# HAMLTON TRANSPORTING FFE

THE IMPACT OF TRANSPORTATION IMPROVEMENTS ON HOUSING VALUES IN THE HAMILTON AREA

Don R Campbell, Senior Analyst Melanie Reuter, Director of Research Allyssa Epp, Research Analyst



## 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.



2

# EXECUTIVE SUMMARY

- Hamilton area 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 Hamilton 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.

As many of the Move 2020 projects have not yet begun the physical construction, investors should only focus on regions where they know the projects are moving ahead or are already completed. With that in mind, the key areas in these regions that will or have been positively affected are:

**First Tier:** Neighbourhoods located near the on and off ramps to the Red Hill Valley Parkway. These include: McQuestern East and West, Barton, Nashdale, Kentley, Glenview East, Corman, Red Hill, King's Forest and Albion Falls.

**Second Tier:** Includes areas that will also be positively impacted by the easier access and traffic flow created by the Highway 8 link to the Red Hill Valley Parkway. This will allow commuters from as far away as Toronto and Oakville to cut key minutes off their drive.

Third Tier: Areas that are within 800 meters of the proposed LRT and GO train stations in Hamilton. These areas will move up to second tier once the official announcements are made as to exact locations, then eventually move to first tier once the actual construction begins. Communities impacted by future LRT lines include: Ainslie Wood, Cootes Paradise, Westdale South, Beasley, Corktown, Kentley, Greenford, Green Acres Park, North Glanford, Ryckmans, Mewburn, Sheldon, Kennedy East, Allison, Greeningdon, Balfour, Bonnington, Yeoville, Rolston, Buchanan, Mohawk, Southam, Centremount, Durand, Corktown, Beasley, Central Hamilton, North End, Ancaster, Mohawk Meadows, Bruleville, Burkholme, northern Crerar, northern Rushdale, Hill Park, Lawfield, Crown Point, northern Homeside, Ancaster, Leckie Park, the Elfrida growth area, Corman, Riverdale, and Winona.

- 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	7
Light Rail Transit Expansion Impact On Residential Property Values	11
Rapid Transit In The GTA	14
Currently Under Construction Remaining Metrolinx Move 2020 Transit Projects Future GTA Rapid Transit Plans – "One City Transit Plan GTA Heavy Rail Transit	Error! Bookmark not defined. Error! Bookmark not defined.
Currently Under Construction Future GO Train Construction Impact Of Highway And Bridge Construction On Property Prices	19 19
Major Road Improvements In Toronto	23
Recently Completed	Error! Bookmark not defined.
Future GTA Highway Construction	



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 <u>www.reincanada.com</u>.



# 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), the Greater Toronto Area (GTA), and Ottawa.

Realizing the housing value impact for some communities over others, a study of the transportation effects in the Hamilton area was first undertaken in 2010. With several of the Move 2020 projects now under construction, a new edition was needed to update dilligent real estate investors. Answers to three very important questions will have a direct financial impact on tens of thousands of residents. These questions are as follows:

- 1. How will the proposed rapid transit lines in Hamilton affect residential real estate values?
- 2. How will improvements to the Lakeshore West GO Train Line affect residential property values in the Hamilton Area?

#### 3. How will the highway improvements affect property values in the City of Hamilton?

For many Hamilton 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.



