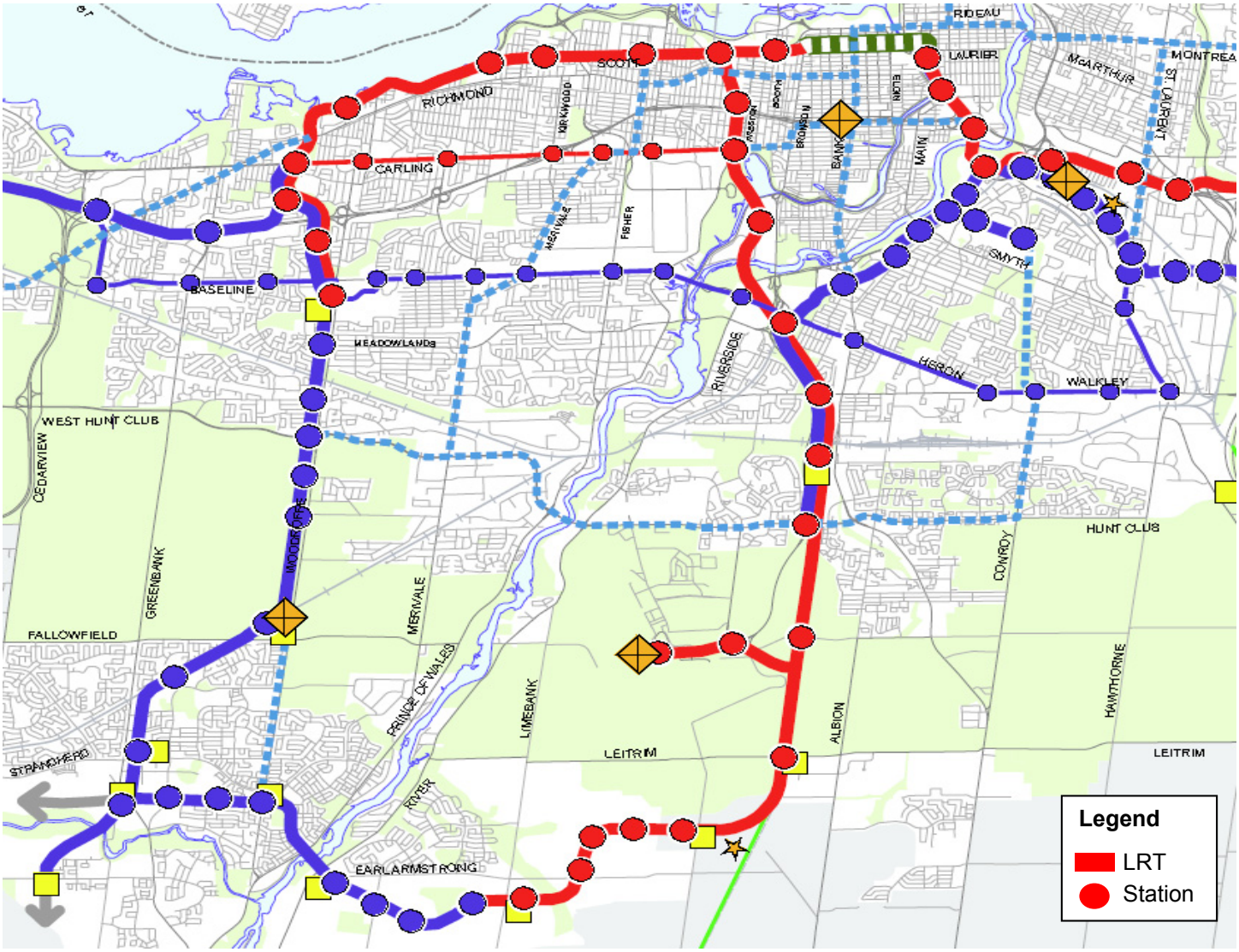
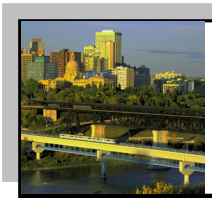


Figure 18. Ottawa's Transportation Master Plan Rapid Transit Map.
Source: City of Ottawa. (2003). "Schedule D – Rapid Transit Network." Transportation Master Plan

However, the City of Ottawa is due to update its Transportation Master Plan in 2014, so current talk surrounding the O-Train extensions is currently just speculation. It won't be until the new report comes out that the city's plans will become more finite. Investors should be cautious in areas slated for transit improvement as nothing is certain until the shovel hits the dirt.

