

**Re-Imagining Transit Development in Toronto: Assessing the
Development-Based Land Value Capture Potential for funding Transit Oriented
Investments**

By

Anthony Robert Soccia

Supervised by:
Laura Taylor

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Abstract:

As transit agencies and municipalities are facing financial stress and political pressures to expand transit, many jurisdictions are starting to use non-traditional funding methods like Land Value Capture to fund transit oriented investments. Land Value Capture is useful because it allows for the transit agency to tap into publically created land value increment. In particular, Development-Based Land Value Capture is favoured by many transit practitioners as a popular non-traditional funding source for its high revenue potentials, low financial and political risks, and low implementation costs. It can be facilitated through the direct transaction of properties whose values have been increased by public regulatory decisions or infrastructure investment.

The main objective of this paper is for transit planners to gain a practical understanding for the benefits and challenges of using Development-Based Land Value Capture to fund transit oriented investments in the City of Toronto. *Section 1* sets the context for Development-Based Land Value Capture by introducing the history and evolution of transit development and finance in Toronto. *Section 2* describes what Development-Based Land Value Capture and Tax- or Fee-Based Land Value Capture are, while also outlining the rationale for using Land Value Capture. This section also highlights some of the enabling factors for successful Development-Based Land Value Capture implementation. *Section 3* expands upon this discussion by providing an analysis of the Development-Based Land Value Capture implementation challenges surrounding the Eglinton Crosstown Light Rail Transit project (ECLRT) and Metrolinx's request for proposal (RFP) to sell the development rights at four station properties along the ECLRT corridor in Toronto.

The main takeaway of this paper is that Development-Based Land Value Capture is a useful tool that transit planners can engage in to finance their transit-oriented investments.

However, even the most basic forms of Development-Based Land Value Capture can be difficult to implement in practice. Based on a reading of this paper, transit planners should be able to anticipate some challenges that they may face in implementing Development-Based Land Value Capture in a city like Toronto. This paper should also open up the discussion amongst transit planners about Development-Based Land Value Capture implementation in Toronto.

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Furthermore, I would like to express thanks to my family for their support throughout this degree and the time that I spent researching and writing for this major paper. You know all that you have done for me.

Foreword:

The following paper is a culmination of the areas of concentration outlined in my Plan of Study: “planning for transit oriented development” and “urban transportation planning”. When I began the Master’s in Environmental Studies Planning Program I was interested in examining the ways that transit agencies could finance their own transit investments through alternative funding methods rather than relying on traditional farebox revenues. Months after starting the program, I was intrigued by Metrolinx’s announcement that they would finance their transit investments through the sale of development rights at locations along the proposed Eglinton Crosstown Light Rail Transit corridor. This financing concept used in many transit oriented development projects was known as land value capture. In order to explore the concept of land value capture further, I chose to analyze its different typologies and study if it could be used in Toronto to fund transit oriented investments. This would be partly achieved through a case study of the Eglinton Crosstown project. The research presented here has allowed me to achieve the following objectives:

1.2 – To gain a thorough understanding of the role(s) of each actor involved in highly politicized transit planning... and development process...

My research has allowed me to explore how the transit agency can act as a catalyst for bringing together public and private sector actors in development based land value capture. These are many of the same actors involved in the transit oriented development field.

The transit agency can act as a catalyst for bringing together public and private sector actors

1.3 – To gain an in depth understanding of the integral connection between land use and transportation planning

Throughout my MES degree I have had a fascination with urban economics. This paper allowed me to development my knowledge of transit-induced land capitalization and explore the effect that Toronto’s first subway line had on property values. In particular, land value capture works because accessibility and agglomeration benefits of transit infrastructure investment get capitalized into the price of land around stations and transit corridors.

2.2 – To attain a thorough comprehension of the financing techniques that could help initiate and fund transit development

This research has allowed me to engage directly with the intricacies of urban transportation planning and the alternative financing technique known as land value capture that can be used in transit development. I have a deeper understanding of the planning, political and organizational challenges surrounding development based land value capture implementation both in Toronto.

With the completion of my major paper, I believe that I have successfully fulfilled the expectations that I had for my program. With the additional land use planning, real estate, condo and construction law courses that I am taking in law school, I hope to one day combine that knowledge with my expertise in development-based land value capture to facilitate development-based land value capture deals such as joint development ventures.

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List of Abbreviations:

DBLVC	Development-Based Land Value Capture
ECLRT	Eglinton Crosstown Light Rail Transit
FAR/FAR	Floor Area/Space Ratio
GTHA	Greater Toronto and Hamilton Area
JD	Joint Development
LRT	Light Rail Transit
LVC	Land Value Capture
MOU	Memorandum of Understanding
RFP	Request For Proposal
RTP	Regional Transportation Plan
TBLVC	Tax-Based Land Value Capture
TIF	Tax Increment Financing
TOD	Transit-Oriented Development
TTC	Toronto Transit Commission

Objectives and Methodology:

I strive to use my paper as an outlet for re-engaging transit planners in the discussion surrounding the alternative methods that cash-strapped transit authorities in Toronto can engage in to pay for their transit oriented investments. In particular, my discussion centers around development-based land value capture (DBLVC) and how transit agencies in Toronto can potentially re-engage themselves in this practice.

The main objective of this paper is for transit planners to gain a practical understanding for the benefits and challenges of using Development-Based Land Value Capture to fund transit oriented investments in the City of Toronto. Based on a reading of this major paper, it is my hope that transit planners can anticipate any challenges that they may face in the future DBLVC implementation in their own cities. This paper should also open up the discussion surrounding DBLVC implementation in Toronto. The main takeaway of this paper is that DBLVC is a useful tool that transit planners can engage in to finance their transit-oriented investments. However, even the most basic forms of DBLVC can be difficult to implement in practice.

These objectives are met in the three main sections of my major paper. In *Section 1*, I set the context for this major paper by introducing the history and evolution of transit development and finance in Toronto. This analysis includes a discussion about the financial and political forces that have altered the ways in which experts approach transit development in the City. In *Section 2*, I describe what land value capture is and the rationale behind its use. Additionally, I outline the strengths and weaknesses of tax- or fee-based (TBLVC) and development-based (DBLVC) land value capture instruments through an analysis of the literature on land value capture and providing a case study on the Washington Metropolitan Area Transit Authority's joint development practice. In *Section 3*, I expand upon this discussion by providing an overview

of the Eglinton Crosstown Light Rail Transit project (ECLRT) and Metrolinx's request for proposal (RFP) to sell the development rights at four station properties along the ECLRT corridor. I outline the planning, political, and intra-organizational barriers that the transit agency faced in implementing DBLVC at the selected ECLRT station properties.

The methodology for my major paper was based on both primary and secondary research. Primary research was gathered from three semi-structured interviews that I conducted with two transit planners from Metrolinx on June 1st, 20th, and 29th, 2017. These interviewees have chosen to keep their anonymity so I have not named them or identified their divisions within Metrolinx in this major paper. My primary research was used in *Section 3* to generate the case study for the ECLRT project. Secondary research involved an analysis of both qualitative and quantitative data from secondary sources such as journal articles, government reports, working papers, websites and consultant reports. This secondary research was used in all three major sections of my major paper.

Section 1

Introduction: Developing and Financing Transit Investments in Toronto

In Section 1, I set the context for this major paper by introducing the history and evolution of transit development and financing in Toronto. I outline the effects of the first Yonge Subway development on real estate values in the City and the role that land value capture (LVC) played in the project. In the following chapters I describe how the value planning philosophy once adopted by the Toronto Transit Commission (TTC) was abandoned due to an eventual loss of their fiscal and political autonomy. Later on I explain how the transit authorities in Toronto began to face a plethora of financial issues, what spurred these issues, and how they faced them. Lastly, I describe how political interference continues to taint the field of transit planning and development in Toronto. The purpose of this chapter is for planners to acknowledge that there has been a successful history of land value capture implementation in the City. Financial and political forces have in recent years altered the ways in which experts approach transit development. This section provides planners with an opportunity to revisit the concept of land value capture and engage in an important discussion as to how we can finance our transit oriented investments in Toronto.

1.0 A History of Transit Development and Land Value Capture in Toronto

The City of Toronto has a long history of transit development. After constructing an electric streetcar system in the early 1890's, the next major achievements were establishing the

Toronto Transportation Commission and the creation of Canada's first subway system.¹ In 1921, the Toronto Transportation Commission became a corporate body that was autonomous from the municipality. It was responsible for the operation of all public transportation within a 35 square mile radius that comprised the City at the time.² The Commission was responsible for setting fares so that revenues would be sufficient to financially maintain and manage all transportation facilities under its control. City Council did however appoint members of the Commission and had the final say on the amount of capital that could be borrowed on the City's credit if required.³

April 15, 1953 marked the day that the Municipality of Metro Toronto was incorporated by the Province of Ontario. Thirteen separate municipalities compounded into Metro Toronto and passed over their responsibility for major regional public transportation services. It was hailed as a "step towards the solution of the problems of rapid growth and development in large urban centres".⁴ On December 31, 1953, the Toronto Transportation Commission officially became the Toronto Transit Commission (TTC).⁵ Overnight, the TTC was responsible for servicing and financing the 240 square miles within the Metro Toronto area. The transit agency still remained a separate corporate body with five Commissioners appointed by the Metropolitan Toronto Council.⁶ Soon after the formation of the TTC came the planning and completion of the first Yonge Subway line. This subway line was not only a catalyst for rapid transit development

¹ David A. Wyatt, "All-Time List of Canadian Transit Systems," *University of Manitoba*. <http://home.cc.umanitoba.ca/~wyatt/alltime/toronto-on.html#islands>. (accessed May 20, 2017).

² Toronto Transit Commission, *Transit in Toronto: the story of the development of public transportation in Toronto, from horse cars to a modern, high speed subway system* (Toronto, 1971), 6.

³ *Ibid.*, 6.

⁴ *Ibid.*, 10.

⁵ *Ibid.*, 10.

⁶ *Ibid.*, 11.

in North America, but it also played a large role in real estate development and how the urban fabric of Toronto evolved.

Hailed as Metropolitan Toronto and the TTC's greatest public transit achievement, the plan for Toronto's first subway envisioned the Yonge line "to run from Union Station under Front Street and then north under or paralleling Yonge Street through the heart of downtown Toronto to Eglinton Avenue".⁷ The Commission believed that the subway system was such a priority that it was prepared to meet almost the full cost of the project from the start. They understood the economic benefits that would result from the operation of rapid transit routes in a growing city and took the risk to assume eighty percent of the cost of constructing the Yonge line. The federal government on the other hand gave the proposed subway a twenty percent grant. Municipal electors were also in favour with this funding proposal based on a ballot box ratio of ten to one. The underground subway infrastructure was built and financed by the municipality out of general funds and subway structures and rights-of-way were provided by the municipality.⁸

From the early planning stages, the concept was to develop a line that would go straight into the heart of the business district. As described by the TTC, the idea:

"was to take Toronto's most heavily travelled surface transit route – a route that was already carrying at the limit of its capacity, a route that in peak hours was choked in paralysing traffic congestion – and replace it with a modern, high speed, high capacity subway line to run on its own underground right-of-way".⁹

⁷ Ibid., 22.

⁸ Ibid., 23-4.

⁹ Ibid., 24.

On March 30, 1954, twelve stations on a 7.4 kilometre line were open to the public. In five years, the Yonge line carried 360 million riders.¹⁰ This unexpected amount of riders indicated that this rapid transit development was accelerating the redevelopment of areas in the city and was helping to increase business and property tax assessments along the subway route.¹¹

Real estate development was quick to follow the implementation of rapid transit. Many new commercial buildings, office spaces and apartments were constructed along the Yonge Subway route by 1959. In order to prove the financial effects of the Yonge Subway development on adjacent properties, a study was commissioned by the transit authority. This study attempted “to isolate property considered to be within the subway sphere of influence and compare its position with other property in the City to try to determine if there [was] any direct relationship between the construction of a subway line and land values”.¹²

It was discovered that between 1950 and 1959, the total assessment of property values for the municipality increased from \$1,346-million to \$1,788 million. During the same period, property adjacent to subway development increased from \$530-million to \$770-million. Overall, the total municipal property assessment increased \$441,670,000 (32.8%) while properties adjacent to the subway increased \$239,924,000 (45.4%).¹³ In another ten-year assessment between 1952-1962, “areas contiguous to the subway had increased 58% compared with a rate of 25% considered to be the normal growth rate over the same period”.¹⁴ As a result of the subway development, the additional increase of real estate development adjacent to the Yonge line

¹⁰ Ibid., 34.

¹¹ Ibid., 34.

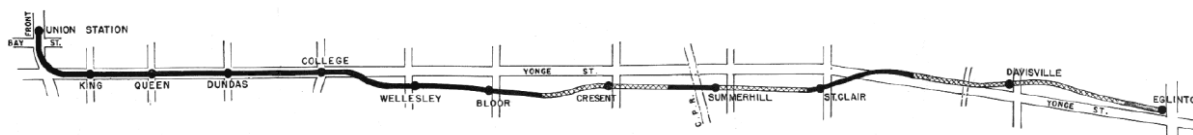
¹² Ibid., 35.

¹³ Ibid., 35.

¹⁴ Ibid., 35.

produced more than \$5-million in annual property taxes.¹⁵ Such early studies in Toronto confirmed that transit development increased property values, added tax revenues to the City, and led to a building boom in downtown Toronto. Subway development also had an unprecedented land value uplift for properties owned by the TTC after the construction of the first portion of the Yonge Subway line.

Based on the use of the cut-and-cover construction technique when building the first portion of the Yonge line, the TTC acquired 22 blocks of land for \$3.9 million between 1949 and 1954 to allow for the subway to run beneath the side of the street (see Figure 1).¹⁶



*Figure 1 - Cut-and-Cover Construction of the Yonge Subway Line*¹⁷

By 1977, 17 of the 22 blocks were leased for an annual rent of \$500,000.¹⁸ The TTC's leasing program grew to be so successful "that lease income stood to completely cover, over a number of years, the Commission's costs of land acquisition".¹⁹ By the late 1970's, the City of Toronto and the TTC existed as a model for other cities looking to use development based land value capture. In addition to the sale of air rights and excess land owned by the TTC, municipal planners provided the relevant up-zoning, floor-area-ratios, density bonuses, and design efforts desired by developers for higher density transit-oriented projects and joint development ventures

¹⁵ Ibid., 35.

¹⁶ Christopher Donald Higgins, "A Value Planning Framework for Predicting and Recapturing the Value of Rapid Transit Infrastructure" (master's thesis, McMaster University, 2015), 226.

¹⁷ Ibid., 226.

¹⁸ Ibid., 226.