Light Rail System         Effect on Property Values           Data         Construction           Data         Construction           Qalaxie         Value of properties rose 39% more than the control group not served by rail.           Hernandez         Proximity to DART resulted in a 24.7% increase vs. 11.5% for non-DART properties for office buildings.           Clower         Growinity to DART resulted in a 24.7% increase vs. 11.5% for non-DART properties for office buildings.           Clower         Construction         Construction         Construction           1999 Weinstein &         Checkins a 5% penalty over time for units nearer stations, less than 1/4 mile.         Construction           Clower         The value of offices less than 1.4 miles from a station increased by 10% & retail property increased by 30%           Clower         The value of confos and apartments from 1/4-1/2 mile from stations.         The value of stations.           2001 Cevero & Duncan         The value of condos and apartments from 1/4-1/2 mile from station.         The value of station.           1995 Landis et al.         For every 1.000.1. Goser to a station prices increased 337 or 1%, but decreased 4% for units closer than 390 ft. to a station.           1994 Landis et al.         For every 1.000.1. Goser to a station experienced a 23% premium           Duncan         Properties less than 1/4 mile form a station experienced a 23% premium           Duncan	Table 1 - Effects of Light Rail Systems on Commercial Property Values		
2003 Lyons & Hernandez         Value of properties rose 39% more than the control group not served by rail.           Hernandez         Proximity to DART resulted in a 24.7% increase vs. 11.5% for non-DART properties for office buildings Clower           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 14 mile.           2002 Cevero & Duncan         A 72% premium resulted for parcels near station increased by 10% & retail property increased by 30% Clower           2002 Cevero & Duncan         A 72% premium resulted for parcels near station increased by 10% & retail property increased by 30% Clower           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%.           2095 Landis & Huang         The revers 0 significant premiums for property 1/4-1/2 mile from a station.         The value of on codes and apartments from 1/4-1/2 mile from stations.           2002 Cevero & Duncan         Properties less than 1/4 mile from a station increased 337 or 1%, but decreased 4% for units closer than 900 ft. to a station.           2002 Cevero & Duncan         Properties less than 1/4 mile from a station increased 4-12%           2002 Cevero & Duncan         Properties less than 1/4 mile from a station increased 4-12%           2000/10 Cevero & Buncan         Properties less than 1/4 mile from	Light Rail System	Effect on Property Values	
Hernandez         Proximity to DART resulted in a 24.7% increase vs. 11.5% for non-DART properties for office buildings           2002 Weinstein &         Cower         Bedian values of residential properties increased 32.1% near DART compared to 19.5% in the control group areas.           1999 Weinstein &         There was a 5% penalty over time for units nearer stations, less than 1/4 mile.           1999 Weinstein &         The value of offices less than 1.4 miles from a station increased by 10% & retail property increased by 30%. Cower           2002 Cevero & Duncan         17% and 10% premiums 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 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 apol. to a station.           2001/2000 Weinberger         Rent for units within a 3/4 mile of a station increased 4-12%           2003 Cevero & Duncan         Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station. but decreased 6% for condos.           2002 Cevero & Duncan         Properties less than 1/4 mile from a station experienced a 23% premium	Dallas		
Hernandez         Proximity to DART resulted in a 24.7% increase vs. 11.5% for non-DART properties for office buildings           2002 Weinstein &         Cower         Median values of residential properties increased 32.1% near DART compared to 19.5% in the control group areas.           1999 Weinstein &         There was a 5% penalty over time for units nearer stations, less than 1/4 mile.           1999 Weinstein &         The value of offices less than 1.4 miles from a station increased by 10% & retail property increased by 30%. Cower           2002 Cevero & Duncan         17% and 10% premiums 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 ware no significant premiums for property 1/4-1/2 mile from station.           1995 Landis & Huang         For every 1,000 ft. closer to a station, prices increased \$337 or 1%, but decreased 4% for units closer than apole.           2001/2000 Weinberger         Rent for units within a 3/4 mile of a station increased 4-12%           Los Angeles         2002 Cevero & Duncan           2012 Covero & Duncan         Yalues rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.           2001/200 Weinberger         Rent f	2003 Lyons &	Value of properties rose 39% more than the control group not served by rail.	
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% Clower           2002 Cevero & Duncan         7% and 10% premium resulted for parcels near stations in the Mission Valley           2002 Cevero & Duncan         7% 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.         For every 1.000 ft, closer to a station, prices increased \$337 or 1%, but decreased 4% for units closer than goot ft. to a station.           2002 Cevero & Duncan         Properties less than 1/4 mile from a station experienced a 23% premium Duncan           2004 It to a station.         Properties less than 1/4 mile from a station increased 4-12%           2002 Cevero & Duncat         Properties less than 1/4 mile from a station was observed.           2002 Cevero & Duncat         Properties less than 1/4 mile from a station was observed.           20000 Valueberger         Rent for units within a	-		
2002 Weinstein &         Median values of residential properties increased 32.1% near DART compared to 19.5% in the control group areas.           1999 Weinstein &         There was a 5% penalty over time for units nearer stations, less than 1/4 mile.           1999 Weinstein &         The value of offices less than 1.4 miles from a station increased by 10% & retail property increased by 30% Clower           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         The trap were no significant premiums for property 1/4-1/2 mile from stations.           1995 Landis & Huang         The trap were no significant premiums for property 1/4-1/2 mile from station.           1995 Landis et al.         The typical home sold for \$272 more for every 330 ft. closer it was to a light rail station.           1994 Cevero &         Poperties less than 1/4 mile from a station increased 4-12%           2000/01 Cevero &         Properties less than 1/4 mile form a station increased 4-12%           2002 Cevero & Duncan         Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.           Portind (Eaststide)         Values rose to do ft. more a stati	2002 Weinstein &	Proximity to DART resulted in a 24.7% increase vs. 11.5% for non-DART properties for office buildings	
Clower         group areas.           1999 Weinstein &         There was a 5% penalty over time for units nearer stations, less than 1/4 mile.           1999 Weinstein &         The value of offices less than 1.4 miles from a station increased by 10% & retail property increased by 30%           2000 Cevero & Duncan         A 72% premium resulted for parcels near stations in the Mission Valley           2002 Cevero & Duncan         A 72% premium resulted for parcels near stations in the Mission Valley           2002 Cevero & Duncan         The value of condos and apartments from 1/4-1/2 mile from station increased 2-18%, the value of single family homes decreased 0-4%.           1995 Landis et al.         The typical home sold for \$272 more for every 30 th. closer it was to a light rail station.           1995 Landis et al.         The typical home sold for \$272 more for every 30 th. closer it was to a light rail station.           1995 Landis et al.         For every 1, 000 ft. closer to a station prices increased \$337 or 1%, but decreased 4% for units closer than 300 ft. to a station.           2000/01 Cevero &         Properties less than 1/4 mile from a station increased 4-12%           Los Angeles         Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.           2001/200 Weinberger         Ret for units within a 3/4 mile of a station increased 4-12%           Los Angeles         Values rose 103.5% for apartments from a station was observed.           2002 Cevero & Duncan         <	Clower		
1999 Weinstein &       There was a 5% penalty over time for units nearer stations, less than 1/4 mile.         Clower       The value of offices less than 1.4 miles from a station increased by 10% & retail property increased by 30%         San Diego       7% and 10% premium resulted for parcels near stations in the Mission Valley         2002 Cevero & Duncan       A 72% premium resulted for parcels near stations in the Mission Valley         2002 Cevero & Duncan       A 72% premium resulted for parcels near stations in the Mission Valley         2002 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 et al.       The value of condos and apartments from type type type type type type type were no significant premiums for property 1/4-1/2 mile from stations.         1995 Landis et al.       The typical homes sold for \$272 more for every 330 ft. closer it was to a light rail station.         Santa Clara/San Jose       Properties less than 1/4 mile from a station experienced a 23% premium         Duncan       Rent for units within a 3/4 mile of a station increased 4-12%         Los Angeles       Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.         Portland (Eastide)       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.         1999 Dueker & Binco.       The value of parcels located 1/2 mile	2002 Weinstein &	Median values of residential properties increased 32.1% near DART compared to 19.5% in the control	