[43] City of Ottawa. (2003). "Schedule D – Rapid Transit Network." Transportation Master Plan. Retrieved from http://ottawa.ca/sites/ottawa.ca/files/migrated/files/dev012499.pdf



#2 HIGHWAY CONSTRUCTION & EXPANSION IMPACT ON COMMERCIAL & RESIDENTIAL 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 increased[44].

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 underpriced[45]. 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 fell[46]. 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 land[47]. In fact, one study showed that values did not reach pre-construction levels until *five years* after construction was completed[48].

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 highway[49]. 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)[50].

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

44 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.

45 Giuliano, G. (1989). "New Directions for Understanding Transportation and Land Use" in *Environment and Planning* A21, pp. 145-159.

46 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.

46 ten Siethoff, ibid.

47 ibid.

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

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

50 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.

level[51]. However, counter-intuitively, houses with highway noise were not found to take any longer to sell than those farther removed.

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 values[52].

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

51 Palmquist, R. (1980). Ibid.

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

OTTAWA HIGHWAY CONSTRUCTION EFFECT ON PROPERTY VALUES: PRIMARY AREAS OF IMPACT

HIGHWAY 417

Highway 417, also known as the Queensway through Ottawa, is a 400-series highway that connects Montreal to Ottawa and forms the backbone of Ontario's transportation system through the National Capital Region. Highway 417 extends from the Quebec border near Hawkesbury to Arnprior, where it continues west as Highway 17.

As the main transportation corridor through one of the most populous cities in Canada, the Queensway is often congested. As of 2009, motorists made 164,000 trips per day on the busiest section of the Queensway, between Vanier Parkway and Nicholas Street. The Ontario Ministry of Transportation expects this number to increase to 196,500 by 2019 – a growth of 20 per cent in one decade[53].

The City of Ottawa knows how important it will be to keep traffic flowing on this road, and has approved several improvements in order to decrease traffic congestion over the next ten years.

Regional Road 29 to Division Street

Highway 417 was widened to four lanes from Regional Road 29 to Division Street in Arnprior. A new intersection was created at White Lake Road, two new overpasses were constructed at Baskin Drive and Division Street, as well as two new bridge crossings for the new westbound lanes at the CPR crossing and the Madawaska River Bridge. The project was completed on November 29, 2012[54]. The community of Arnprior will witness an increase in property values due to these improvements.

Hunt Club Road Extension to Highway 417

Plans to extend Hunt Club Road to Highway 417 have been in the place for over a decade. The City of Ottawa addressed the need to connect the East Urban Community to the South Urban Community in its Transportation Master Plan in 2003.

The project was finally given the go-ahead in May 2011 and was divided into two phases. Phase I of the project includes a four-lane extension of Hunt Club Road from Russell Road to Highway 417. A new interchange will be constructed to connect Hunt Club Road to Highway 417. The project began construction in October 2011 and is expected to be complete in 2014. Hunt Club Road was extended from Hawthorne to Russell Road in 2011, but will remain closed to traffic until the interchange is completed in 2014[55]. As Phase II of the project has not been given a start date, it has been listed later in this report, under Future Highway Construction.