¹⁹ Ibid., 226.

adjacent to transit.²⁰ It was claimed that the TTC and Metropolitan Toronto both shared a key philosophy at the time to enter into projects based on their potential for land value uplift and financial impacts.²¹ This shared value planning philosophy may have contributed to the success of previous cost recovery practices adopted by Metro Toronto and the TTC.

The value planning philosophy may have started to pick up in the late 1950's when Metro Council launched a cost recovery program in 1959 to discover ways to raise revenues from their properties. This program began after Council suggested that the "lease or sale of surplus lands could recapture the costs of subway land acquisition".²² The typical case in Metro Toronto was for the public sector to take part in land banking and later lease the surplus land and rights to the private sector developers.²³ Metro Toronto's Subway Property Committee played an important role as the "hardnosed business[person]" in this practice²⁴.

The Subway Property Committee was described by developers as a group who knew how to negotiate, and understand private sector business problems.²⁵ In fact, the TTC was described by Cadillac Fairview at the time as a "very business-like organization" with shrewd negotiators "that you can deal with, and that [comprehend] business issues in Toronto".²⁶ The Subway Property Committee was also described as being able to understand "not only a development's benefit to the TTC, but also its benefit to the city as a whole, and they attempt to see a project's full ramifications before making a decision".²⁷ The typical joint development venture encapsulated this value planning ethos. A member of the former Committee outlined a typical

²⁰ Ibid., 227.

²¹ Ibid., 227.

²² Ibid., 228.

²³ Ibid., 228.

²⁴ Ibid., 228-9.

²⁵ Ibid., 228-9.

²⁶ Ibid., 228-9.

²⁷ Ibid., 229.

instance that:

“once it had been determined [by the TTC] that the right-of-way costs were to be recouped through the disposal of rights, it was the Subway Property Committee that suggested to Metro Toronto that land leasing would be preferable to land sales, and that the form of the lease would be such that it presented security to the developer and his prospective mortgage lenders”

In order to carry out these value capture practices however, the TTC required to have the fiscal and political autonomy needed to act in this development framework. Over time, “this autonomy diminished... Metro Toronto and the Province of Ontario gradually took more responsibility for subsidizing the TTC’s operations and infrastructure expansion. By 1962 it had become apparent that the TTC was no longer distant from the politics of Metro”.²⁸ The next chapter will outline the financial issues surrounding transit investment in the City of Toronto.

2.0 Financing Transit Investments in Toronto

As previously outlined, development based land value capture mechanisms such as large-scale land leasing programs and joint development arrangements were undertaken from the 1950’s to the early 1980’s which successfully developed a high-density, transit-supportive corridor with high ridership and cost recovery for land acquisition.²⁹ However, after a long and successful period of using alternative funding practices, the transit agency began facing financial issues.

The TTC was able to fund the Yonge-University line entirely from its own resources and

²⁸ Ibid., 229.

²⁹ Jeff Kentworthy. "The Land Use and Transit Connection in Toronto." *Australian Planner* 29, no. 3 (1991): 149-54.

reserves.³⁰ But despite this previous financial and political autonomy from Metro Council, it was quickly dissolving. According to CD Higgins (2015), “the TTC quickly found its role politicized in Metro, with appointed officials overseeing operations amid strong and increasing pressure for service expansion in Metro’s outer municipalities.”³¹ With Metro agreeing to contribute funding to Subway line expansions, which included the upcoming Bloor-Danforth Subway line, this eroded the independence of the TTC.

The transit system was originally able to make its own “operating profits and finance its own development.”³² When the TTC had called upon the municipality for financial help under political pressures from Metro Council, this autonomy vanished. The TTC was historically able to pay for transit themselves and make their own decisions. With Metro Council contributing funds, they were given the upper hand in making important transit planning decisions such as locating a subway or implementing their choice of transit technology. Ultimately, “the political priorities of the Council’s locally elected members [outweighed] either land-use or transportation considerations” made by planners.³³

I agree with transit author CD Higgins (2015) that 1973 was considered the last year that the TTC was financially self-sustaining. The original transit system was argued by the transit agency to work well using two zones because the double fare allowed for the Commission to cover the extra costs associated with providing suburban transit service. Under intense pressure from the suburban Metro Councillors, the TTC chose to drop the two-zone system in favour of a flat fare. As a result, the TTC’s growing financial deficit skyrocketed “from \$2.9 million in 1971 to \$40.0 million in 1976” while later breaching “the \$100 million mark in the early 1980’s

³⁰ Higgins, "A Value Planning Framework" 230.

³¹ Ibid., 230.

³² Ibid., 230

³³ Ibid., 230.

and [exceeding] \$200 million in 1992.³⁴ After achieving the impressive feat of operating and developing public transit in Toronto on a break-even basis for 50 years, transit development started to cause many financial repercussions for taxpayers.

A 1971 study by Metro Council concluded that there would likely be some serious problems for the transit agency in “meeting [their] annual commitments for [decreasing transit] deficits if substantial fare increases were not to be introduced.”³⁵ As a result, the municipality should find alternative ways to raise funds for transit investment. However, the exact opposite happened. From this point onward, the use of land value capture mechanisms largely fell out of practice and TTC Commissioners began to raise fares to meet the funding shortfalls left by downloading.³⁶

At this point, I believe that the transit agency began taking what some critics refer to as the old-line reluctant transit operator position. The TTC began to only regard themselves as providers of transportation services and not savvy developers who could “seek profit in private sector activities as a means of reducing operating deficits and resulting public subsidies.”³⁷ Some planners would argue that it is a public duty for the transit agency to engage in alternative funding practices because it is a ‘public’ transportation agency. As a result, the TTC began ignoring an entire source of revenue that taxpaying riders and the transit system could benefit from by focusing all revenue generation on the fare box.

³⁴ Sewell, John. *The Shape of the City* (Toronto: University of Toronto Press Incorporated, 1993), 217.

³⁵ *Ibid.*, 217.

³⁶ Brenda Thompson, “Fare Increases to pay for new transit in Toronto,” Socialist Project, April 5, 2013, <http://www.socialistproject.ca/bullet/798.php> (accessed May 16, 2017).

³⁷ Louis E. Keefer, “Joint development at transit stations in the United States,” *Transportation*, 12, no.4 (1985): 339.

Moving into the early 1980s, the TTC covered as much as 68 percent of operating costs through fares.³⁸ As one TTC spokesperson explained, “About two-thirds of the TTC’s operating budget is [currently] covered by fares paid by the riders”.³⁹ The main issue is that while fares generated about a large percentage of the TTC’s operating budget, the rest primarily came from the City subsidy which was (and still is) the lowest in North America.⁴⁰ By choosing to increase transit fares instead of finding funding alternatives, I agree with transit advocate Brenda Thompson (2015) that the transit agency also discouraged “transit use by punishing those who can least afford to pay and it [did not] generate very much revenue.”⁴¹ Such an ordeal kept the TTC strapped for cash and reliant on other levels of government to keep them afloat.

Eventually “transit capital works requirements in Toronto were met 75% from the Province and 25% from the Municipality. However, this situation [was] becoming less satisfactory for the Municipality because the priorities of the Province [did] not always correspond to the strategic planning objectives of the Municipality”.⁴² Such funding issues are still at play today in the City of Toronto. The current mayor of the City of Toronto John Tory accused Ontario Premier Kathleen Wynne of the Province turning its back on the City when the provincial budget was released in April 2017 for not matching the Federal government’s funding commitment of up to 40 percent of the cost of new transit projects.⁴³ According to Mayor John Tory, without the

³⁸ Thompson, “Fare Increases to pay”

³⁹ Jennifer Palisoc, "How does the TTC’s funding compare to other transit ..." *Global News*. November 13, 2014, <http://globalnews.ca/news/1670796/how-does-the-ttcs-funding-compare-to-other-transit-agencies/> (accessed July 29, 2017).

⁴⁰ Ibid.

⁴¹ Thompson, “Fare Increases to pay”

⁴² Jeff Kentworthy. "The Land Use and Transit Connection."

⁴³ Ben Spurr, "Ontario Liberals Reject Mayor John Tory’s calls to match federal transit funding," *The Toronto Star*. April 27, 2017, <https://www.thestar.com/news/canada/2017/04/27/ontario-liberals-reject-mayor-john-torys-calls-to-match-federal-transit-funding.html> (accessed May 16, 2017).

provincial funding, “transit projects that council has designated as its top priorities” such as the Mayor’s SmartTrack plan would not get developed.⁴⁴

The same sentiments were echoed during the debate over the Transit City Light Rail Plan. The province of Ontario told former TTC Chairwoman Karen Stintz that the TTC would not receive any provincial funding if they insisted that the TTC would “determine the scope of [Transit City light rail] projects.”⁴⁵ Additionally, Ontario Minister of Transportation Bob Chiarelli “warned that if city council tried to impose veto conditions on the deal, the \$8.4 billion Queen’s Park has promised would be off the table”.⁴⁶ Many of these transportation infrastructure projects in question are planned and controlled by Metrolinx.

Metrolinx is the provincial transportation agency established by the Liberal government in 2006. The agency merged with GO Transit in 2009. As described by Metrolinx themselves, “The organization’s mission is to champion, develop and implement an integrated transportation system for our region that enhances prosperity, sustainability and quality of life”.⁴⁷ Furthermore, Metrolinx was established to provide ‘leadership’ and ‘coordination’ for transit such as the Eglinton Crosstown light rail transit project (ECLRT) for instance. Metrolinx takes all local transit projects into consideration and prioritizes them in terms of regional importance.⁴⁸ Within

⁴⁴ Jennifer Pagliaro, "John Tory says Wynne government ‘turned their backs’ on Toronto with 2017 budget," *The Toronto Star*. April 28, 2017, https://www.thestar.com/news/city_hall/2017/04/28/john-tory-says-wynne-government-turned-their-backs-on-toronto-with-2017-budget.html (accessed May 17, 2017).

⁴⁵ Hamutal Dotan, "Council Approves Light Rail Plan," *Torontoist*. November 1, 2012, <http://torontoist.com/2012/11/council-approves-light-rail-plan/> (accessed May 17, 2017).

⁴⁶ Ibid.

⁴⁷ Metrolinx, "Metrolinx Overview," *Metrolinx*. http://www.metrolinx.com/en/aboutus/metrolinxoverview/metrolinx_overview.aspx (accessed May 16, 2017).

⁴⁸ David Fleischer, “Understanding Metrolinx,” *Torontoist*. October 8, 2014, <http://torontoist.com/2014/10/understanding-metrolinx/> (accessed May 18, 2017)

the City of Toronto, these new waves of projects will be planned, built by, and owned by Metrolinx while being operated by the TTC.⁴⁹ Its job was, and still is, to create a transportation plan for the GTHA. *The Big Move* (2008) Regional Transportation Plan was delivered by Metrolinx to provide this planning vision.

Another important goal of Metrolinx was to find ways to fund transportation projects.⁵⁰ As a part of *The Big Move* (2008), a reoccurring five-year capital plan and Investment Strategy for the Greater Golden Horseshoe was developed. The *Investment Strategy* (2013) provided some suggestions for funding transit development in the GTHA “including [to] raise \$2 billion a year [by] adding 1 per cent to the HST, introducing a parking levy for businesses, a new 5-cent tax on gasoline, and a 15-per-cent increase in development charges”.⁵¹ In addition, *Big Move Implementation Economics: Revenue Tool Profiles* (2013) was prepared by AECOM. The consultant outlined that the report would:

“provide readers with detailed information about each of the revenue tools that have been used in other jurisdictions to support the development of transportation infrastructure... The intention of these Revenue Tool Profiles is to provide adequate revenue estimates and create a basis to evaluate qualitatively the tools to help inform the development of Tool Kit options for funding the Metrolinx Investment Strategy.”⁵²

⁴⁹ Metrolinx, "Eglinton Crosstown FAQs." *The Crosstown*. <http://www.thecrosstown.ca/the-project/faq> (accessed May 17, 2017).

⁵⁰ David Fleischer, "Understanding Metrolinx"

⁵¹ Ibid.

⁵² Metrolinx, *Investment Strategy: Investing in Our Region Investing in Our Future*, 2013, Toronto, ON: Metrolinx, http://www.metrolinx.com/en/regionalplanning/funding/IS_Full_Report_EN.pdf (accessed May 27, 2017).

Both the *Investment Strategy* (2013) and the *Big Move Implementation Economics: Revenue Tool Profiles* (2013) report looked into alternative funding mechanisms for transit development. Land value capture, “a tool that “captures” and dedicates part of this incremental increase to land value, through direct involvement in property development or joint ventures” was one of the tools analyzed.⁵³

Transit agencies like the Toronto Transit Commission no longer have the capacity or financial autonomy to cover their costs and get into the area of building transit oriented investments. Despite these reports opening up the floor to conversations about transit financing methods, financing issues still plague transit development in Toronto. Additionally, despite having a Regional Transportation Plan, politics still plays a large role in influencing how transit development will unfold in the City of Toronto. The next chapter will outline how politically driven transit plans have tainted the field of transit planning in Toronto.

3.0 Politicizing Transit Investments in Toronto

Transportation planning can be perceived as a very standard and objective field measured by values. The field tends to balance multiple, often contradictory goals that are often influenced by strong political processes. In what some planners might consider the ideal world of transportation planning, the decision making could be left to professional planners and transit experts who would study a city’s needs. The transportation planners could play both a technical and coordinative role in shaping the future of transit. On the other hand, politicians would potentially support this rational research and find ways to generate the funding required to build

⁵³ Metrolinx, *Investment Strategy*

and expand these systems.⁵⁴ As one explores the field of transportation planning, they quickly realize that this is not how things work in reality. In many situations, there are no clear answers as to who should be responsible for planning transit? who should decide what we are to build? and who should pay for it?⁵⁵ This chapter provides some insight into the political interference that I believe is plaguing transit planning and investment in the City of Toronto.

Political interference continues to taint the field of transit planning.⁵⁶ It is the case that “too often, politicians make decisions based on what is best for them” and not the municipality that they represent.⁵⁷ Councils and politicians can have vastly different perspectives, goals and policy desires when it comes to transportation decisions. As a result, observers say these decisions tend to be products of political terms and elections with self-interest regarded as a driving force affecting re-election hopes. Planning decisions are dreamed up on napkins in City Council meetings.⁵⁸ The voice of the transit planner and their long term visions are drowned out in favour of short term promises that meet political agendas and their own dreams of leaving a physical mark on the political landscape.

To contrast with this is the role of the municipal planner and the transit agency. Transit authorities do not have the autonomy to make transit decisions in such a highly politicized field. We saw this historically unfold with the TTC. Where there could be coordination between the

⁵⁴ "Keep politics out of transit planning: Editorial." *The Toronto Star*. July 14, 2016, <https://www.thestar.com/opinion/editorials/2016/07/14/keep-politics-out-of-transit-planning-editorial.html> (accessed May 5, 2017).