Clower         Instruction           1999 Weinstein &         The value of offices less than 1.4 miles from a station increased by 10% & retail property increased by 30%           2002 Cevero & Duncan         A 72% premium resulted for parcels near stations in the Mission Valley           2002 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 & Huang         There were no significant premiums for property 30 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 300 ft. to a station.           2001/2000 Weinberger         Rent for units within a 3/4 mile of a station increased 4-12%           2002 Cevero & Duncan         Yalues rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.           2001/2000 Weinberger         Rent for units within a 3/4 mile of a station increased 1-12%           1999 Ducker & 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.           1997 Lewis-Workman         Property values increased by \$75 for every 100 ft. closer to the station (within 2.500 - 5,280 ft. radius).           1998 Al-Mosaind et al.         A 10.6% premiu			
1999 Weinstein &       The value of offices less than 1.4 miles from a station increased by 10% & retail property increased by 30% Clower         2002 Cevero & Duncan       A 72% premium resulted for parcels near stations in the Mission Valley         2002 Cevero & Duncan       A 72% premium resulted for parcels near stations in the Mission Valley         2002 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%.         2003 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 300 ft. closer it was to a light rail station.         1994 Cevero & Duncan       For every 1, 000 ft. doser to a station prices increased \$337 or 1%, but decreased 4% for units closer than 300 ft. to a station.         2000/01 Cevero & Duncan       Properties less than 1/4 mile from a station increased 4-12%         Los Angeles       Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.         2002 Cevero & Duncan       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.         1999 Lewis & Bianco       Median house values rose at altereasing rates the closer to the station (within 2,500 - 5,2		There was a 5% penalty over time for units nearer stations, less than 1/4 mile.	
Clower         San Diego           San Diego         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%.           2001 Cevero & Duncan         The value of condos and apartments from 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.           1995 Landis et al.         For every 1, 000 ft. closer to a station prices increased \$337 or 1%, but decreased 4% for units closer than goof ft. to a station.           2000/01 Cevero & Locan         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%           2003 Cevero & Duncan         Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.           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. from a station.           1998 Al-Mosaind et al.         A 10.6% premium for homes 500 meters from a station was observed.           1997 Lawis-Workma         Property values increased by \$75 for every 100 ft. closer to the sta			
San Diego         Metaolity           2002 Cevero & Duncan         A 72% premium resulted for parcels near stations in the Mission Valley           2002 Cevero & Duncan         13% 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 et al.         There were no significant premiums for property 1/4-1/2 mile from stations.           1994 Landis et al.         The rewere no sol for \$272 more for every 300 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.           2000/01 Cevero & Duncan         Properties less than 1/4 mile from a station experienced a 23% premium 2001/2000 Weinberger           2002 Cevero & Duncan         Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.           Portand (Eastide)         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.           1999 Ducker & Bianco         Median house values rose at increased by 75 for every 100 ft. closer to the station (within 2,500 - 5,280 ft. radius).           1993 Al-Mosaind et al.         A 10.6% premium for homes 500 meters from a station, as 6.2% if very near a station.		The value of offices less than 1.4 miles from a station increased by 10% & retail property increased by 30%	
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.       For every 1, 000 ft. closer to a station, prices increased \$337 or 1%, but decreased 4% for units closer than 300 ft. to a station.         Santa Clara/San Jose       2001/2000 Weinberger       Rent for units within a 3/4 mile of a station increased 4-12%         2001/2000 Weinberger       Rent for units within a 3/4 mile of a station increased 4-12%       Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.         2001/2000 Weinberger       Rent for units within a 3/4 mile of a station increased 4-12%       Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.         2001/2000 Weinberger       Rent for units within a 3/4 mile of a station was observed.       Property values increased by 575 for every 100 ft. closer to the station. The largest change, \$2, 300, was for homes up to 200 ft. Irom a station.         1999 Ducker & Bianco       Median house values rose at increasing rates the closer to the station (within 2,500 - 5,280 ft. radius).         1997 Lewis-Work			
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 homes odd for 5272 more for every 300 ft. doser 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%       Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.         Portiand (EastEd)       Yalues rose 10.25% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.         Portiand (EastEd)       Yalues rose 10.5% for apartments and homes 1/4-1/2 mile from a station.       The largest change, \$2, 300, was for homes up to 200 ft. from a station.         1999 Ducker & Bianco       Median house values rose at increasing rates the closer to the station (within 2,500 - 5,280 ft. radius).       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. <td>-</td> <td>A 72% premium resulted for parcels pear stations in the Mission Valley</td>	-	A 72% premium resulted for parcels pear stations in the Mission Valley	
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 301 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 300 ft. to a station.         Santa Clara/San Jose       2000/01 Cevero &       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.         1999 Dueker & Bianoo       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         1997 Lewis-Workman       Property values increased by \$75 for every 100 ft. closer to the station (within 2,500 - 5,280 ft. radius).         1991 Lewis-Workman       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 station.         1993 Al-Musaid et al.       The value of homes with 500 metres increased by 10.6% or \$4, 324.         Sacrameto			
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.         2000/01       Cevero &       Properties less than 1/4 mile from a station experienced a 23% premium         Duncan       Cevero &       Properties less than 1/4 mile for 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.         Portand (Eastside)       1999 Dueker & Biano.       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       Property values increased by \$75 for every 100 ft. closer to the station (within 2,500 - 5,280 ft. radius).         1998 Al-Mosaind 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.         1999 Landis et al.       The value of homes within 500 meters increased by 10.6% or \$4, 324.         Sacrameto       1094/95 Landis		stations.	
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 go0 ft. to a station.         Santa Clara/San Jose       2000/01       Cevero &         2000/12       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         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         1998 Al-Mosaind et al.       A 10.6% premium for homes 500 meters from a station was observed.         1997 Lewis-Workman       Property values increased by \$75 for every 100 ft. closer to the station (within 2,500 - 5,280 ft. radius).         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       There was no discernable positive or negative impact to property values (not statistically significant). Single family home	2001 Cevero & Duncan	· · · · · · · · · · · · · · · · · · ·	
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       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         2020 Zevero & Duncan       Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.         Portiand (Eastside)       1999 Dueker & Bianco         1998 Al-Mosaind et al.       A 10.6% premium for homes 500 meters from a station was observed.         1997 Lewis-Workman 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.         Sacamento       1994/95 Landis et al.         1994 Landis       There was no discernable positive or negative impact to property values (not statistically significant). 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.         1994/95 Landis et al.       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	1995 Landis & Huang		