[53] Ottawa Business Journal. (15 February 2011). "Apathy over Queensway Traffic woes." Retrieved from http://www.obj.ca/Opinion/2011-02-15/article-2242545/Apathy-over-Queensway-traffic-woes/1

[54] Government of Ontario. (29 November 2012). "Widened Highway 417 Now Open in Arnprior." Retrieved from http://news.ontario.ca/mto/en/2012/11/widened-highway-417-now-open-in-arnprior.html

[55] City of Ottawa. (2013). "Innes - Walkley - Hunt Club Connection and Hunt Club Road/Highway 417 Interchange." Retrieved from http://ottawa.ca/en/major-projects/construction-and-infrastructure/roadwork/innes-walkley-hunt-club-connection-and-hunt

Eagleson Road to Highway 7

Anyone who has attended an Ottawa Senator's home game knows how congested this stretch of Highway 417 can get. In September 2011, the Government of Ontario began construction to widen the highway and improve existing overpasses and intersections.

Highway 417 will be widened from Eagleson Road to Palladium Drive to provide two additional lanes in each direction. One lane in each direction will be a High Occupancy Vehicle (HOV). From Palladium Drive to Highway 7, the highway will be widened to provide one additional lane in each direction[56].

Several bridges will need to be widened and rehabilitated to accommodate these highway upgrades[57]:

- The existing Carp River bridges (eastbound and westbound) will be widened and rehabilitated to provide two additional lanes of traffic in both directions
- Carp Road Bridge will be widened at the north abutment to create three full lanes of traffic
- The Eagleson Road bridge and Huntmar Road bridge will be rehabilitated

Resurfacing and rehabilitation of existing lanes will also occur on Highway 417 between Eagleson Road and Highway 7 as well as existing ramps at Terry Fox Drive, Palladium Drive, and Carp Road[58].

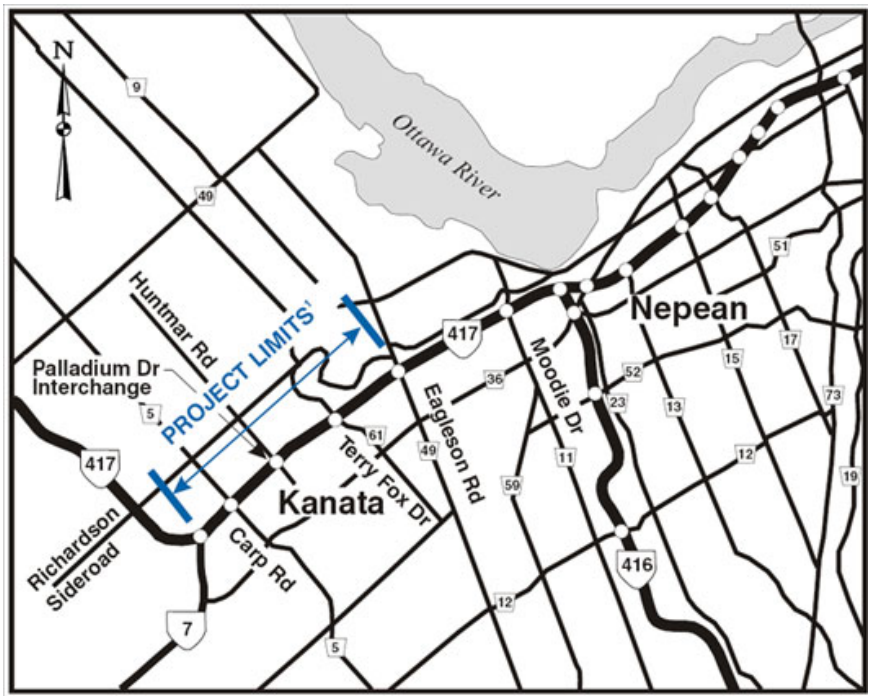


Figure 19. Highway 417 Expansion from Eagleson Road to Highway 7.
Source: Government of Ontario. (2011).

Construction on the entire project began in September 2011, and is expected to be completed in the fall of 2014[59]. Residents in the communities of Kanata, Stittsville, and Huntley should witness an increase in property values due to these transportation improvements.