⁵⁵ Tricia Wood, "Politics Should Be Removed from Transit Planning," *Torontoist*. March 30, 2018, <http://torontoist.com/2017/03/politics-removed-transit-planning/> (Accessed May 5, 2017)

⁵⁶ "Keep politics out of transit planning"

⁵⁷ Gordon Chong, "The politics of transportation," *Toronto Sun*, March 4, 2017 <http://www.torontosun.com/2017/03/04/the-politics-of-transportation> (accessed May 5, 2017).

⁵⁸ Marcus Gee, "Toronto transit descends from tragedy to farce," *The Globe and Mail*. September 6, 2017, <https://www.theglobeandmail.com/news/toronto/toronto-transit-descends-from-tragedy-to-farce/article14175830/> (Accessed May 5, 2017).

planner and the politician is generally competition generated by a political narrative. Examples of this narrative generated around transportation are subways v LRTs, bikes v cars, and downtowns v suburbs. Rather than actually creating a meaningful discussion, this competition drives transportation planning into a state of inaction and paralysis.⁵⁹ Contributing to this lack of autonomy and inaction are the overload of decision makers who can be involved in transportation planning projects. For instance, in the Greater Toronto Area (GTA) there are 9 actors who are involved in transportation: the TTC, the City Planning Division, the City Transportation Services Division, GO Transit, York Region VIVA, Mississauga Transit, Municipal Licensing and Standards, the Ministry of Transportation, and Metrolinx and all of its divisions. As Alex Gatién (2017) explains:

“In the City of Toronto proper, transit planning is a confused affair with the City and Metrolinx awkwardly sharing jurisdiction. The three phases of light rail along Eglinton are a telling demonstration of muddled responsibilities. The Eglinton Crosstown is being planned and paid for by Metrolinx, but the Eglinton West LRT is being planned by Metrolinx and will be paid for by Toronto as part of SmartTrack. Meanwhile, the Eglinton East LRT is being planned by the City, and due to the vociferous appetite of the Scarborough subway extension, it is presently unclear who will pay for it.”⁶⁰

In the meanwhile, left out of this tension tends to be the public who are rarely engaged in substantive dialogue about transportation planning projects. It tends to be the case that any

⁵⁹ Tricia Wood, "Politics Should Be Removed"

⁶⁰ Alex Gatién, "Toronto's Transit Planning Problem Isn't Politics, It's Governance," *Torontoist*. April 20, 2017, <http://torontoist.com/2017/04/torontos-transit-planning-problem-isnt-politics-governance/> (accessed May 5, 2017).

engagement in transportation planning is either after the fact or is not meaningful in influencing major decision makers' minds⁶¹.

One example of political decision-making influencing the field of transit planning in Toronto was the *Transit City* – Light Rail Plan by former Mayor David Miller and TTC Chair Adam Giambroni passed on March 16, 2007. The plan was based off of David Miller's 2006 election platform where the former mayor was hell-bent on the development of light rail lines in the City. The vision was to extend a seven line, 122.4 kilometre light rail network to the far reaches of Toronto (see Figure 2).⁶² This plan included the Eglinton Crosstown LRT (ECLRT) as a priority project to be completed by 2020.

⁶¹ Richard Willson, "Assessing communicative rationality as a transportation planning paradigm," *Transportation* 28 (2001): 1-31.

⁶² Spacing, "TTC announces TRANSIT CITY plan," March 16, 2007, <http://spacing.ca/toronto/2007/03/16/ttes-announces-transit-city-plan/> (accessed May 6, 2017).

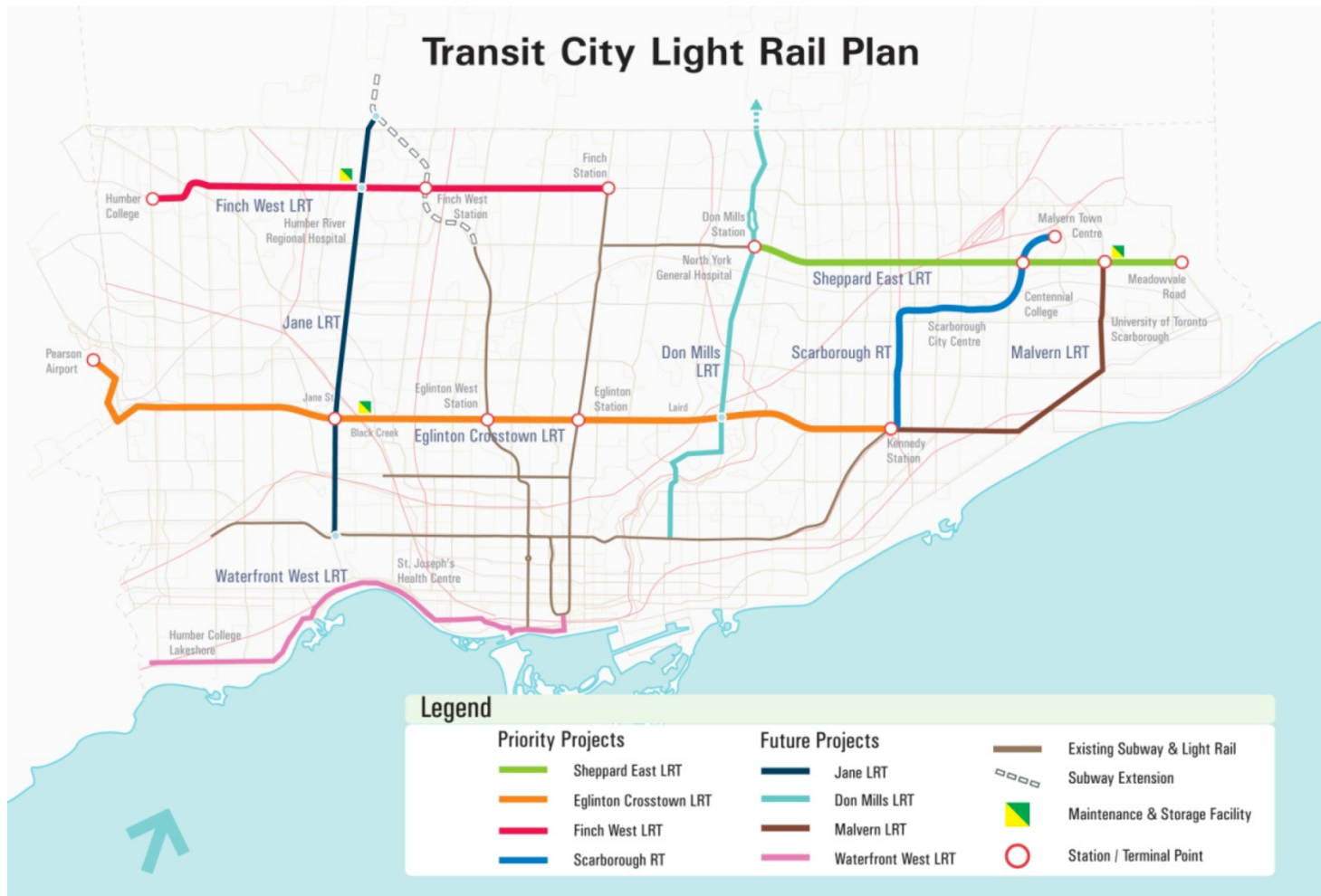


Figure 2 - Transit City Light Rail Plan envisioned by David Miller and Adam Giamboni⁶³

⁶³ Toronto, City of. *Transit City Light Rail Plan*. Toronto, ON: City of Toronto.

While the initial plan was passed by City Council with much support, in December of 2010, the newly elected suburban Mayor Rob Ford cancelled Transit City on his first day in office. The plan was replaced in favour of Ford's election promise of more "subways, subways, subways" and his belief that the private sector could fully fund transit development in Toronto.⁶⁴ These statements were against the expert opinion of planners who explained that sufficient population and job densities were required to make a subway investment worthwhile.⁶⁵ Despite the massive cancellation of light rail transit, the Eglinton-Crosstown LRT and the Finch-West LRT were the only first wave projects from *Transit City* to be saved by Metrolinx. This politically driven cancellation of a politically driven transit plan did not come without its own financial repercussions.

Financing for *Transit City* was coming from the provincial and the federal levels. In particular, "the Eglinton-Crosstown LRT was to be entirely paid for by the provincial government, which had committed over \$8 billion towards the Transit City plan."⁶⁶ As a result of the cancellation, the province "stated that no further funding would be provided, that the City of Toronto would be responsible for paying for contract cancellation costs, and that any funding for the city's transit plans would have to come out of the remainder of the funds committed."⁶⁷ As a result, all remaining funds were routed into the ECLRT project placing all other projects on hold and in limbo.

⁶⁴ Toronto, City of. *Transportation Funding Strategy - Appendix B*, 2012, <http://www.toronto.ca/legdocs/mmis/2012/ex/bgrd/backgroundfile-50609.pdf>.

⁶⁵ Edward LaRusic, "Subways, Subways, Subways: Enough Already!," *Elevation Blog*. October 18, 2012, <http://elevation.blogspot.ca/2012/10/subways-subways-subways-enough-already.html> (accessed May 5, 2017).

⁶⁶ James Bow, "Toronto's Transit City LRT Plan," July 20, 2017, <http://transit.toronto.on.ca/streetcar/4121.shtml> (accessed July 21, 2017).

⁶⁷ Ibid.

From this example of the *Transit City* Plan and the ECLRT, we can see how political forces have shaped and re-shaped a transit vision for the City of Toronto. The politically driven *Transit City* Light Rail Plan, although almost entirely cancelled by the Ford administration, still has ramifications for transit development in the City. Although political administrations have placed a transit vision in doubt, it has granted planners and economists with the opportunity to study the ways in which we can fund these capital investment LRT projects through the use of financial mechanisms like development based land value capture. My next section will outline what land value capture (LVC) is, its benefits and drawbacks, and provide the results of using development based land value capture (DBLVC) in a case study of WMATA's joint development DBLVC practice. In my last section I will explain how Metrolinx attempted to reintroduce land value capture in Toronto through the Eglinton Crosstown Light Rail Transit project. I will outline the challenges and barriers that they faced and how transit planners can learn from their shortcomings.

Section 2

Land Value Capture

In Section 2, I describe LVC and its different typologies. These include tax- or fee-based (TBLVC) and development-based (DBLVC) land value capture instruments. In this section I also explore the rationale behind using land value capture, explore the effects of transit on land values and will evaluate the benefits and drawbacks of using TBLVC and DBLVC to fund transit oriented investments. The case study of the Washington Metropolitan Area Transit Authority joint development program will be introduced to demonstrate how DBLVC revenue generating tools can be successfully implemented by transit agencies. The purpose of this section is for planners to understand that DBLVC is a useful tool for financing transit-oriented investments. However, there could still be drawbacks to its use. Even the most basic forms of DBLVC can be difficult to implement in practice.

4.0 What is Land Value Capture (LVC)?

Based on my review of the literature on LVC, it is my opinion that Hiroaki Suzuki, Murakami, Hong and Tamayose (2015) provide planners with the most thorough definition of **land value capture**. As they describe:

“LVC is defined as a public financing method by which governments (a) trigger an increase in land values via regulatory decisions (e.g., change in land use or FAR) and/or infrastructure investments (e.g., transit); (b) institute a process to share this land value increment by capturing part or all of the change; and (c) use LVC proceeds to finance infrastructure investments (e.g., investments in transit and TOD), and other improvements required to offset impacts related to the changes (e.g.,

densification), and/or implement public policies to promote equity (e.g., provision of affordable housing to alleviate shortages and offset potential gentrification).”⁶⁸

At its most basic definition, “Land Value Capture (LVC) is an [alternative] way [for transit agencies and investors] to capture the increase in the value of land and development generated by the improved accessibility of transportation. Improved access has value which is reflected in land and property values just like property which has waterfront views.”⁶⁹ LVC proves to be an alternative funding method for transit agencies considering that most “financial figures indicate that fixed-guideway transit ridership has not been high enough to recover capital costs and operation and maintenance costs.”⁷⁰ By capturing the increased value in land, the transit agency could fund more transit oriented investments (a public good) which could generate more public and private benefits.”⁷¹ Different jurisdictions have achieved the benefits of LVC by creating a virtuous cycle which is a chain of events with favourable results. According to the *Metrolinx Investment Strategy* (2013), jurisdictions can achieve these LVC benefits when:

⁶⁸ Hiroaki Suzuki et al., *Financing Transit-Oriented Development with Land Values Adapting Land Value Capture in Developing Countries* (Washington, DC: International Bank for Reconstruction and Development / The World Bank, 2015), xxii.

⁶⁹ George Hazel Consultancy Ltd. *Land Value Capture as A Source of Funding of Public Transit for Greater Montréal*, October 2014. Accessed June 20, 2017. <http://www.theiu.org/wp-content/uploads/2015/04/NBC-CA-Land-ValueCapture2.pdf>

⁷⁰ Suzuki et al., *Financing Transit-Oriented Development*, 130.

⁷¹ Dapo Olajide, *Transit Value Capture Finance - A Global Review Towards Measuring Monetary Efficiency*. August 2015, https://open.library.ubc.ca/media/download/pdf/310/1.0305734/5HIFXtCgARZpGij80-keO_Lwja-uA (accessed May 25, 2017).

- Developers make voluntary financial contributions to public infrastructure, such as a new rapid transit project or station, thereby helping to create a better transportation system with a direct capital cost savings to taxpayers.
- Developers in turn are able to build more density and achieve a stronger return on their investment (assuming municipal approval), because more people will want to live or locate their business close to the improved transit infrastructure.
- Development is in turn more oriented towards the rapid transit infrastructure, increasing the ridership, and long-term financial success and sustainability of the new service.
- More development and people making use of rapid transit infrastructure reduces the amount of automobile-based development that would have otherwise occurred away from transit. The negative impacts of growth – including sprawl, road congestion and vehicle emissions – are reduced.
- In turn, a greater proportion of trip origins and destinations across the region are supported by transit, making the entire region more transit-accessible and encouraging future development to occur closer to transit.

Figure 3 - How to create a virtuous cycle of LVC benefits⁷²

As James McIntosh, Newman, Trubka, and Kentworthy (2017) outline, LVC also provides transit agencies and investors with an understanding of the overall value of a transit project.⁷³ I agree that this allows for:

- “An understanding of the net cost of infrastructure,
- Development of options to offset the cost of the project,
- Support for cost-sharing arrangements between stakeholders,
- Support for long-term planning and integrated TOD policy development,
- Support for project affordability and funding analysis, and
- Development of a comprehensive project Value Proposition.”⁷⁴

For the purpose of this paper a **transit oriented investment** (TOI) is any transit related development within walking distance of public transportation (typically a station). These investments could include any ancillary developments or transit infrastructure which could be financed through the use of LVC instruments. I shall focus on the added value around these transit oriented investments generated by transit and how LVC has the ability to finance them. The following section will expand on this discussion and outline the rationale for using land

⁷² Metrolinx, *Investment Strategy*

⁷³ James Robert McIntosh et al., "Framework for land value capture from investments in transit in car-dependent cities." *The Journal of Transport and Land Use* 10, no. 1 (2017): 160.