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       Properties less than 1/4 mile from a station experienced a 23% premium         2001/01       Cevero &       Properties less than 1/4 mile from a station increased 4-12%         Los Angeles       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       Property values increased by \$75 for every 100 ft. closer to the station (within 2,500 - 5,280 ft. radius).         et al       11e 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       10.8% of doser than 900 ft.         1994/55 Landis et al.       The price of single family homes increased by 0.1% for every 1, 000 ft. closer to a station, but decreased 10.8% if doser than 900 ft.     <	-		
900 ft. to a station.         Santa Clara/San Jose         2000/01 Cevero &       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         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)       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.         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.         1999 Lewis-Workman       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       Intere 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.         Sata Clara/San Jose       There was no discernable positive or negative impact to property values (not statistically significant). Single family			
2000/01       Cevero & Druccan       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)       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.         1999 Dueker & Bianco       Median house values increased by \$75 for every 100 ft. closer to the station (within 2,500 - 5,280 ft. radius).         1997 Lewis-Workman 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       Inter 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       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. <td></td> <td></td>			
Duncan         Instrument           2001/2000 Weinberger         Rent for units within a 3/4 mile of a station increased 4-12%           Los Angeles         Image: Comparison of the station of the station.           Portland (Eastside)         Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.           1999 Ducker & 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).           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         Image: Sacramatic and the station and 6.2% if very near a station.           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.           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.           1998 Sal	Santa Clara/San Jose		
2001/2000 Weinberger       Rent for units within a 3/4 mile of a station increased 4-12%         Los Angeles       2002 Cevero & Duncan         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         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       Imere 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.         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.         1994 Salajic       There was a \$2,237 premium for the average home.         1998 Ferguson       A \$4.90 premium per foot associate with prox	2000/01 Cevero &	Properties less than 1/4 mile from a station experienced a 23% premium	
Los Angeles2002 Cevero & DuncanValues rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.Portland (Eastside)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.1999 Dueker & BiancoMedian 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 alProperty 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.SacramentoImage: Sacramento Sacrame	Duncan		
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)       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       Property values increased by \$75 for every 100 ft. closer to the station (within 2,500 - 5,280 ft. radius).         1938 Al-Mosaind 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.         1996 Knapp et al.       The value of homes within 500 metres increased by 10.6% or \$4, 324.         Sacramento       Image: the value of homes increased by 0.1% for every 1, 000 ft. closer to a station.         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       Image: the value of premium for the average home.         Vancouver       Image: the value of premium for the average home.         1998 Ferguson       A \$4.90 premium per foot associate with proximity to station was found.         London       Image: the value of premium per foot associate with proximity to station was found.	2001/2000 Weinberger	Rent for units within a 3/4 mile of a station increased 4-12%	
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       Image: the 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       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.         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.         1983 Bajic       There was a \$2,237 premium for the average home.         Vancouver       1998 Ferguson         1998 Ferguson       A \$4.90 premium per foot associate with proximity to station was found.         London       2007 Savills	Los Angeles		
1999 Dueker & BiancoMedian 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 alProperty 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.SacramentoImage: Statistical 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.1994 LandisThe 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.1998 BajicThere was a \$2,237 premium for the average home.VancouverImage: Statistical provint prov	2002 Cevero & Duncan	Values rose 103.5% for apartments and homes 1/4-1/2 mile from a station, but decreased 6% for condos.	
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 alProperty 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.SacramentoImage: statistical provide the statistical provide the statistical provide the alignment rose the farther they were a station.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.1994 LandisThe 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.1998 BajicThere was a \$2,237 premium for the average home.VancouverImage: station provide the station was found.1998 FergusonA \$4.90 premium per foot associate with proximity to station was found.1907 SavillsA one-minute reduction to commuter rail journey increaser the average home value by £1,000.	Portland (Eastside)		
1998 Al-Mosaind et al.A 10.6% premium for homes 500 meters from a station was observed.1997 Lewis-Workman et alProperty 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.SacramentoImage: statistical stat	1999 Dueker & Bianco		
1997 et alProperty values increased by \$75 for every 100 ft. closer to the station (within 2,500 - 5,280 ft. radius). et al1996 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.SacramentoImage: statistic closer to a station and 6.2% if very near a station.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 JoseImage: statistic closer than 900 ft.1994 LandisThe 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.1983 BajicThere was a \$2,237 premium for the average home.VancouverImage: statistic closer to a station was found.1998 FergusonA \$4.90 premium per foot associate with proximity to station was found.LondonImage: statistic closer than 900 ft.2007 SavillsA one-minute reduction to commuter rail journey increaser the average home value by £1,000.	1998 Al-Mosaind et al.		
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.SacramentoImage: statistical statis statistical statistic			
1993 Al-Musaind et al.The value of homes within 500 metres increased by 10.6% or \$4, 324.SacramentoImage: constraint of the state of th			
Sacramento1994/95 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 JoseThe 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.1994 LandisThe 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.TorontoImage: Clara Sacramento Sacrame	1002 AL Mussing at al		
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 Jose1994 LandisThe 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.TorontoImage: closer than 900 ft.1983 BajicThere was a \$2,237 premium for the average home.VancouverImage: closer than 900 ft.1998 FergusonA \$4.90 premium per foot associate with proximity to station was found.LondonImage: closer than 900 ft.2007 SavillsA one-minute reduction to commuter rail journey increaser the average home value by £1,000.			
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 Jose1994 LandisThe 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.TorontoImage: Clara Station		There was no discorrable positive or permitted impact to prepart with the fact statistic discrete statistics of the stat	
1994 LandisThe 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.TorontoImage: Constant of the station of the	1994/95 Landis et al.		
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.	Santa Clara/San Jose		
1983 Bajic       There was a \$2,237 premium for the average home.         Vancouver	1994 Landis		
Vancouver         A           1998 Ferguson         A \$4.90 premium per foot associate with proximity to station was found.           London         A           2007 Savills         A one-minute reduction to commuter rail journey increaser the average home value by £1,000.	Toronto		
1998 FergusonA \$4.90 premium per foot associate with proximity to station was found.London2007 SavillsA one-minute reduction to commuter rail journey increaser the average home value by £1,000.	1983 Bajic	There was a \$2,237 premium for the average home.	
1998 FergusonA \$4.90 premium per foot associate with proximity to station was found.London2007 SavillsA one-minute reduction to commuter rail journey increaser the average home value by £1,000.	Vancouver		
London           2007 Savills         A one-minute reduction to commuter rail journey increaser the average home value by £1,000.	1998 Ferguson	A \$4.90 premium per foot associate with proximity to station was found.	
	2007 Savills	A one-minute reduction to commuter rail journey increaser the average home value by £1,000.	
	Source: Huang, H. (1996). "L	and Use Impacts of Urban Rail Transit Systems" in Journal of Planning Literature, vol. 11, iss. 17.	