Highway 416 to Anderson Road

The long-term plan for the City of Ottawa is to widen Highway 417 between Highway 416 and Anderson Road to eight lanes – four in each direction. Construction has been ongoing since 2006, with several bridge decks being replaced or widened to accommodate the additional lanes. The entire project is expected to be completed by 2015[60].

[56] Government of Ontario. (23 January 2012). "Construction reports: East." Retrieved from http://www.mto.gov.on.ca/english/traveller/trip/construction_reports-eastern.shtml#Contract2011-4036
[57] Ibid.
[58] Ibid.
[59] Wilkinson, M. (15 October 2012). "Highway 417 Construction." Retrieved from http://mariannewilkinson.com/2012/10/15/highway-417-construction/
[60] Government of Ontario. (2013). "Southern Highways Program 2012-2016." Retrieved from http://www.mto.gov.on.ca/english/pubs/highway-construction/southern-highway-2012/expansion-projects.shtml

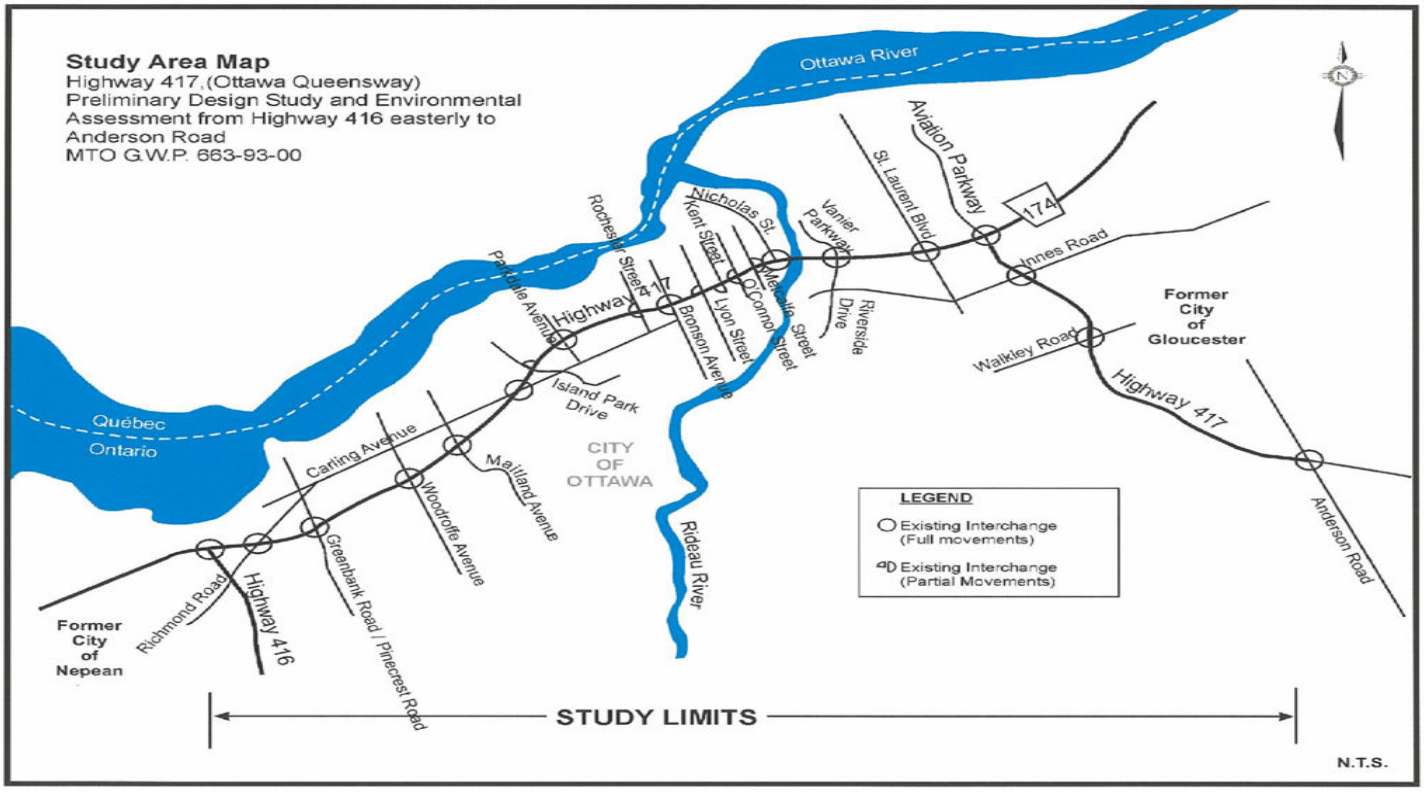


Figure 20. Highway 417 Road Widening from Highway 416 to Anderson Road.
Source: Government of Ontario. (2011).

Nicholas Street to Highway 174 (the Split)

The Nicholas Street to Highway 174 construction is part of the Highway 416 to Anderson Road project. "The Split" is the nickname given to the location where Highway 417 literally splits into two highways – Highway 417 south to Montreal and Highway 174 east toward Orleans. One of the busiest sections of the Queensway, traffic has been congested at "the Split" for decades. The Province of Ontario is hoping to "fix the Split" by investing $220 million to widen Highway 417 from Nicholas Street to Highway 174[61].

The construction slated for this project is extensive. Two new lanes (one in each direction) will be added to Highway 417 between Nicholas Street and Highway 174. The St. Laurent Bridge and Hurdman's Bridge will be widened and rehabilitated to accommodate these highway upgrades. In addition, the Lees Avenue, Vanier Parkway, and Belfast Road bridges will be completely replaced, using rapid replacement construction techniques[62].