⁷⁴ *Ibid.*, 160.

value capture.

4.1 What are the Effects of Transit on Land Values and Who Benefits from Transit Investment? – A Rationale for Using LVC

As transit agencies and municipalities are facing financial stress and political pressures to expand transit, many jurisdictions are starting to use land value capture to fund transit oriented investments. It is the typical case that many transit investments “are unable to be funded, due to the lack of strategic [funding] or ongoing budget allocation, without... exceeding lending limits.”⁷⁵ I share the same opinion as Suzuki et al. (2015) that LVC is useful because it allows for the transit agency to tap into publically created land value increment. I agree that this “can be an efficient way to allocate resources by exploiting [the] positive externalities” of transit development on surrounding land values.⁷⁶

Studies have proven that there is a relationship between transit investments and land values. In what experts refer to as **Transit-Induced Land Capitalization**, “property values and rent generally rise with proximity to transit lines and stations, reflecting the more accessible nature of such properties.”⁷⁷ However, transit-induced land capitalization (LVC) only occurs when there are **accessibility** and **agglomeration benefits** of transit infrastructure investment. These benefits eventually get capitalized into the price of land around stations or transit corridors.⁷⁸

Accessibility benefits are “defined as the component of the total financial value of land or property that is explained by the access to natural, social and economic resources.”⁷⁹ Urban

⁷⁵ Ibid., 156.

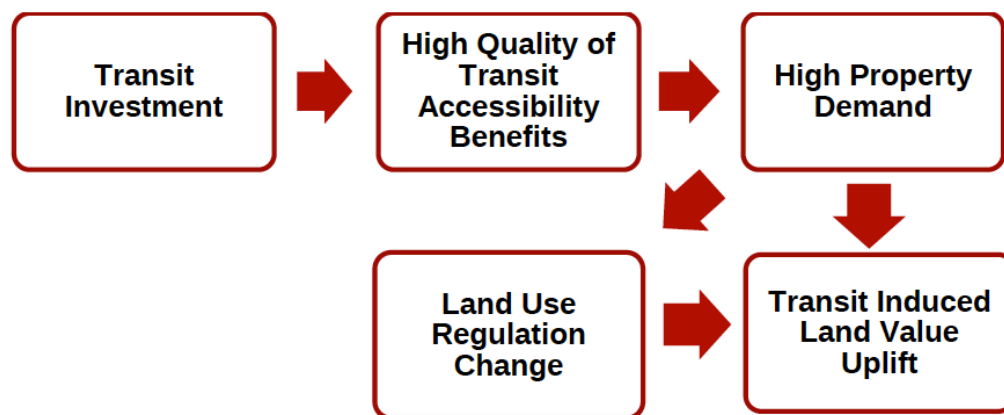
⁷⁶ Suzuki et al., *Financing Transit-Oriented Development*, 43.

⁷⁷ Olajide, *Transit Value Capture Finance*, 14.

⁷⁸ Suzuki et al., *Financing Transit-Oriented Development*, 43.

⁷⁹ Olajide, *Transit Value Capture Finance*, 12.

economists agree that “accessibility is measured as the distance from properties to transit stations and transit corridors that pedestrians encounter.”⁸⁰ As Suzuki et al. (2015) states, “the degree of access is determined by a combination of travel congestion and activity location in cities and regions.”⁸¹ In terms of the transit investment, this benefit is “based on the well-established understanding that proximity to public transit influences property prices (since most people are willing to pay a premium to enjoy the social and economic benefits that proximity to transit affords).”⁸² For the most part, it has been revealed in academic studies that “development density/land value increases in the proximity of nodes or development density/land price gradients from nodes in a bid-rent curve. In this sense accessibility can be regarded as [one] surrogate for measuring external economic benefits of transport investment.”⁸³ *Figure 4* below visualizes how transit accessibility benefits can lead to transit induced land value uplift.



*Figure 4 - The impact of transit accessibility benefits on land values*⁸⁴

⁸⁰ Ibid., 14.

⁸¹ Suzuki et al., *Financing Transit-Oriented Development*, 45.

⁸² Dapo Olajide and Manuel Arcé, *Funding wisely: Unlocking urban transit with Land Value Capture*. May 2017, <https://assets.kpmg.com/content/dam/kpmg/xx/pdf/2017/.../Foresight-funding-wisely.pdf> (accessed June 17, 2017).

⁸³ Suzuki et al., *Financing Transit-Oriented Development*, 45.

⁸⁴ Olajide, *Transit Value Capture Finance*, 13.

Transit investments could also generate **Agglomeration benefits**. These benefits are described as the “productivity gains arising from increasing the 'effective density' of economic activity in urban areas.”⁸⁵ In the case of transit investment, there is typically an “increase in accessibility and affordable mobility options decreases the interaction cost within the spatial economy and boosts the agglomeration of economic activity, thus enabling greater scale economies.”⁸⁶ Transit investment leads to more compact forms of urban development and improves the level of financial productivity in these areas based on the improved proximity of employees and consumers to surrounding businesses.⁸⁷ I agree with experts that these economic benefits spurred by transit are capitalized into the surrounding land and property.

The typical **beneficiaries of transit infrastructure investment** are outlined by McIntosh et al. (2017). These can include:

- **“Land owners:** due to increases in underlying land values.
- **Property developers:** potential increase in developed real estate values, faster sales rates, reduced holding costs, and lower construction costs due to reduced parking requirements.
- **Transport system users:** a more efficient, less congested transport system results in less time spent in transit, allowing more time for other activities and a better transit experience.
- **Business owners:** increased economic activity due to improved customer and employee accessibility to their business, with workers arriving less stressed and more productive.
- **Federal/[provincial] and local governments:** due to increases in land-property-based revenue from existing levies and taxes from increased land and property values.”⁸⁸

⁸⁵ Steer Davies Gleave, *Eglinton Crosstown Rapid Transit Updated Benefits-Case Analysis*, June 2012. Accessed June 15, 2017. http://www.metrolinx.com/en/regionalplanning/projectevaluation/benefitscases/Benefits_Case-Eglinton_Crosstown.pdf.

⁸⁶ Olajide, *Transit Value Capture Finance*, 14.

⁸⁷ *Ibid.*, 14.

⁸⁸ James Robert McIntosh et al., "Framework for land value capture," 159.

The benefits that these beneficiaries receive from the transit investment gets factored into the increase in property value surrounding the transit station or corridor. At the same time, there can be dis-beneficiaries of transit development. Although the transit agency and others benefit from the rise in land values surrounding transit stations and corridors, this can also have the effect of displacing low-income households in what urban planners call **gentrification**.⁸⁹ Municipal planners should help transit agency and developers engaging in land value capture practices by providing “incentives to ensure that affordable housing is built close to transit stops.”⁹⁰ A good example of this is introducing density bonusing in exchange for constructing social or rent-protected housing near transit stations. These incentives can be included in development-based land value capture agreements.⁹¹

Before planners jump to conclusions about transit-induced land capitalization, it should be noted that transit investment alone does not always cause the price of land to appreciate, nor is it always the sole contributor to a potential increase in land value (see Figure 5). I acknowledge that a financial uplift in real property value can vary depending on a range of factors including the type of property, type of transit, level of accessibility, mode of transport technology, and service related issues such as crime, noise and other forms of pollution.⁹² In agreement with Suzuki et al. (2015) I am also of the opinion that aside from the prevailing market conditions required for successful LVC, transit-supportive policies (i.e., supportive land use regulation) must also be adopted by the municipality and the transit agency if they wish to capitalize on the external economic benefits of transit investment on nearby land. Other external factors such as public

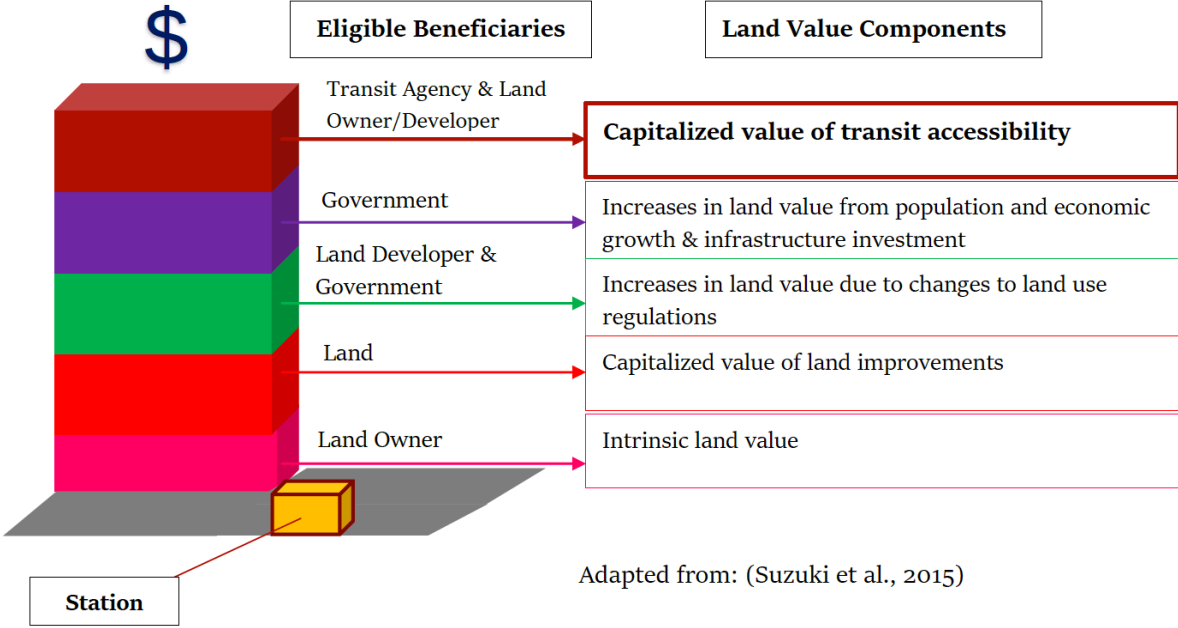
⁸⁹ Suzuki et al., *Financing Transit-Oriented Development*, 26.

⁹⁰ *Ibid.*, 26.

⁹¹ *Ibid.*

⁹² James Robert McIntosh et al., "Framework for land value capture," 158.

investments in social services and infrastructure, private investments on land improvements, and population growth and economic development could also play a factor in value uplift.⁹³ These are some reasons why there are varying ranges of transit-induced land capitalization. For example, studies proving that “the highest impact can be found downtown (where knowledge-and service-based business entities, such as finance and insurance, real estate, and advanced business services, concentrate around high-accessibility transit facilities) rather than in suburban areas’ bedroom communities” demonstrates how there can be external factors to transit development.⁹⁴



Adapted from: (Suzuki et al., 2015)

Figure 5 - Land values and their beneficiaries⁹⁵

⁹³ Olajide, *Transit Value Capture Finance*, 10.
⁹⁴ Suzuki at al., *Financing Transit-Oriented Development*, 46.
⁹⁵ Olajide, *Transit Value Capture Finance*, 11.

5.0 What are the Types of LVC that can be used to fund Transit Oriented Investments?

Suzuki et al. (2015) explain that there are different types of land value capture:

“There are two main categories of LVC: development-based LVC and tax- or fee-based LVC. **Development-based LVC** can be facilitated through direct transaction of properties whose values have been increased by public regulatory decisions or infrastructure investment [(e.g., transit development)]. **Tax- or fee-based LVC** is facilitated through indirect methods, such as extracting surplus from property owners, through various tax or fee instruments (e.g., property taxes, betterment charges, special assessments, etc.).”⁹⁶

Both TBLVC and DBLVC have different instruments that transit agencies can utilize to fund transit oriented investments (see Figure 6). In order to appropriately select which category of LVC to implement, a transit agency should understand the advantages and disadvantages of each instrument. The following sections will outline the different categories of land value capture, their instruments, and why implementation of DBLVC could potentially be a better approach for funding TOIs.

⁹⁶ Suzuki et al., *Financing Transit-Oriented Development*, xxii.

	Instrument	Description
Tax- or fee-based	Property and land tax	Tax levied on estimated value of land or land and buildings combined, with revenues usually going into budgets for general purposes.
	Betterment charges and special assessments	Surtaxes imposed by governments on estimated benefits created by public investments, requiring property owners who benefit directly from public investments to pay for their costs.
	Tax increment financing	A surtax on properties within an area that will be redeveloped by public investment financed by municipal bonds against the expected increase in property taxes. Mainly used in the United States.
Development-based	Land sale or lease	Governments sell developers land or its development rights, whose values have increased thanks to a public investment or regulatory change, in return for an up-front payment, leasehold charge, or annual land rent payments through the term of the lease.
	Joint development	A well-coordinated development of transit station facilities and adjacent private properties between transit agencies and developers, where the latter usually contribute physically or financially to the construction of the station facilities, as their property value will increase thanks to the transit investment. Used in Japan, the United States, and other countries.
	Air rights sale	Governments sell development rights extended beyond the limits specified in land use regulations (such as floor area ratios [FARs]) or created by regulatory changes to raise funds to finance public infrastructure and services.
	Land readjustment	Landowners pool their land and contribute a portion of their land for sale to raise funds and partially defray public infrastructure development costs.
	Urban redevelopment schemes	Landowners and a developer establish a cooperative entity to consolidate piecemeal land parcels into a single site that they then develop (such as a high-rise mixed-use building) with new access roads and public open spaces. The local government modifies zoning codes and increases maximum FARs in the targeted redevelopment areas (typically around rail transit stations) and finances the infrastructure. Mainly used in Japan.

Figure 6 - Various tax- and development- based Land Value Capture Instruments⁹⁷

5.1 Tax- or Fee-Based Land Value Capture (TBLVC) Instruments

The three most common forms of TBLVC instruments are property and land taxes, betterment charges/special assessments, and tax increment financing (also known as TIF). Figure 6 briefly outlines how each of these TBLVC instruments work. I agree with Suzuki et al. (2015) that while TBLVC can be useful in financing transit development and transit-oriented

⁹⁷ Suzuki et al., *Financing Transit-Oriented Development*, 5.

investments, DBLVC instruments have a number of advantages over their tax-based counterparts.

TBLVC instruments are unpopular among practitioners for a number of reasons. Siding with the majority of practitioners who specialize in LVC, I must agree. Although there are benefits to their use, the three most common TBLVC instruments can be complicated to implement, require heavy planning and political coordination, and are always open to public resistance.