-

# **BACKGROUND: HAMILTON**

As more people flock to the Greater Toronto Area (GTA) for the job opportunities, the demand on the Area's infrastructure and housing market will continue to escalate. As a result, people will make the decision to move further outside Toronto, turning instead to surrounding communities to find accommodations to either rent or buy that fit their budget. This urban expansion and a desire for reducing impact on the environment will result in the need for infrastructure and transportation improvements to provide connectivity to the city and its jobs. The opposite of this is also true; rail transit often drives urban development<sup>1</sup>.

Hamilton is located at the western end of Ontario's Golden Horseshoe, on the banks of Lake Ontario. With access to the Queen Elizabeth Way (QEW), the city is only 30 minutes away from the Greater Toronto Area (in



Figure 1. City of Hamilton

good traffic), a market of six million people. Hamilton also has direct access to United States markets via the Detroit or Buffalo border crossings.

Located in the 'most densely populated corridor of economic activity in Canada<sup>2</sup>', the City of Hamilton is poised for continued population growth. Lower housing prices and the short driving distance to Toronto appeal to people who work in GTA, but live outside its borders. As of the last federal census, the population of Hamilton was 519,949<sup>3</sup>. By 2031, Hamilton is expected to employ over 300,000 workers, and the city's population will surpass 660,000. If left unchecked, the population growth will mean an additional 180,000 auto driver trips per day on the city's already congested road network. The City of Hamilton, in its Transportation Master Plan<sup>4</sup>, states that "this translates into 1.2 million additional kilometres driven by Hamilton residents each day and a consumption of 40 million litres of fuel per year...significant congestion on most escarpment crossings will result in increased delays to auto drivers, transit riders and commercial vehicles".

According to the Toronto City Summit Alliance in 2007, the growth of the GTA and the Hamilton area has resulted in the transportation infrastructure failing to meet the needs of its residents<sup>5</sup>. Community and regional planners can and do use transportation to guide growth. The Province's Places to Grow Act 2006<sup>6</sup> outlines a plan to accommodate this 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



<sup>&</sup>lt;sup>1</sup> Huang, H. (1996). "Land Use Impacts of Urban Rail Transit Systems" in Journal of Planning Literature, vol. 11, iss. 17.

<sup>&</sup>lt;sup>2</sup> City of Hamilton. (2009). "Why Hamilton – Top Ten Reasons". <u>http://www.investinhamilton.ca/why-hamilton/top-ten-reasons.html</u>

<sup>&</sup>lt;sup>3</sup> Statistics Canada. (2011). "Hamilton, Ontario" (Code 3 3525005) (table). 2011 Community Profiles. 2011 Census. Retrieved from

http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/prof/92-591/details/page.cfm?Lang=E&Geo1=CSD&Code1=3521010&Geo2= PR&Code2 = 35&Data=Count&SearchText=brampton&SearchType=Begins&SearchPR=01&B1=All&Custom=

<sup>4</sup> City of Hamilton. (2008). Transportation Master Plan. http://www.hamilton.ca/NR/rdonlyres/9C87D1C8-0444-4A3A-A26A-1102B6049BBB/0/2ExecutiveSummary.pdf 5 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.

<sup>6</sup> Ministry of Public Infrastructure Renewal. (2006). Places to Grow Act 2006. http://www.placestogrow.ca/index.php?lang=eng

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. A number of projects were planned for the Hamilton area<sup>7</sup>:

- 1. GO Lakeshore West rail line capacity expansion by adding a third track from Burlington to Hamilton
- 2. Hamilton east-west rapid transit on King/Main Streets from Eastgate Mall to McMaster University
- 3. Hamilton north-south rapid transit on James/Upper James Streets from Rymal Road to King Street

The city has taken the province's transportation improvement advice to heart, and has added a number of its own projects to improve travel times for Hamilton residents. Additional LRT lines cominbed with highway improvements will provide a much needed higher capacity transportation system with better connections to Toronto and beyond.

<sup>&</sup>lt;sup>7</sup> Government of Ontario. (June 15, 2007). "MoveOntario 2020 Projects." Retrieved from http://news.ontario.ca/opo/en/2007/06/moveontario-2020-projects.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 catalysts<sup>8</sup>. 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<sup>9</sup>.

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, <u>www.walkscore.com</u> 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 year<sup>10</sup>. 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

<sup>&</sup>lt;sup>10</sup> 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.



<sup>8</sup> Campbell, Don R. (2005) Real Estate Investing in Canada ISBN 0-470-83588-5 John Wiley & Sons Publishers: Toronto.

<sup>9</sup> 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.

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 year<sup>11</sup>. 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.

<sup>&</sup>lt;sup>11</sup> 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 owners<sup>12</sup>.

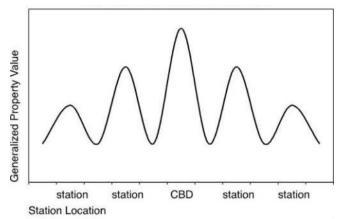


Figure 2. Peaks and Valleys of Property Values at Rail Stations in relation to the CBD

Studies show that there appears to be a higher positive impact on property values located near commuter railway stations over light and heavy railway<sup>13</sup>. 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<sup>14</sup>, 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<sup>15</sup>.

#### 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<sup>16</sup>. 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.

<sup>16</sup> 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.



<sup>12</sup> Diaz, R. (n.d.) Impacts of Rail Transit on Property Values. www.apta.com/research/info/briefings/documents/diaz.pdf.

<sup>13</sup> Debrezion, G., E. Pels, & P. Rietveld. (2003). The Impact of Railway Stations on Residential and Commercial Property Value. Tinbergen Institute Discussion Paper.

<sup>14</sup> Ibid.

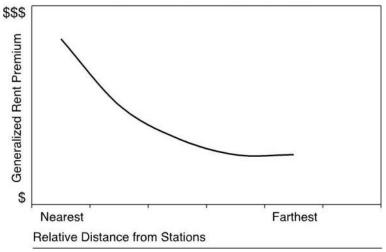
<sup>15</sup> Fejarang, R. A. (1994). Impact on Property Values: A Study of the Los Angeles Metro Rail, Transportation Research Board, 13<sup>th</sup> Annual Meeting, Washington, D.C.

Overall, studies have found that rent decreased by approximately 2.5% for every one-tenth of a mile distance from the station<sup>17</sup>.

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<sup>18</sup>. 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<sup>19</sup>. 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.<sup>20</sup>

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<sup>21</sup>. 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<sup>22</sup>. 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

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.