The project will also create major changes to several intersections between Nicholas Street and Ottawa Highway 174. The St. Laurent Boulevard off-ramp at Ottawa Road 174 will be realigned to prevent westbound traffic from entering St. Laurent Boulevard. The current St. Laurent Boulevard northbound to Highway 417 eastbound ramp will be changed to 'Transit and Emergency Services use only.' The Parkdale Avenue Interchange and the Bronson Avenue Interchange are schedule for major operational improvements[63].

[61] Chiarelli, B. (2011). "Fixing the Split." Retrieved from http://www.bobchiarelli.onmpp.ca/DocumentEN.aspx?id=26
[62] Government of Ontario. (14 May 2012). "Notice of submission design and construction report Highway 417 expansion, operational improvements and infrastructure rehabilitation from Nicholas Street to Ottawa Road 174." Retrieved from http://queenswayexpansioneast.com/wp-content/uploads/2012/05/GWP-4091-07-00-4320-06-00-Notice-of-DCR-Submission.pdf
[63] Ibid.

The project is currently undergoing detail design and has a tentative completion date of March 31, 2015[64]. For a complete list of scheduled changes and improvements, please visit http://queenswayexpansioneast.com/project-overview/project-area.

Areas that will experience a positive price impact from the Highway 416 to Anderson Road improvements include: Qualicum, Bayshore, Redwood, Parkway Park, Whitehaven, Queensway Terrace, Bel Air Park, Glabar Park, Braemar Park, McKellar Heights, Carlington, Laurentian View, Hampton Park, Wellington West, Hintonburg, West Centre Town, Chinatown, The Glebe, Centretown, Downtown, Old Ottawa East, Sandy Hill, Robinson Field, Hurdman's Bridge, Eastway Gardens, Overbrook, Cyrville, Pineview, Beacon Hill South, Gloucester, Convent Glen, and Orleans.

Construction on Highway 7
Source: Government of Ontario. (2011).

HIGHWAY 7

Highway 7 is a provincial highway running east-west through southern Ontario. Highway 7 begins in Ottawa when Highway 417 branches into two sections just after Moonstone Road. The highway continues north towards Arnprior as Highway 417 and south towards Stittsville as Highway 7.