Although **property tax** could generate high economic yields based on geographic area, it can be difficult for a cash-strapped municipality to funnel the additional tax increases towards transit oriented investments. In addition, a large amount of government assistance and coordination is required, and an increased property tax could also lead to taxpayer resistance.

When dealing with **betterment charges or special assessments**, governments impose a surtax on property owners for estimated benefits created by public investments.⁹⁸ An example of this would be a surtax on properties found within a one-mile radius of a newly developed subway station. The surrounding properties would incur a predicted value uplift because of the nearby public investment. However, the challenge of precisely estimating revenue from this levy on top of existing property taxes could be faced with tremendous public resistance.⁹⁹ This estimated betterment charge or special assessment is determined on how much value the property owners would capture from the public investment. It is difficult to set a surtax because of the unpredictability of the public investment's uplift on nearby property values (both real and projected). Accurately estimating the cost of the public goods provision is typically where resistance occurs. Another issue with this TBLVC instrument is that "revenues generated by

⁹⁸ Ibid., 55.

⁹⁹ Ibid.

property owners are highly dependent on local economic conditions.”¹⁰⁰ As a result, the revenues achieved from these betterment charges or special assessments are out of the hands of the transit investor who must rely on a strong and predictable local economy.

The same issues could be faced when implementing **tax increment financing (TIF)**. TIF is “a surtax on properties within an area to be redeveloped by public investment financed by municipal bonds.”¹⁰¹ To explain TIF in a simple nutshell, Daniel Dale (2014) outlines it as a three step process. These steps include: “One: [Declaring] certain neighbourhoods TIF zones for a certain number of years. Two: [Borrowing] money. Three: when property values increase in the TIF zones, [taking] all the extra tax revenue and [using] it to pay back off the debt, instead of paying for other programs and services.”¹⁰² The concept sounds simple, however, the main issue with TIF is its unpredictability when assuming when and how much development will occur. This unforeseen challenge of using the TIF TBLVC instrument was exemplified with the Atlanta BeltLine project as discussed by Daniel Dale (2014). A form of TIF was estimated to raise \$1.7 billion (60 percent) of the \$2.8 billion to be used for the development of new parks, transit and housing. After a national economic recession, “the revenue estimate dropped to \$1.45 billion while the estimated project cost jumped to \$4.3 billion.”¹⁰³ The municipality would generally be on the hook to cover any funding gaps as was the case here.¹⁰⁴ While TIF can trigger major

¹⁰⁰ Olajide, *Transit Value Capture Finance*, 41.

¹⁰¹ Suzuki et al., *Financing Transit-Oriented Development*, 56.

¹⁰² Daniel Dale, "Analysis: John Tory's SmartTrack funding proposal is vague, massive — and could fail," *The Toronto Star*. October 12, 2014
https://www.thestar.com/news/city_hall/toronto2014election/2014/10/12/analysis_john_torys_smarttrack_funding_proposal_is_vague_massive_and_could_fail.html (accessed June 25, 2017).

¹⁰³ Ibid.

¹⁰⁴ Ericka Brown Davis, "Atlanta BeltLine Closes \$155 Million 2016 Bond Issue to Advance Affordable Housing, Capital Construction and Economic Development." *Atlanta Beltline*. January 2, 2017, <https://beltline.org/2017/01/22/atlanta-beltline-closes-155-million-2016-bond->

redevelopment of nearby transit station areas, the fact that it requires significant coordination and time for TIF negotiation between actors involved (i.e., municipality, transit authorities, land owners), and a strong urban land and real estate market can be considered weaknesses of this tool.¹⁰⁵ Based on these examples I am of the opinion that transit agencies and municipalities should only use tax- or fee-based tools if they have previous land value capture experience and are in a rapidly growing urban region.

5.2 Development-Based Land Value Capture (DBLVC) Instruments

With DBLVC, transit agencies or investors are directly or indirectly involved in the delivery of development around transit stations. Transit investors could include independent transit developers and operators (although not typical in North America) or special purpose enterprises structured between governments, transit agencies and private investors for joint development ventures.¹⁰⁶ DBLVC is typically a voluntary partnership between the public sector and the “private sector where each partner understands the business of the other and agrees to share the mutual benefit.”¹⁰⁷

The transit agency will provide transit which generates an uplift in the value of land based on improved accessibility. The transit investor will typically own the land and development rights surrounding the proposed station. This nexus between the transit agency and investor creates a mutual benefit. Alternatively, the transit agency could own the land or development rights, and the transit investor (typically a private real estate developer) will engage in development of the transit oriented investment (e.g., a mixed commercial residential building

issue-to-advance-affordable-housing-capital-construction-and-economic-development/ (accessed June 25, 2017).

¹⁰⁵ Olajide, *Transit Value Capture Finance*, 40.

¹⁰⁶ George Hazel Consultancy Ltd. *Land Value Capture*, 13.

¹⁰⁷ Ibid.

above the station). In most cases, “A voluntary partnership is then formed where the increase in value due to the transit is equitably distributed between the developer/landowner and the transit provider to help build” the transit oriented investment or “the transit that will generate the value.”¹⁰⁸ Agreements between the parties on the form of contribution from the private-sector would typically be negotiated on a site-specific basis once an request for proposal (RFP) is issued. Contributions will vary depending on the specific characteristics of the development site and transit facility linkages.¹⁰⁹ For these DBLVC ventures to be successful, a value planning ethos must be adopted by all parties involved.

Value planning is an important concept for DBLVC. This was the ethos formerly adopted by the TTC and the municipality of Metro Toronto starting in the mid-1950’s. As Dapo Olajide (2013) explains, this “innovative approach to transit development... attempts to maximize value generation for transit projects.”¹¹⁰ More land is assembled than required for station development to allow for future high density development surrounding transit station areas. By owning excess land and/or air rights around stations, “transit agencies can be direct beneficiaries of the significant transit induced land value gains” if they plan to engage in DBLVC practice.¹¹¹ It must be noted however that having publicly owned land is not enough for the transit agency to get involved in the implementation of DBLVC instruments.

Good urban governance and institutional capacities are also required before implementing DBLVC instruments. Municipal planners play an important role in allowing for DBLVC to succeed. Planners must be able to enhance land values before recapturing the

¹⁰⁸ Ibid.

¹⁰⁹ Ibid.

¹¹⁰ Olajide, *Transit Value Capture Finance*, 30.

¹¹¹ Ibid.

increment for public investment.¹¹² Planners could include the pursuit of transit oriented development principles in transit, land use and official plans. It could also include changes in zoning or the creation of secondary plans and overlay zones in order to maximize returns on investment. At the same time, I am of the opinion that Suzuki et al. (2015) are correct in saying that transit and municipal planners should have the proper technical knowledge and financial expertise to take part in private sector investment projects. This allows for the clear facilitation of DBLVC “through public-private partnerships in integrating transport investments with land development and management.”¹¹³ Such expertise also allows for DBLVC contributions to be agreed on as early as possible. The Metrolinx *LVC Discussion Paper* (2013) outlines that early communication between public-private partners is a crucial aspect of DBLVC because:

“the largest gains are to be made in the initial stages of the development process before options are taken and site ownership transferred. Any agreed contributions at this stage can be accounted for in the development process that follows. As time goes by, and certainty increases, value is taken out as developers anticipate increases in land value around the new transit. Hence, LVC is best secured before the line and station locations are fixed.”¹¹⁴

Unfortunately, agreeing upon contributions at an early stage is not always practiced in reality.

Finally, while these revenues could be used for a number of transit related financing purposes, I agree with Olajide and Arcé (2017) that even **development-based “LVC schemes are only part of the funding solution”** and “they will never be sufficient to cover the full cost of development.”¹¹⁵ Opportunities for DBLVC are driven by the market. There may be little appetite to engage in DBLVC and land acquisition if the real estate market is in a slump or is

¹¹² Suzuki et al., *Financing Transit-Oriented Development*, 62.

¹¹³ Ibid.

¹¹⁴ George Hazel Consultancy Ltd. *Land Value Capture*, 12.

¹¹⁵ Olajide and Arcé, *Funding wisely: Unlocking urban transit*, 1.

facing uncertainties. As a result, transit agencies should not solely rely on DBLVC instruments to generate funds to finance transit oriented investments.¹¹⁶ These instruments should be considered as an alternative funding mechanism that could potentially cover some of the costs of transit investment.

The most common forms of DBLVC instruments are direct property development, land sale and lease agreements (as we historically saw with the TTC), joint development, air rights sale, land readjustment, and urban redevelopment schemes. I will discuss each in turn. The chart on page 41 indicates some of the advantages and disadvantages of these DBLVC instruments (see Figure 7). This analysis is included so that transit planners and investors can understand the benefits and challenges they may face when selecting a particular instrument to fund transit oriented investments.

Direct property development is the most straightforward DBLVC instrument. It can be described as the direct involvement of transit agencies in the property development of excess land surrounding their transit stations.¹¹⁷ The advantage of this development-based instrument is that it has the potential to generate significant and lasting revenues for transit agencies.¹¹⁸ If municipal planners are able to grant transit-supportive upzoning for properties in question, there could be massive financial potential for the transit agency in their new role as property developer. The largest issue with direct property development in Toronto is that organizational bylaws prohibit both the TTC and Metrolinx from being able to purchase property for the purposes of creating development sites.¹¹⁹ Agencies must find shortcuts around these bylaws in order to profit from direct property development. Joint development may be a solution to this.

¹¹⁶ Suzuki et al., *Financing Transit-Oriented Development*, 62.

¹¹⁷ Olajide, *Transit Value Capture Finance*, 31.

¹¹⁸ Ibid.

¹¹⁹ Joanna Kervin, "Eglinton Crosstown project," email message to the author, May 9, 2017.

The downside of this instrument is that there are significant financial barriers for entry into real estate development for transit agencies primarily being the acquisition of expensive property and construction costs. Financial barriers lead to an increased amount of risk with real estate projects that public sector transit agencies are not always willing to assume.¹²⁰ Additionally, transit agency personnel must have the financial and development experience to undertake direct property development. If this expertise is lacking within the organization, then land sales and leasing might be a better avenue for transit agencies looking to use DBLVC to finance TOIs.

Land Sales and Lease Agreements are two other forms of DBLVC instruments that transit agencies could pursue in order to enter into the LVC field. The typical case of land sales is when a transit agency “sells excess acquired land or development rights around transit infrastructure at appreciated (post rail investment) land prices to developers to raise significant upfront revenues to finance transit [oriented] investments.”¹²¹ In order to achieve the largest return on investment, municipal planners should be in a position to recommend supportive land use regulations in order for the transit agency to be able to sell at the highest market value. If the transit agency does not already own the land in question, the high initial land costs may be a barrier for entry into DBLVC because of a lower return. This is why DBLVC goals must be communicated early on in the transit planning process before property prices increase. With lease agreements, “the transit agency or investor leases valuable land, or space above or below the land adjacent to transit stations to developers in return for annual land rents and or a single leasehold payment.”¹²² This could include air rights, ground, or subsurface leases. While land leases generate upfront and recurring revenues, and pose low financial risk for the public transit

¹²⁰ Olajide, *Transit Value Capture Finance*, 31.

¹²¹ *Ibid.*, 32.

¹²² *Ibid.*

agency, experts question the worth of this DBLVC instrument because it can generate only low financial yields which cannot cover the sheer costs of TOIs.¹²³ In my opinion, these are two entry level DBLVC tools with which transit agencies could experiment.

Joint Development is the coordinated development of transit facilities and transit adjacent property between public sector transit agencies and transit investors such as a real estate developer. Suzuki et al. (2015) explains that private developers typically contribute to the development by constructing the transit facility or financing part or all of the construction costs once the land and development rights have been transferred to them.¹²⁴ Private developers have the incentive enter into joint development partnerships with public transit agencies on transit adjacent properties when there are potential land value uplifts generated by nearby transit.¹²⁵ Joint development ventures involve a cost and revenue sharing agreement between the transit agency and private developer (i.e., the transit investor). These could commonly include incentive based, voluntary, or equity participation and revenue sharing agreements. Joint development is advantageous for transit agencies because they are able to share financial risks and benefits with the private developer who has expertise the field of property development. Another major advantage of joint development is the significant revenues that could be recovered compared to other DBLVC tools. On the other hand, transit agencies might face a disadvantage with this DBLVC instrument if there are disagreements with their joint partner over cost and revenue allocation. Moreover, these partnerships might not be worthwhile to enter into if zoning regulations do not allow for the highest and best use of the station adjacent properties. I am of

¹²³ Ibid., 32-34.

¹²⁴ Suzuki et al., *Financing Transit-Oriented Development*, 58.

¹²⁵ Olajide, *Transit Value Capture Finance*, 31.

the opinion that private developers will not willingly enter into these ventures if they do not see a good enough return on their investment.

With **Air Rights Sales**, “the transit agency [sells] the development rights above stations and transit adjacent land to developers to raise funds to finance transit investments.”¹²⁶ To further explain, “the developable space above station and station-adjacent land is increased beyond the allowable floor space ratio (FSR) in the land use designation to unlock additional financial land value, which is then captured by the transit agency through sales to developers.”¹²⁷ This DBLVC instrument is able to help support the transit network by providing density, integrating other uses with the public transit station, and therefore improving transit access, potential ridership numbers and increased fare revenues. Air rights sales also allow for the last large scale development opportunities in downtown areas. Through the sale of air rights, transit agencies and developers could avoid assembling small parcels from multiple landowners.¹²⁸ For the transit agency, this instrument is attractive because it could generate significant upfront revenues with low financial risk. However, I share the opinion with Nathan Bunio (2016) that “community opposition to air rights development [projects] can be a major deterrent to [a] proposal’s approval, and may inhibit the density [required] to make [a] project feasible.”¹²⁹ Furthermore, air rights development can be complicated from an engineering and construction standpoint.¹³⁰ Once the transit agency sells the air rights, they must make sure that the air rights development project does not prolong any proposed transit development or else the transit

¹²⁶ Ibid., 32.

¹²⁷ Ibid.

¹²⁸ Nathan Bunio, “Air Rights Development and Public Assets: An Implementation Handbook for Public Entities” April 2016 (master’s thesis, Ryerson University, 2015) 10-12.

¹²⁹ Ibid., 12.

¹³⁰ Ibid.

agency risks public opposition. The transit agency could also risk going over budget and hence face potential lawsuits if these air rights developments prolong transit projects.