<sup>17</sup> 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.

<sup>18</sup> Landis, J. & R. Cervero. (1995). "BART at 20: Property Value and Rent Impacts." Transportation Research Board, 74<sup>th</sup> Annual Meeting, Washington, D.C.

<sup>19</sup> Voith, R. (1991). "Transportation, Sorting and House Values" in AREUEA Journal, Vol. 117, No. 19.

<sup>&</sup>lt;sup>20</sup> Donovan, Patricia. (2007). "Housing Prices Higher Near Most Buffalo Metro Rail Stations". On University of Buffalo website: http://www.buffalo.edu/news/8669

<sup>&</sup>lt;sup>21</sup> 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.

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<sup>23</sup>.

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 residents<sup>24</sup>.

#### 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<sup>25</sup>. 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<sup>26</sup>.



<sup>&</sup>lt;sup>23</sup> Cook, L., Barnes, Y., Ward, J., Hudson, N., Rose, L. (2007). "Commuter impact on property". Savills Research.

<sup>&</sup>lt;sup>24</sup> 24 Weinstein, B. & T. Clower. (1999). The Initial Economic Impacts of the DART LRT System. Prepared for Dallas Area Rapid Transit.

<sup>25</sup> Debrezion, G., E. Pels, & P. Rietveld. (2003). The Impact of Railway Stations on Residential and Commercial Property Value. Tinbergen Institute Discussion Paper.

<sup>26</sup> Ibid.

# RAPID TRANSIT IN HAMILTON

In November 2008, Metrolinx (now merged with GO Transit), released the final copy of its transportation strategy. The Big Move reports that more than 1,200 kilometres of new rapid transit lines are planned for the Greater Toronto Hamilton Area (GTHA). The report states that over 80% of people in the GTHA will live within two kilometres of rapid transit, in comparison to the 42% currently. The addition of these rapid transit lines means that there will be twice as many people commuting via public transit each morning<sup>27</sup>.

The Big Move identifies a total of five future rapid transit corridors for the City of Hamilton to be constructed over the next 25 years and beyond. These corridors include:

- B-Line Main/King corridor, McMaster University to Eastgate Square, Top 15 priority project
- L-Line Downtown to Waterdown, 25 +year project
- A-Line James/Upper James corridor, Downtown to Airport, 15 year project
- S-Line Centennial to Ancaster Business Park, 25+ year project
- T-Line Mohawk to Meadowlands, 25 year project



Figure 4. Hamilton Long Term Rapid Transit System (BLAST)

Source: City of Hamilton. (2014).

<sup>27</sup> Metrolinx. (2010). "The Big Move: Implementing a Transportation Renaissance in the GTHA". http://www.metrolinx.com/en/regionalTransportationPlan.aspx



## CONSTRUCTION STARTING IN THE NEXT 15 YEARS

Hamilton LRT projects marked as 'Top Priority' by Metrolinx.

### **B-Line**

Metrolinx listed 15 top priority 'early implementation' projects, which included a rapid transit expansion from McMaster University to Eastgate Square (known as the B-Line). In January 2011, the City of Hamilton released its preliminary maps for the B-Line with proposed stations. Possible stops on this include: McMaster University and Medical Centre at the beginning of the line; a multi-modal downtown station where the B-Line, L-Line, A-Line, and Hunter Street GO Station all connect for transfer at James Street South and Main Street West; and a final station at Eastgate Square, at Centennial Parkway South and Queenston Road.



Source: City of Hamilton. 2011. Moving Hamilton Forward with LRT.

Neighbourhoods that would experience a 10%-20% price premium if these stations were built include: Ainslie Wood North, Ainslie Wood East, Cootes Paradise, Westdale South, Central Hamilton, northern Durand, Beasley, Corktown, Riverdale West, Kentley, Greenford, and Green Acres Park.

In April 2014, the Province of Ontario announced its plans to make nearly \$29 billion available over the next 10 years to invest in priority infrastructure to build a seamless and integrated transportation network across the GTHA. One of the key projects announced as part of this plan was Hamilton Rapid Transit<sup>28</sup>, meaning the B-Line project could soon get a start date.

## A-Line

Included in the first 15 years of the Metrolinx plan was the 'A-Line', which will start at the John C. Munro Hamilton International Airport and end near Hamilton's waterfront. Preliminary maps show possible stations at the airport, off of Airport Road; a station at Mohawk College, at W 5 Street and Fennell Avenue West; a station at St. Joseph's Healthcare on W 5 Street and Fennell Avenue West – adjacent to Mohawk College; a stop at St. Joseph's Hospital off of James Street South and St. Josephs Drive; a connection to the multi-modal downtown terminal where the A-Line, L-Line, and the Hunter Street GO station may meet up with the B-Line, at James Street South and Main Street West; and a possible terminus at the Hamilton Waterfront.

<sup>&</sup>lt;sup>28</sup> Daily Commercial News. (April 15, 2014). "Ontario government plans to invest \$29 billion on transportation infrastructure over next 10 years." Retrieved from <u>http://www.dcnonl.com/article/id59876/--ontario-government-plans-to-invest-29-billion-on-transportation-infrastructure-over-next-10-years</u>



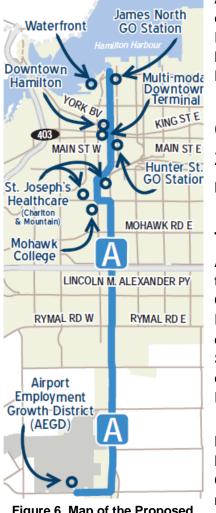


Figure 6. Map of the Proposed A-Line Route

Source: City of Hamilton. 2011.

Areas roughly 800 meters from the station which will enjoy increased real estate premiums (as well as access to LRT) include: North Glanford, Ryckmans, Mewburn, Sheldon, Kennedy East, Allison, Greeningdon, Balfour, Bonnington, Yeoville, Rolston, Buchanan, Mohawk, Southam, Centremount, Durand, Corktown, Beasley, Central Hamilton, and North End.

# CONSTRUCTION STARTING WITHIN THE NEXT 25 YEARS

Hamilton LRT projects to begin within the next 25 years.