Highway Twinning 7 to Carleton Place

Highway 7 was recently widened from two lanes to four lanes (providing two lanes in each direction) between Highway 417 and Carleton place. The drive to downtown Ottawa has effectively been shortened by 25 minutes and commuters can now use two new commuter parking lots installed at Dwyer Hill Road and Cemetery Road[65]. The community of Carleton Place will benefit from this improvement.

FUTURE HIGHWAY CONSTRUCTION

Projects planned for the Ottawa region that do not have a set completion schedule.

Highway 417

Hunt Club Road Phase II

Phase II of the Hunt Club Road project will see the new Hunt Club interchange connected to Walkley Road and Innes Road through a new north-south corridor[66].

Division Street to Scheel Drive

Highway 417 will be widened to four lanes between Division Street and Scheel Drive, just west of Arnprior. The project is currently in the design phase. Money has been set aside for this project in the provincial budget[67].

[64] Ottawa Business Journal. (4 May 2012). "Contracting begins on Highway 174, Road 17 upgrades." Retrieved from http://www.obj.ca/Real-Estate/Construction/2012-05-04/article-2970659/Contracting-begins-on-Highway-174,-Road-17-upgrades/1
[65] Government of Ontario. (November 2012). "Twinning Highway 7 Carleton Place." Retrieved from http://www.mto.gov.on.ca/english/pubs/highway-construction/southern-highway-2012/completed-projects.shtml#s2
[66] City of Ottawa. (2013). "Innes - Walkley - Hunt Club Connection and Hunt Club Road/Highway 417 Interchange." Retrieved from http://ottawa.ca/en/major-projects/construction-and-infrastructure/roadwork/innes-walkley-hunt-club-connection-and-hunt

Scheel Drive to Renfrew

The Ontario Ministry of Transportation plans to further extend Highway 417 west through the Ottawa Valley by twinning the existing route to a four-lane highway beyond Arnprior. The project, which spans a total of 22.5 kilometres of highway from Scheel Drive in Arnprior to five kilometres west of Renfrew, is currently under environmental assessment[68].

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.

[67] Chase, S. (30 November 2012). "Highway 417 opens at Arnprior." *The Daily Observer*. Retrieved from http://www.thedailyobserver.ca/2012/11/30/highway-417-opens-at-arnprior

[68] Ibid.

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Don R. Campbell is a Canadian-based real estate investor, researcher, author and educator. He is the Founding Partner of the Real Estate Investment Network Ltd. His experienced team's research and systems have been developed and continuously refined over the last twenty years and are based solely on proven Canadian strategies that work in today's market environment.

Don is the author of the best-selling Canadian real estate book *Real Estate Investing in Canada*. Published in May 2005, with a combined total of over 100,000 copies of all his books sold, *Real Estate Investing in Canada* is the all-time best-selling real estate book in Canadian history. *Real Estate Investing in Canada 2.0* was released in 2009 with an update on current market conditions and includes a section on property management to help investors better manage their portfolios. Don's second book, *97 Tips for Canadian Real Estate Investors* was released in 2006 and became a #1 best-seller with over 20,000 copies sold. His third book, titled *51 Success Stories of Canadian Real Estate Investors*, chronicles real estate investors' stories and follows with detailed analyses of their journeys so that all investors can mirror the successes and avoid the pitfalls. *81 Financial and Tax Tips for the Canadian Real Estate Investor*, released in February 2010, is a practical, compact, and easy-to-understand guide to accounting and tax-saving strategies. Published in 2011, *Secrets of the Canadian Real Estate Cycle* enables investors to assess local markets and decide the best investment tactics based on the key factors that drive cycles. Real *Estate Joint Ventures: The Canadian Investors Guide to Raising Money and Getting Deals Done* was released in November 2011. *Buying US Real Estate: The Proven and Reliable Guide for Canadians* is Don's most recent book, released in September 2012.

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