Land Readjustment is a DBLVC instrument where “individual landowners in a transit investment area (station area) pool their land together into a large site for redevelopment and in the process donate a portion of the assembled land to the government in exchange for zoning relaxation on the consolidated site.”¹³¹ Typically the transit agency would use a portion of the land for station development and the remainder is sold, leased or developed. This DBLVC is useful because it allows the transit agency to avoid the potentially high cost of land acquisition, but it is not widely used in North American. For the most part, I agree with Olajide (2013) that this is not a very reliable DBLVC instrument because the transit agency is heavily reliant on private landowners. Land readjustment is also not likely to happen in urban cores, but rather on the fringes of cities. The largest disadvantage of this tool is that it is very dependent on local planning and urban development policy to grant private owners zoning relaxations in areas where there can already be secondary plans or studies in place that call for a certain area planning precedent.¹³² It is my opinion that this DBLVC instrument should be avoided by North American transit agencies looking to engage in LVC unless they can overcome the disadvantages/challenges mentioned above.

The last of the most commonly used DBLVC instruments is the **Urban Redevelopment Scheme**. Multiple property owners in a transit investment area form an association to (ADJOIN) individual land parcels into a single redevelopment site. A partner developer (this could be the transit agency) can temporarily assume responsibility for the landowning partners during this process. In the meanwhile, redevelopment plans would be sent to a municipal planning

¹³¹ Olajide, *Transit Value Capture Finance*, 32.

¹³² *Ibid.*, 34.

department to receive transit supportive zoning changes and increases in FARs. Once these changes have happened, the developer or transit agency partner can sell the excess floor space to new property owners to fund transit oriented investments in the station area.¹³³ Transit agencies taking part in this DBLVC instrument face many of the same challenges as those engaging in land readjustment schemes. Once again, it is my opinion that this DBLVC instrument should be avoided by North American transit agencies looking to engage in LVC unless they can overcome the disadvantages/challenges mentioned above.

After a review of the most commonly used DBLVC instruments, it is my opinion that transit agencies who wish to enter into the field of DBLVC should consider engaging in land/air rights sales, lease agreements and/or joint development ventures. At some point, transit agencies might luckily acknowledge that if they keep “withdrawing revenue without simultaneously creating value, [their financial resources] will eventually be depleted.”¹³⁴ Some transit agencies might still face some challenges when first engaging in these DBLVC instruments. However, they will eventually be able to find an additional revenue source for financing their transit oriented investments. At the same time, these transit agencies can potentially avoid having to face the difficult challenges of more intricate forms of TBLVC or DBLVC instruments outlined above. The next chapter will expand on the discussion of DBLVC instruments and provide planners with a justification for why some experts prefer to engage in DBLVC instruments rather than their TBLVC counterparts.

¹³³ Suzuki at al., *Financing Transit-Oriented Development*, 60.

¹³⁴ Ibid.

DBLVC Mechanism	Advantages	Disadvantages
Direct Property Development	<ul style="list-style-type: none"> Significant and long term revenues from development ventures 	<ul style="list-style-type: none"> Exposure to significant financial costs and risks associated with property investment and development. Requires zoning regulations that permit highest and best use land development
Joint Property Development	<ul style="list-style-type: none"> Significant revenues from joint development ventures Incentive based Risk and benefits sharing Most compatible for PPP financed transit projects 	<ul style="list-style-type: none"> Partner disagreements over cost and revenue allocation Requires zoning regulations that permit highest and best use land development
Land Sales	<ul style="list-style-type: none"> Generation of significant upfront revenues Low financial risk 	<ul style="list-style-type: none"> Revenues dependent on the amount of land development rights, the nature of land use regulations, and urban land market activity High land acquisition costs
Air Rights Sale	<ul style="list-style-type: none"> Generation of significant upfront revenues Low financial risk 	<ul style="list-style-type: none"> Zoning relaxation is required to increase allowable floor space area above ground
Lease Agreements	<ul style="list-style-type: none"> Generation of upfront and recurrent revenues Low financial risk 	<ul style="list-style-type: none"> Revenue yield low in comparison to other DBLVC instruments and the sheer cost of urban transit investments
Land Readjustment	<ul style="list-style-type: none"> Zero land acquisition due to land contribution from land readjustment Revenues or cost savings for transit project development 	<ul style="list-style-type: none"> Highly dependent on private land owners consent and support Financial risk associated with post readjustment transit agency led property development Only feasible on land located in the urban fringe Highly dependent on local planning and urban development policy
Urban Redevelopment Schemes	<ul style="list-style-type: none"> Proceeds from the sale of increased development right accrue to the agency and local governments for transit investment Suitable on urban land or built up areas 	<ul style="list-style-type: none"> Land Assembly and Land Contribution are highly dependent on cohesion between the private land owners and developer(s) Zoning relaxation is required to increase allowable floor space area above ground developer and individual land owners Highly dependent on local planning and urban development policy

Figure 7 - The advantages and disadvantages of common DBLVC instruments¹³⁵

¹³⁵ Olajide, *Transit Value Capture Finance*, 33-35.

5.3 Why Do Some Experts Prefer DVLVC Instruments over TBLVC Instruments?

Benefit	Tax- or Fee-Based LVC (TBLVC)	Development Based LVC (DBLVC)
Higher Revenue Potential		X
Lower Financial Risk		X
Lower Political Risk		X
Lower Implementation Cost		X
Easier Implementation		X

Figure 8 - Checklist Comparing Benefits of Tax-Based LVC and DBLVC

I agree with Suzuki et al. (2015) that DBLVC has more advantages over tax- or fee-based LVC when it comes to financing transit oriented investments (see Figure 8). Primarily, there is a **more direct** and **higher revenue potential** with DBLVC than taxation-based solutions.¹³⁶ DBLVC has the greater potential to “finance capital-intensive transit or TOD-related investments without major fiscal distortions or public opposition to additional taxes or fees.”¹³⁷ In cases of joint or direct property development, DBLVC can generate direct revenues from land value increases attributed to transit investments. As a result, this can lead to “increases [in] transit ridership, and therefore the fare income of the transit line, and [increased] viability of local services.”¹³⁸ The implementation of DBLVC instruments can also lead to “more sustainable long-term revenues from properties (such as retail shops, leisure facilities, parking, and residential buildings to be developed around station areas)” due to transit oriented investments in the station area.¹³⁹

While tax-based LVC instruments are often challenged by practitioners on the accuracy and lack of conventional methods to calculate transit induced property value uplift, DBLVC instruments are more **financially risk-adverse** than tax-based methods. DBLVC “involves

¹³⁶ George Hazel Consultancy Ltd. *Land Value Capture*, 11.
¹³⁷ Suzuki at al., *Financing Transit-Oriented Development*, 35.
¹³⁸ George Hazel Consultancy Ltd. *Land Value Capture*, 8-9.
¹³⁹ Suzuki at al., *Financing Transit-Oriented Development*, 35.

tractions of land, development rights, or air rights whose values have risen due to public investment or regulatory change” and I have to agree with Suzuki et al. (2015) these instruments establish “a clearer linkage between value creation and capture” compared to tax- or fee-based LVC instruments.¹⁴⁰ This direct link between DBLVC funding contributions to a specific project generating increased profits is attractive to both developers and the public.¹⁴¹ Additionally, because DBLVC instruments are more site-specific (compared to tax-based LVC instruments like TIF or betterment charges) transit investors could engage in more market studies to predict a return on investment. If investors like a transit agency are operating in a stable market with relatively few market cycles, and high real estate demand and prices such as in Toronto, they would be susceptible to less risk. These same factors (stability and high demand for land) could also be regarded as barriers for cash-strapped transit agencies who wish to enter into the DBLVC practice.¹⁴²

DBLVC instruments also face **lower political risk**. I share the same opinion of Olajide (2013) that DBLVC instruments typically face a “low likelihood of public opposition to financially beneficial land and development [transactions]” because negotiations “between the [transit] agency and private partners in DBLVC [instruments] are conducted far from the public eye or without public participation.”¹⁴³ Transparency might be considered an issue to the public, but it is required to avoid compromising RFPs for DBLVC projects. Planning issues such as NIMBYism are most likely to be considered more of a concern for these projects because residents surrounding station areas may be in opposition of increased height and density disrupting their “stable” neighbourhoods.

¹⁴⁰ Ibid., 37.

¹⁴¹ George Hazel Consultancy Ltd. *Land Value Capture*, 12.

¹⁴² Olajide, *Transit Value Capture Finance*, 35-6.

¹⁴³ Ibid.

Additionally, DBLVC instruments allow for **partnerships and sharing of financial costs and benefits**. A great aspect of DBLVC instruments like joint development is that it allows for a partnership between the transit agency and the private partners. These partners could be any range of private land owners, developers, governments, or commercial entities. Rather than assuming all of the costs or risks involved in acquisition and/or development, these LVC instruments provide a good entry point for transit agencies who wish to start using an alternative method for financing transit oriented investments. Engaging in DBLVC allows transit authorities (like Metrolinx in Ontario) to demonstrate to taxpayers that they are financially responsible.¹⁴⁴ Through DBLVC partnerships, transit authorities are able to share “land value gains through mutually beneficial land and development transactions” (an alternative method of financing) “as opposed to exactions”.¹⁴⁵ Experts like transit scholar Robert Cervero also hold “that a central element of [these partnerships is that they amount] to a quid pro quo, whereby [private partners’] benefits from transit accessibility are capitalized into higher rents and occupancy rates, and transit agencies' capital funding is enhanced through cost sharing mechanisms”.¹⁴⁶ These ventures are typically executed “through the provision of significant development land and air rights for private partners, and the sharing of land value gains with private partners”.¹⁴⁷

Lastly, “The advantage of voluntary development-based LVC methods is that they do not require any new legislation and work with the grain of the development industry.”¹⁴⁸ As a result, it is my opinion that transit agencies could **implement DBLVC instruments more easily** than

¹⁴⁴ George Hazel Consultancy Ltd. *Land Value Capture*, 12.

¹⁴⁵ Olajide, *Transit Value Capture Finance*, 35.

¹⁴⁶ Jeffrey J. Smith and Thomas A. Gihring, "Financing Transit Systems Through Value Capture." *The American Journal of Economics and Sociology* 65, no. 3 (2006): 751-86. July 2006, <http://onlinelibrary.wiley.com/doi/10.1111/j.1536-7150.2006.00474.x/abstract> (accessed June 25, 2017) 754.

¹⁴⁷ Olajide, *Transit Value Capture Finance*, 35.

¹⁴⁸ George Hazel Consultancy Ltd. *Land Value Capture*, 13.

TBLVC instruments. However, it should be noted that “they only work where the private sector is convinced the transit facility cannot be fully funded by the public purse.”¹⁴⁹

From my planning and public policy perspective, DBLVC instruments could also promote more economic competitiveness, environmental sustainability and social equity targets for cities when compared to tax- or fee-based LVC counterparts.¹⁵⁰ For instance, “by changing land use regulations” such as granting higher densities or converting uses (ex. Single Family Residential to Mixed Commercial Residential) “governments can develop articulated densities in station areas for diverse uses while increasing development-based LVC revenues.¹⁵¹ Additionally, “by using development-based LVC revenues for TOD investments in station areas” like bike lanes or public squares, “governments, transit agencies, developers, landowners, and communities can jointly develop efficient, attractive and safe public places in [transit oriented] areas.”¹⁵² Lastly, “in exchange for FARs or other regulatory incentives, governments can require developers to provide social facilities, such as affordable housing units, daycare centers, and green spaces.”¹⁵³

6.0 Why isn’t DBLVC happening – What are the Challenges of Implementing DBLVC for Transit Agencies?

As I have outlined so far in the previous chapters, DBLVC can be a very useful tool for funding transit oriented investments. Even though DBLVC can be a great funding strategy in theory, the transit agency must still overcome the potential challenges of engaging in the practice. The Metrolinx *Land Value Capture Discussion Paper* (2013) outlined some of these

¹⁴⁹ Ibid.

¹⁵⁰ Suzuki et al., *Financing Transit-Oriented Development*, 37.

¹⁵¹ Ibid.

¹⁵² Ibid.

¹⁵³ Ibid.

challenges for implementing LVC in the GTHA (see Figure 9).¹⁵⁴ This chapter will review these potential implementation challenges that Metrolinx is facing in the GTHA according to the *Land Value Capture Discussion Paper* (2013). It is my opinion that other transit agencies wishing to engage in the practice of DBLVC can anticipate some of these challenges by reviewing this section.

The implementation of LVC methods in the GTHA will require the following challenges to be addressed:

- Acceptance of the principle of LVC and the benefits
- A willingness to change and to act
- Collaboration between public and private sector stakeholders
- Potential changes to policy and strategy
- Potential changes to the legal framework
- Potential changes to appraisal methods

Figure 9 - Challenges to the implementation of LVC methods in the GTHA as Identified by Metrolinx¹⁵⁵

It is first outlined in the *Land Value Capture Discussion Paper* (2013) that there needs to be an acceptance of the principle of DBLVC and its benefits by the transit agency.¹⁵⁶ Every key player in the transit agency from the planners to the Board of Directors must accept DBLVC as a useful tool, but not one that solves all funding shortfalls. I would also add that there needs to be an understanding and acceptance of DBLVC by the real estate development industry if the transit agency wishes to undertake in joint development or other similar ventures. At the same time, it must be accepted that DBLVC tools might not work everywhere. I am also of the opinion that in cases where “there is no uplift, the uplift to be reasonably captured is minimal, or the uplift is difficult to be captured” does not mean that LVC is a useless tool or that the transit agency is

¹⁵⁴ George Hazel Consultancy Ltd. *Land Value Capture*, 18.

¹⁵⁵ Ibid.

¹⁵⁶ Ibid.

erring in its application.¹⁵⁷ In some cases DBLVC works and in others it does not. It can very well be the case that proper zoning and FARs are not in place for projects to generate enough revenues that would attract investors to a project. As a result, municipal planners must also accept that the transit agency wishes to undertake DBLVC and work with them. Adding to this, it is my opinion that all departments within a transit agency should adopt the value planning philosophy. If a transit organization without much development experience wishes to enter into the practice of DBLVC, it is important that they place all of their institutional capacities into this effort. DBLVC projects should be prioritized with other large scale projects that the transit agency is working on (ex. Metrolinx Regional Express Rail).

An additional challenge for the transit agency in implementing DBLVC methods in the GTHA is based on a willingness to change and act as business people.¹⁵⁸ Transit planners should have a willingness to listen to alternative views on transit financing, adopt a willingness to work across non-traditional transit boundaries, and have a willingness to work with partners who may have different values and objectives.¹⁵⁹ This challenge alludes back to the transit agency taking the “old-line” reluctant transit operator position and avoiding joint development, real estate sales or leasing in their practices. Transit agencies like Metrolinx have understood the benefits of using DBLVC and want to change their approach to financing transit oriented investments. However, I also believe that “the willingness to change needs to be accompanied by a willingness to act.”¹⁶⁰ The *Land Value Capture Discussion Paper* (2013), the *Big Move Implementation Economics: Revenue Tool Profiles* report (2013) and the *Metrolinx Investment Strategy* (2013) all show a willingness by the transit agency to engage in DBLVC practices. So

¹⁵⁷ Ibid.