## T-Line

A third route was included in the first 25 years of the transportation plan, from the start of Mohawk Road near the Lincoln Alexander Parkway, up Upper Ottawa Street, onto Kenilworth Access, and up Kenilworth Avenue North. Preliminary stations on this line include: a stop in the Ancaster community, off of Golf Links Road; a station at Lime Ridge Mall, located at Upper Wentworth Street and Mohawk Road East; and a terminus at Centre Mall (which will be completed by this time), off of Kenilworth Avenue North and Barton Street East,

Homes located in the areas of Ancaster, Mohawk Meadows, Hill Park, Bruleville, Burkholme, northern Crerar, northern Rushdale, Hill Park, Lawfield, Crown Point West, Crown Point East, and northern Homeside will all enjoy not only quick access to a station, but also premiums above average home price increases thanks to this new transit access.

## FUTURE RAPID TRANSIT PLANS

Hamilton LRT projects not slated to begin construction within next 25 years.

## S-Line

The fourth route, to be implemented after the first 25 years, is known as the 'S-Line'. Preliminary plans have the line starting at the Ancaster Business Park, near where Wilson Street and Garner Road meet up and terminating at Eastgate Square. The line would follow Garner Road and turn on to Rymal Road, following it east before heading up Centennial Parkway and ending at Eastgate Square. Preliminary maps of the line show a possible station in the Elfrida growth area.

As only a few stations along this line have been plotted so far, it remains to be seen which other neighbourhoods will be affected. As it stands now, the communities of Ancaster, Leckie Park, the Elfrida growth area, Kentley, Corman, and Riverdale will experience average house price increases.



## L-Line

The last LRT line in the Metrolinx transportation plan for Hamilton is nicknamed the "L-Line". The line would begin at the proposed multi-modal station off of James Street South and Main Street West and end at Waterdown Commercial Centre off of Highway 6.

As only the beginning and terminus of this line have been plotted, it is difficult to say which neighbourhoods will receive a positive impact. We will have to wait and see.

#### **B-Line Extension**

Also included in Metrolinx's plans for the distant future is the extension of the B-Line from its terminus at Eastgate Square to Gateway, off of Fifty Road and Queen Elizabeth Way. It remains to be seen how many stations will be added to this extension. As it stands now, the community of Winona will experience a 10%-20% price premium when the extension to Gateway is completed.

As most of the transit plans are over ten years away, many details need to be ironed out before exact station locations and routes can be pinned down. It is important to keep in mind that many proposed infrastructure changes never take place. In addition, not all properties in regions slated for infrastructure improvements make great investments, so it is of the utmost importance for investors looking at investing in regions with upcoming transportation improvements to do their due diligence.

Take a look at Metrolinx's preliminary rapid transit plans for the Hamilton region. The map includes more immediate rapid transit plans, such as the B-Line, as well as ones planned in the distant future, such as the L-Line.



# HAMILTON 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 Toronto<sup>29</sup>.

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 Hamilton<sup>30</sup>. 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.

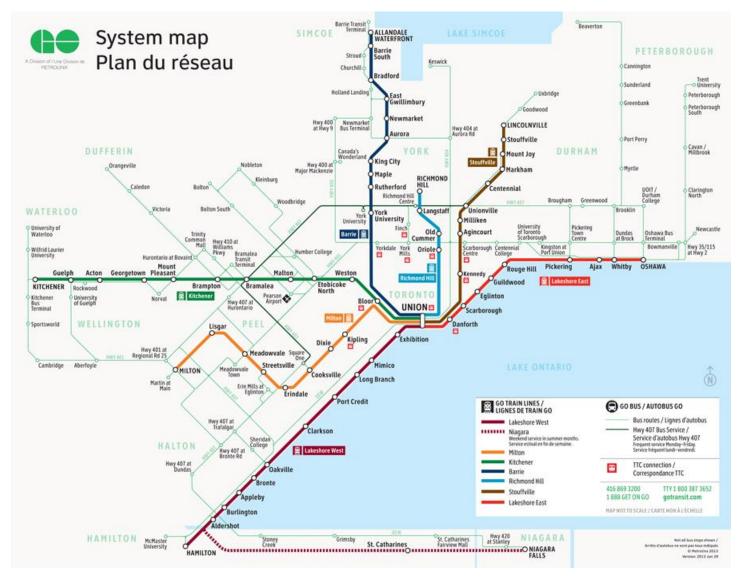


Figure 7. GO Transit System Map

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

<sup>29</sup> Go Transit. (January 2014). What is Go? Retrived from http://www.gotransit.com/public/en/aboutus/whatisgo.aspx
<sup>30</sup> Ibid.



## CURRENTLY UNDER CONSTRUCTION

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



Figure 8. James Street North GO Station Site Image Provided By: Secondarywaltz

#### Lakeshore West Line

Hamilton is serviced by the Lakeshore West GO Train line. Currently, trains only run during rush hour, and off hours are serviced by a bus service for areas beyond Aldershot. There are currently 12 stations on the Lakeshore West line: Hamilton, Aldershot, Burlington, Appleby, Bronte, Oakville, Clarkson, Port Credit, Long Branch, Mimico, Exhibition and Union Station.

#### James Street North Station

Construction is currently underway on a GO Station that will be located at 353 James Street North. The station will be

connected to a nearby plaza that will include multi-level parking with 300 spaces, bus bays, and a pedestrian walkway. When construction is completed, GO Transit plans to add two more train trips in the morning and afternoon two and from Hamilton. The station is expected to be open in time for the Pan Am games in 2015<sup>31</sup>.

## FUTURE GO TRAIN CONSTRUCTION

Proposed GO Train projects that have not yet begun construction in the Hamilton area.

## Lakeshore West Electrification

MoveOntario 2020's commitment to electrifying the diesel powered GO Lakeshore line will mean that commuters will get from Toronto to Hamilton 15 minutes faster. This incentive will be enough to entice more people to trade more expensive housing closer to Toronto for more affordable homes closer to Hamilton. The distance remains the same, but a savings of 30 minutes a day commute time, or 2.5 hours a week, will sweeten the option.

### 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 options<sup>32</sup>. The study proposes one of four possible scenarios for when the service starts<sup>33</sup>:

- 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



<sup>&</sup>lt;sup>31</sup> Government of Ontario. (February 28, 2014). "More GO Train Service On the Way for Hamilton." Retrieved from

http://news.ontario.ca/mto/en/2014/02/more-go-train-service-on-the-way-for-hamilton-1.html

GO Transit. (2012). "Niagara Peninsula Rail Service Expansion". http://www.gotransit.com/public/en/improve/projects.aspx <sup>33</sup> GO Transit. (March 2009). "Environmental Assessment and Preliminary Design". http://www.gotransit.com/public/en/improve/ea\_niagara.aspx

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.



# 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 increased<sup>34</sup>.

#### **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<sup>35</sup>. 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<sup>36</sup>. 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<sup>37</sup>. In fact, one study showed that values did not reach pre-construction levels until *five years* after construction was completed<sup>38</sup>.

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<sup>39</sup>. 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)<sup>40</sup>.

#### 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 level<sup>41</sup>. However, counter-intuitively, houses with highway noise were not found to take any longer to sell than those farther removed.



<sup>34</sup> ten Siethoff, B. & K. Kockelman. (2002). Property Values and Highway Expansions: An Investigation of Timing, Size, Locations, and Use Effects. Transportation Research Board, 81<sup>st</sup> Annual Meeting, Washington, D.C.

<sup>35</sup> Giuliano, G. (1989). "New Directions for Understanding Transportation and Land Use" in *Environment and Planning* A21, pp. 145-159.

<sup>36</sup> Mikelbank, B. (2001). "Spatial Analysis of the Relationship between Housing Values and Investments in Transportation Infrastructure." Western Regional Science Association, 40<sup>th</sup> Annual Meeting, Palm Springs, CA.

<sup>36</sup> ten Siethoff, ibid.

<sup>37</sup> ibid.

<sup>38</sup> Downs. A. (1992). Stuck in Traffic. The Brookings Institution: Washington, D.C.

<sup>39</sup> Palmquist, R. (1980). Impact of Highway Improvements on Property Values in Washington, US Department of Transportation, Federal Highway Administration.

<sup>40</sup> 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.

<sup>41</sup> 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 values<sup>42</sup>.

#### **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



<sup>42</sup> Lewis, C.A., J. Buffington, & S. Vadali. (1997), ibid.

# MAJOR ROAD IMPROVEMENTS IN HAMILTON

The City of Hamilton has positioned itself as a transportation hub. With connections to three international airports (John C. Munro, Pearson International, and Buffalo Niagara), a network of highways, international rail lines, and the Port of Hamilton, the city offers businesses with unparalleled transportation links. A central point between the GTA and the U.S., many businesses have come to see the advantages that Hamilton has to offer in terms of moving goods and people.

## RECENTLY COMPLETED

Major road improvement projects that were completed in the Hamilton area in the last decade.

## **Red Hill Valley Parkway**

Opened in November 2007, the Red Hill Valley Parkway is a four-lane highway running through Hamilton. It is the north-south leg of the 403 to QEW parkway and completes an express bypass south of Hamilton, as it connects the Lincoln M. Alexander Parkway to the Queen Elizabeth Way Hamilton Harbour. near lt encompasses an eight kilometer fourlane 90 km/hour parkway with a truck climbing lane from the Greenhill Avenue interchange to the Mud Street interchange<sup>43</sup>.

The areas near these interchanges (Nashdale, Lakely, Kentley,



Figure 10. Red Hill Valley Parkway Image Provided By: Whpq

McQuestern, Barton, Glenview, Corman, Red Hill, Albion Flals, and Stoney Creek) have begun to enjoy a 12 - 15% value increase when compared to similar properties without this easy access.

## FUTURE HIGHWAY CONSTRUCTION

Major road improvement projects that may begin in the Hamilton area in the next decade.

## Highway 8 - Park Avenue to Bond Street

The City of Hamilton has initiated a Municipal Class Environmental Assessment (EA) process to examine infrastructure improvements to Highway 8 between Park Avenue and Bond Street. The Project Schedule will be confirmed, and refined if required, once a preferred alternative is identified<sup>44</sup>.

<sup>&</sup>lt;sup>44</sup> City of Hamilton. (2014). "Highway 8 – Park Avenue to Bond Street Study (Formerly a Municipal Class Environmental Assessment)." Retrieved from http://www.hamilton.ca/CityDepartments/PublicWorks/Environment\_Sustainable\_Infrastructure/StrategicPlanning/StrategicEnvironmentalPlanningProject s/Highway+8+%E2%80%93+Park+Ave+to+Bond+St.htm



<sup>43</sup> SKB & Associates. (2007). Red Hill Valley Project. http://www.myhamilton.ca/Hamilton.Portal/Inc/RHVP-VirtualTour/map.html

## Highway 5/6 Interchange

The City of Hamilton would eventually like to replace the existing Highway 5 and Highway 6 intersection in order to accommodate future traffic demand. Plans for the project include adding a commuter parking lot. No start date has been given for this project, but a public information session was held in 2012<sup>45</sup>.

#### **East Mountain Arterial Road**

The City of Hamilton is planning to build an \$18 million connector road between Red Hill Valley Parkway and Rymal Road. The arterial road would serve as a major traffic corridor linking the south-east Mountain and Red Hill Industrial Park with the Red Hill Valley Parkway. The new two kilometre, four lane arterial road will run from the Red Hill Valley Parkway ramp at Stone Church Road and south across Highland Road before connecting to Rymal Road just west of Trinity Church Road. The connector would carry thousands of vehicles per day, taking some of the traffic off upper Centennial Parkway and Dartnall Road<sup>46</sup>.

**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.



<sup>&</sup>lt;sup>45</sup> City of Hamilton. (2014). "Highway 5 & Highway 6 Interchange." Retrieved from

http://www.hamilton.ca/CityDepartments/PlanningEcDev/Divisions/GrowthManagement/Infrastructure+Planning/Environmental+Assessments/Environme ntalAssessments.htm

<sup>&</sup>lt;sup>46</sup> Newman, M. (March 28, 2013). "\$18 million east Mountain arterial road planned for 2014." *Hamilton Community News*. Retrieved from <a href="http://www.hamiltonnews.com/news/18-million-east-mountain-arterial-road-planned-for-2014/">http://www.hamiltonnews.com/news/18-million-east-mountain-arterial-road-planned-for-2014/</a>