¹⁵⁸ Ibid.

¹⁵⁹ Ibid.

¹⁶⁰ Ibid.

far, it is my opinion that Metrolinx has not been able to deliver much DBLVC work on the ground. I agree with the George Hazel Consultancy Ltd. (2013) that the transit agency might be able to accomplish more in terms of delivery if “Metrolinx [develops] an inventory of where significant development opportunities exist adjacent to existing or potential future transit.”¹⁶¹ In addition to this, the *Land Value Capture Discussion Paper* (2013) mentions that the development of a “sophisticated, accountable, and transparent LVC delivery and evaluation program that respects commercial confidentiality” could also help build a strong relationship between the transit agency and private development sector which could help spur DBLVC partnerships.¹⁶²

A third challenge for the transit agency is being able to collaborate between public and private sector stakeholders when engaging in DBLVC.¹⁶³ Strong working relationships should be formed between the transit agency, municipalities, senior levels of government and the private sector. The *Land Value Capture Discussion Paper* (2013), recommends that collaboration should happen at strategic forums to improve communication between key players in DBLVC, and on a case by case basis in order for each player to benefit. I agree that private sector developers must have an understanding of the procurement and planning processes involved in a LVC project. At the same time, I also believe that there should be equitable benefits between partners and not situations where the transit investor/real estate developer takes advantage of their public sector partners. Equity and fairness should be met in every DBLVC delivery process.¹⁶⁴ At the same time, I agree with the authors of the *Land Value Capture Discussion Paper* (2013), that the public sector transit agency should work with the market and understand its strengths and limitations. That could mean that transit projects are located in areas where

¹⁶¹ Ibid., 25.

¹⁶² Ibid., 26.

¹⁶³ Ibid., 18-19.

¹⁶⁴ Ibid., 19.

there is good land value capture potential. This could mean that “there needs to be a willingness of the municipal planning authorities to allow and support, and preferably maximize, development around transit stations.”¹⁶⁵

If municipal planners are able to use their toolbox to allow for large scale transit-supportive development around transit stations, this will drive the DBLVC process and deliver the benefits of funding, sustainable development and high quality living associated with TOD.¹⁶⁶ It has been shown that “when transit is funded only by traditional government funds, there is usually no incentive for providing TOD.”¹⁶⁷ If municipal planners use their tools to allow for LVC to more likely happen, this could potentially mean that there would be an incentive for the transit agency to provide TOD. Support from senior levels of government is also important because “public funding for transit is tied to municipal support in terms of progressive TOD planning policies.”¹⁶⁸ LVC projects could help achieve TOD objectives by creating an urban work-live-play fabric around station areas.

Another big challenge that I also believe the transit agency must face is potential changes to their policy and strategy on DBLVC. The *Metrolinx Investment Strategy* (2013) estimates that LVC (both DBLVC and TBLVC) can generate approximately \$20 million of revenue per year for the organization.¹⁶⁹ The *Land Value Capture Discussion Paper* (2013) outlines that this is a conservative revenue estimate; more revenue can be “achieved if LVC was pursued aggressively by government and government partners in collaboration with the private sector.”¹⁷⁰ Transit agency policy and strategies for DBLVC implementation should reflect this. The discussion

¹⁶⁵ Ibid.

¹⁶⁶ Ibid.

¹⁶⁷ James Robert Mcintosh et al., "Framework for land value capture," 156.

¹⁶⁸ George Hazel Consultancy Ltd. *Land Value Capture*, 19.

¹⁶⁹ Ibid., 20.

¹⁷⁰ Ibid., 20.

paper notes that one way to overcome this challenge is for the transit agency to take part in an exercise to estimate the development potential around station areas typically within a one kilometer radius. The test is outlined as making an “estimate [of] the number of residential units and areas of commercial and leisure developments around proposed transit lines and [taking] varying percentages of their value, say at 1 %, 5 % and 10%, to compare with the \$20 million per annum Investment Strategy target.”¹⁷¹ This exercise will confirm the true uplift around stations on a case-by-case basis and test the “risk as to whether or not additional development attributed to the additional transit provision is in fact generating intensification of demand and therefore increased LVC.”¹⁷² Such a test will be able to estimate long-term value creation, financial benefits of ridership, and other economic benefits. These estimates can be reflected in the transit agency’s policy and strategic planning efforts and push the agency to pursue DBLVC more aggressively.

The fifth challenge mentioned by the *Land Value Capture Discussion Paper* (2013) is the legal framework of the transit agency.¹⁷³ The discussion paper outlines that there is no reason that DBLVC cannot be implemented under Canadian law. In particular, I also believe that the procedures to deliver DBLVC will need to be developed. Current Metrolinx development and real estate policies do not allow for the acquisition of properties for the purposes of creating development sites. Metrolinx is currently working around these policies by utilizing some DBLVC instruments in order to achieve TOD objectives. As the *Land Value Capture Discussion Paper* (2013) notes:

“LVC is potentially a policy and asset maximization tool. Metrolinx holds significant assets and is in the process of examining how these assets can be

¹⁷¹ Ibid., 21.

¹⁷² Ibid.

¹⁷³ Ibid.

maximized for the benefit of Metrolinx and the city region. The focus of this work is on how to realize intensification and additional revenues from Metrolinx-owned property and on lands adjacent to Metrolinx-owned transportation corridor and station assets. Part of this examination should eventually include a review of current development and real estate policies to ensure that they are not restrictive with respect to the application of LVC methods. Indeed, they should positively help the introduction of such methods.”¹⁷⁴

I am of the opinion that if these development and real estate policies change to reflect a value planning philosophy, then LVC could be implemented more easily in the GTHA.

The last challenge to implementing LVC in the GTHA as outlined in the *Land Value Capture Discussion Paper* (2013) is potential changes to appraisal methods.¹⁷⁵ Transit planners are typically well versed in traditional transportation analysis, but for the most part I agree that they do not usually take part in traditional real estate analysis and/or financial metrics/returns approaches. As the discussion paper describes, “traditional transit appraisal methods often do not account for land value uplift (and potential capture scenarios) because land use and the associated implication of how changing or tying land use can affect how one should evaluate such transit investments.”¹⁷⁶ I agree that the only way to account for growth projections “is to show how real estate is directly tied into transit investment decisions. The advantage of LVC appraisal is that it is clearly seen to generate “real money” which can be used to provide better access and hence improved competitiveness, which in turn should support the financial performance of the transit and generate further benefits which can be accounted for in a variety of appraisal methods already in use.”¹⁷⁷ This also means that transit agency planners need to be

¹⁷⁴ Ibid., 21-22.

¹⁷⁵ Ibid., 22.

¹⁷⁶ Ibid.

¹⁷⁷ Ibid.

versed enough in the fields of urban economics, finance and real estate development to make such projections.

These are just some of the challenges for implementing LVC within the context of the GTHA. The next chapter will provide planners with some enabling factors that will help the transit agency implement DBLVC to fund their transit oriented investments.

6.1 What Factors Are Required for DBLVC to Work?

In face of the potential challenges of DBLVC implementation, Suzuki et al. (2015) outline seven enabling factors for DBLVC to work. Some of these enabling factors have been already alluded to in the previous chapters. These enabling factors are important for planners of the transit agency to understand before they attempt to engage in any DBLVC practice. I have outlined each factor individually for easy referencing.

DBLVC Enabling Factor #1: Macro Fundamentals

Demographic and economic fundamentals are key to successful DBLVC. Suzuki et al. (2015) outline that DBLVC works well when urban populations and strong economic growth create high demand for land and property prices increase.¹⁷⁸ Even in areas of slow economic growth, transit agencies and municipalities could adapt by creating station area plans early on (introducing TOD principles) and help crystalize the economic potential of these areas by addressing inadequate land uses and zoning codes. At the same time, throughout my interviews with planners at Metrolinx, there was a desire for the agency to understand where development is going to occur, where it is not likely to occur and why?¹⁷⁹ An understanding of market demand

¹⁷⁸ Suzuki et al., *Financing Transit-Oriented Development*, 15.

¹⁷⁹ "Metrolinx Interview 1." Interview by author. Toronto, June 28, 2017.

could benefit the transit agency before even attempting to engage in the creation of early station area plans.

DBLVC Enabling Factor #2: Visionary Master Plans

Municipal policymakers and planners can emphasize transit infrastructure as the spine of spatial development strategies in cities. I agree with Suzuki et al. (2015) that a long term land use vision will help guide planning, funding, construction and operations in a way that supports transit.¹⁸⁰ These plans should be transit supportive and realize that higher order transit calls for higher densities in certain parts of cities. Municipal authorities should invite different stakeholders and professionals from a variety of fields to converge and share key information and address mutual interests in the areas of planning, transit, real estate development and financing. I am of the opinion that the most important point Suzuki et al. (2015) addresses is that “master plans should not be too prescriptive. Development Parameters depend on diverse site conditions and changing market demands.”¹⁸¹ If a transit project or plan evolves and calls for higher FARs in the station area then previous land use plans should be able to acknowledge this and adapt. This will allow for the transit agency and transit investor to take part in DBLVC without additional hindrances to their plans.

DBLVC Enabling Factor #3: Flexible Zoning

As Suzuki et al. (2015) mention, there are many parties involved in DBLVC. Negotiations happen among planners, transit authorities, developers, landowners and local stakeholders seeking mutual interests and benefits. As a result, “zoning codes and site design parameters around stations should be flexible enough to meet changing market demands and diverse local needs. Zoning systems can provide flexible and negotiable codes with minimum standards to

¹⁸⁰ Suzuki et al., *Financing Transit-Oriented Development*, 16.

¹⁸¹ *Ibid.*, 17.

target station areas, allowing transit companies and developers to adjust site-design parameters.”¹⁸² However, I agree that “relaxing development regulations around stations alone does not ensure transit-supportive land use.”¹⁸³ In order to achieve this, “municipalities and transit agencies need to coordinate the physical integration of rail station facilities with private property development and surrounding neighborhoods.”¹⁸⁴ With integration, transit accessibility can improve and generate more revenues from DBLVC ventures while also increasing farebox revenues. At the same time, it should be noted that a lack of flexible zoning or suitable FARs can threaten the viability of DBLVC projects.

DBLVC Enabling Factor #4: Multiple Funding Sources

It should be acknowledged by the transit authority and the public that DBLVC is not a single funding source that can solve every funding deficit. It cannot be stressed enough that diversified funding sources should be studied and available for use by the transit agency to pay for transit oriented investments, infrastructure and services in the long run.¹⁸⁵ Farebox revenues still play a very important role in funding transit investments. As Suzuki et al. (2015) acknowledge, DBLVC is a very useful tool, but “land prices by their nature are volatile in response to changing economic and political climates, which are beyond the control of local governments or transit agencies.”¹⁸⁶ A variety of funding sources should be available to counter any risks of changing land prices rather than relying solely on DBLVC to fund TOIs.

DBLVC Enabling Factor #5: Intergovernmental Collaboration

¹⁸² Ibid.

¹⁸³ Ibid., 18.

¹⁸⁴ Ibid.

¹⁸⁵ Ibid., 19.

¹⁸⁶ Ibid.

DBLVC requires multiple government entities to work together to deliver transit-related projects. Suzuki et al. (2015) recommends one approach where a single local government body that includes the transit agency coordinates planning, design, land acquisition, construction, operation and asset management.¹⁸⁷ This is not always plausible. For instance, in Toronto there are multiple authorities (i.e., Metrolinx, TTC, and etc.) who must work together and whose responsibilities occasionally overlap (see Chapter 2.0). At the same time, I agree with Suzuki et al. (2015) that in order for collaboration for DBLVC to be achieved, “it is crucial for transport officials to recognize the financial potential and social importance of dealing with land and property around their transit stations” rather than focusing solely on service. Additionally, local political leaders and councillors can help bring stakeholders together and really get a DBLVC project accepted by their communities. Planning and policy authorities could use regulatory instruments to allow for the full exploration of development opportunities that new transit investment could bring.¹⁸⁸

Land value capture should also be understood as being able to capture value for all partners involved.¹⁸⁹ From an early stage partners should be clear on learning where the value is, how much there is, and who is benefitting.¹⁹⁰ Metrolinx has outlined that their landholdings “can be used in a collaborative way to act as a catalyst for sustainable development around transit stations, leveraging in private sector participation and funding, and creating new and exciting joint development proposals.”¹⁹¹ I believe that this can be the same case with the developable air rights that they own above stations. At the same time, “municipal participation in LVC can help

¹⁸⁷ Ibid., 20.

¹⁸⁸ Ibid.

¹⁸⁹ George Hazel Consultancy Ltd. *Land Value Capture*, 16.

¹⁹⁰ Ibid.

¹⁹¹ Ibid.

unlock and leverage revenue at the local level to help advance transportation priorities.”¹⁹² Every partner should somehow equitably share the wealth of a project.

DBLVC Enabling Factor #6: Entrepreneurship

DBLVC can be used as a simple tool of short-term project finance. However, more transit agencies have started to become increasingly entrepreneurial as they implement a Rail + Property (R+P) business model for long-term urban finance and development. As a result, mainstream property development and asset management around stations has become a large part of these entrepreneurial transit agencies. For instance, the Washington Metro Area Transit Authority’s (WMATA) “joint development program began in the 1970’s and became known for its in-house real estate expertise, pro table deals and innovative deal structures.”¹⁹³ By adopting an entrepreneurial framework and having the proper expertise to engage in DBLVC, transit agencies are able to establish a consensus with other stakeholders in “the ownership of and responsibilities for land and property management in and around stations.”¹⁹⁴ As we historically saw with the TTC, developers like Cadillac Fairview were more willing to involve themselves in joint development ventures with the transit agency who knew how to negotiate, and understand private sector business problems. Through my interview with transit planners from Metrolinx, there seems to be a current belief that it is the transit agency’s responsibility to maximize returns on property and to treat their land holdings as valuable investments.¹⁹⁵ This position might indicate a re-emergence of the entrepreneurial framework required for DBLVC implementation in Toronto.

¹⁹² Ibid.

¹⁹³ George Hazel Consultancy Ltd., *Land Value Capture as A Source of Funding Of Public Transit for Greater Montréal*, October 2014, <http://www.theiu.org/wp-content/uploads/2015/04/NBC-CA-Land-ValueCapture2.pdf> (accessed June 20, 2017).

¹⁹⁴ Suzuki et al., *Financing Transit-Oriented Development*, 16.

¹⁹⁵ "Metrolinx Interview 1." Interview by author. Toronto, June 28, 2017.

The development of a new governance and business model was also identified by the Metrolinx *Land Value Capture Discussion Paper* (2013). I agree with the authors of the report that there should be two levels of engagement in a LVC project.¹⁹⁶ It is first outlined that there should be a strategic level where there is general agreement to implement LVC policies. Metrolinx has done this by identifying LVC potential in their Investment Strategy. Secondly, there should be engagement at the delivery level where value is captured. The biggest factor to overcome here is that many transit agencies acknowledge the benefits of LVC, but they fail in the delivery step.¹⁹⁷ Adding to what the report outlines, it is my opinion that transit agencies should enter into LVC practice through the use of easier-to-implement DBLVC instruments. The transit agency can act as a catalyst for bringing together public and private sector actors.¹⁹⁸ Once there are demonstrated successes, it can help build the confidence of the agency and of the private development industry who may be more willing to engage in joint development practices for instance.

DBLVC Enabling Factor #7: Clarity

I agree with Suzuki et al. (2015) when they mention that rules for DBLVC should be clear. This means that DBLVC should be adapted based on local and site specific contexts. For instance, “rules for sharing costs, benefits, and risks must support the collaborative actions of multiple stakeholders.”¹⁹⁹ For example, in Hong Kong, the transit authority offers three options for DBLVC benefit sharing to private developers. These options include profits in agreed proportions from the sale/lease of properties, assets in kind, and up-front payments from the

¹⁹⁶ George Hazel Consultancy Ltd. *Land Value Capture*, 16.

¹⁹⁷ Ibid.

¹⁹⁸ Ibid.

¹⁹⁹ Suzuki et al., *Financing Transit-Oriented Development*, 23.

developers.²⁰⁰ Options are decided on a case-by-case basis based on the development locations and market conditions. By offering clarity in DBLVC ventures, I agree that it makes it easier for the developer to enter into arrangements with the transit authority especially when working on more complex DBLVC ventures above and around stations. This can all be outlined in the RFP stage and further negotiations with winning proposal bidders.

The Metrolinx *Land Value Capture Discussion Paper* (2013) also spoke about clarity. It should be a priority that key stakeholders agree on a set of objectives surrounding a transit oriented investment project using LVC. Conflicts that can arise based on project objectives have the potential to stall, prolong, and/or add to project costs. From an early stage there should be “effective collaboration between all the key public sector players... delivering [on] and agreed set of objectives and priorities for each LVC project. This collaboration can take many forms – voluntary, Special Purpose Vehicle, or statutory.”²⁰¹

Additionally, just as the *Land Value Capture Discussion Paper* outlines, I believe that a transit agency like Metrolinx “should establish development principles that will act as guidelines for all TOD and economic hub development.”²⁰² Not only will this provide clarity for the transit agency in site selection criteria for DBLVC implementation, but it will also mean that the private sector could suggest sites to the transit agency that makes sense to engage in DBLVC.

Overall, these are just some of the potential enabling factors that will allow for DBLVC projects to work for transit agency, the municipality and the private transit investor/developer. Through a case study analysis, the next chapter will describe some of the best practices associated with using DBLVC instruments to fund transit oriented investments.

²⁰⁰ Ibid.

²⁰¹ George Hazel Consultancy Ltd. *Land Value Capture*, 15.

²⁰² Ibid., 24.

7.0 DBLVC Case Study - WMATA Joint Development Program – Washington, DC, USA

As I have outlined, DBLVC implementation can still be a challenge. Transit agencies and their planners can tackle these challenges head on if they make sure they follow the seven DBLVC enabling factors. One transit agency that has been hailed as meeting these enabling factors in their DBLVC practice is the Washington Metropolitan Area Transit Authority (WMATA).

WMATA has one of the most advanced and largest DBLVC programs in North America. They have compiled over 40 years of joint development (JD) experience in the Washington, DC and surrounding area. As transit financing practitioners Dapo Olajide and Manuel Arcé (2017) explain, JD ventures have been undertaken by WMATA since 1975.²⁰³

WMATAs JD success began to occur when the transit agency “and adjacent property owners found it useful, on a project-by-project ad hoc basis, to share some land preparation, excavation, and construction costs and coordinate building schedules.”²⁰⁴ Since these humble beginnings, WMATA now has a working portfolio of more than 65 large-scale JD projects and spurring “more than \$235 billion [USD] in economic development at or next to Metro property.”²⁰⁵ In turn, these JD projects generated about \$3.1 billion dollars of property tax revenues with half a mile of Metro transit.²⁰⁶

The transit agency’s JD program was established in 1981. However, WMATA has been embarking on its real estate business since the 1960’s.²⁰⁷ At that time, the transit agency began delving into the realm of DBLVC by working on smaller scale commercial tie-ins with metro

²⁰³ Olajide and Arcé, *Funding wisely: Unlocking urban transit*, 2.

²⁰⁴ Robert Cervero et al., “Transit Joint Development in the United States”. *Monograph 42* (1992) 58.

²⁰⁵ Suzuki et al., *Financing Transit-Oriented Development*, 139-40.

²⁰⁶ *Ibid.*, 140.

²⁰⁷ *Ibid.*, 139.

stations. Partnerships were established with the WMATA and “landholders who would realize capital gains on property through tie-ins with metro investments.”²⁰⁸ WMATA’s real estate department arm continues to be pro-active in building their land holdings by screening sites for JD potential. Since the establishment of WMATA’s real estate and JD arms, a set of JD Policies and Guidelines have established the general JD practices for the transit agency.²⁰⁹ Some of the purposes of these guidelines include:

- Disseminating info about WMATA’s JD program to developers, the local jurisdictions, the local community, and the general public.
- Identifying the roles and responsibilities of the actors involved in the JD process and establishing procedures for the transit agency’s JD partners.
- Defining processes for evaluating and estimating JD project benefits.²¹⁰

The typical joint development deal is between WMATA and developers “on transit adjacent sites that [WMATA] owns and controls. On a project specific basis, WMATA offers preferred developers the development rights to develop retail, residential, and commercial buildings on sites adjacent to its subway stations (proposed and/or existing) in exchange for a portion of the proceeds from development.”²¹¹ Much of this joint development is for the purposes of meeting the transit agency’s transit oriented development (TOD) goals which increases ridership and is the main motivating factor for using DBLVC instruments like JD to fund and expand their transit investments.

Most of WMATA’s DBLVC projects in their JD program involve the conversion of surface parking lots into structures, freeing adjacent land for private residential, commercial, or

²⁰⁸ Ibid.

²⁰⁹ Washington Metropolitan Area Transit Authority, *WMATA Joint Development Policies and Guidelines*. 2013.

²¹⁰ Ibid., 3-4.

²¹¹ Olajide and Arcé, *Funding wisely: Unlocking urban transit*, 2.

office development.²¹² With Metrolinx's large amount of landholdings near stations (primarily parking lots), It is my opinion that some of these instruments could eventually be implemented to generate revenue to fund transit oriented investments. In addition to joint development, transit scholars Suzuki et al. (2015) explain that "WMATA has also raised property-related revenues by adapting four development-based LVC instruments: air rights sales, site leasing, long-term development agreements of WMATA-owned land on and around Metro stations, and connection payments from private developers on non-WMATA-owned sites."²¹³ Some of these DBLVC instruments are among the ones I recommend for transit agencies to undertake if they wish to enter into the practice of implementing LVC.

It is also my opinion that much of WMATA's DBLVC success comes from their close coordination with local jurisdictions and developers in the implementation of its JD program. As per their JD policies and guidelines, "WMATA requires its selected developers to work with local jurisdictions throughout the joint development process" because local jurisdictions have a say on planning, zoning and other land use related issues.²¹⁴ For instance, Arlington County's adoption of a corridor-wide General Land Use Plan (GLUP) allowed for the "flexibility to rezone [station] areas for higher densities than originally specified."²¹⁵ The early communication and coordination of transit projects by WMATA allowed for the County to rezone 11 percent of its land to encourage mixed-use and high density development around station areas.²¹⁶ In fact, it has been the case that WMATAs strong success and entrepreneurial appetite for JD has triggered County planners to continuously re-evaluate land uses and plans in and around their transit

²¹² Suzuki at al., *Financing Transit-Oriented Development*, 142.

²¹³ *Ibid.*, 141.

²¹⁴ Washington Metropolitan Area Transit Authority, *WMATA Joint Development*, 4.

²¹⁵ Suzuki at al., *Financing Transit-Oriented Development*, 143.

²¹⁶ *Ibid.*

stations.²¹⁷ Intergovernmental collaboration is certainly a strong suit of WMATAs JD practice. Transit agencies like Metrolinx should attempt to build upon their relations with local intergovernmental actors.

After many years of experience working on large scale JD deals, WMATAs guidelines and policies for JD clearly outline the role of each actor taking part in JD projects. These actors include the WMATA Board of Directors who approve a project, the WMATA JD General Manager and staff who ensure development and station access goals are met, the local jurisdictions who play an important role in granting transit-supportive zoning around WMATA JD sites and also work with consultants to identify sites with JD potential, developers who initiate JD proposals and the community who will provide input for a local JD project.²¹⁸ By outlining the entire RFP process, the real estate permit application process, and the goals for its JD projects, I believe that this clarity and coordination is another major reason for WMATA's DBLVC success.

It is also my opinion that in addition to reviewing WMATAs JD Policies and Guidelines, transit agencies should look to the early JD experiences of WMATA to understand how they could benefit from entering into the field of DBLVC. The first DBLVC agreement for WMATA was between the transit agency and a department store in 1969. At the site of their Metro Center Station, "WMATA was granted easements as well as ground and underground development rights at 50 percent of fair market value, while the [private department store owners] were allowed to connect its planned underground mezzanine directly to the Metro Centre Station."²¹⁹ The private department store owners realized the benefits of this partnership including increased

²¹⁷ Cervero et al., "Transit Joint Development," 60.

²¹⁸ Washington Metropolitan Area Transit Authority, *WMATA Joint Development*, 5-9.

²¹⁹ Cervero et al., "Transit Joint Development," 58.

pedestrian traffic and agreed to share the costs of constructing the mezzanine and tunnel below.²²⁰ A second JD project was undertaken by WMATA in 1975. This time “WMATA leased the development rights above its Farragut North Station in exchange for an annual \$250,000 rent payment, and a percentage of net operating income.”²²¹ As transit author Henry Cord (1981) described, the “use of air rights, adjacent excess areas and existing zoning with certain approved variances resulted in a \$14 million [dollar] office-retail complex with a gross floor area exceeding 200,000 square feet.”²²² A newer larger-scale example of WMATA’s JD success has been the White Flint – North Bethesda project. This was a 34 acre mixed-used development where WMATA received \$66 million USD in exchange for a 55-year lease of the site. The project generates 6,500 daily riders.²²³ These DBLVC projects demonstrate how WMATAs scale of JD has involved over the years. These examples also demonstrate how other transit agencies wishing to get involved in DBLVC can potentially follow a similar path of success.

²²⁰ Ibid.

²²¹ Ibid., 59.

²²² Cord, Henry W. "Washington transit program includes joint development." *Right of Way*, (June 1981): 49.

²²³ Southwest Michigan Planning Commission, *Lesson 10 Transit Oriented Development*. (Michigan, Benton Harbour) 14.

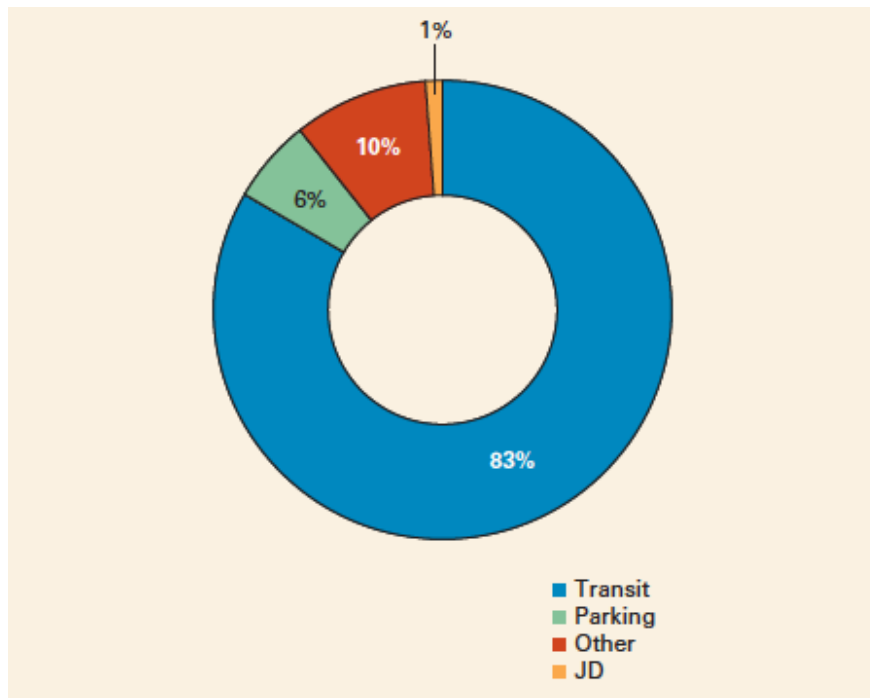


Figure 10 - WMATA's joint development program contribution to annual operating revenues FY 2004-12²²⁴

As the WMATA case study establishes, there can still be great financial benefits to the use of DBLVC. However, as I have mentioned previously, while DBLVC instruments like JD are useful, they are not an end all solution to fixing the financial struggles of transit agencies. Transit scholar Danielle Yu-chen Dai (2011) explains, “as of 2006, the WMATA reported average annual revenues of \$15 million” from their JD ventures.²²⁵ Despite contributing to only a trivial amount of a transit agency budget (see Figure 10), JD practices undertaken by WMATA have also led to an increase in passenger revenues from \$419.6 million USD in 2004 to \$752.6 million USD in 2012 by enhancing station areas and improving access to stations through

²²⁴ Suzuki et al., *Financing Transit-Oriented Development*, 142.

²²⁵ Danielle Yu - chen Dai, *Analyzing Private Investment in the Chicago Transit Authority: The Potential for Joint Development*, Transport Chicago. June 3, 2011. http://www.transportchicago.org/uploads/5/7/2/0/5720074/ddai_transport_chicago_paper.pdf (Accessed July 10, 2017) 16.

development of transit oriented investments.²²⁶ In addition, I strongly agree with Yu-chen Dai (2011) that “joint development [can contribute] to the modernization of poor transit infrastructure by improving [transit oriented investments like station] facilities.”²²⁷ Metrolinx and other transit agencies can look to the example of the WMATA JD program and take note on the potential success they can achieve if they dedicate more time and resources to the DBLVC cause.

Transit agencies like Metrolinx have acknowledged the DBLVC successes that transit agencies like WMATA have had. Although Metrolinx has had a willingness to engage in some form of DBLVC, there has not been much of an attempt to deliver a product. With the Eglinton Crosstown project, it was Metrolinx’s first attempt at DBLVC implementation. For my next section, I will engage in my own case study of Metrolinx’s DBLVC practice along the Eglinton Crosstown corridor and I will outline the challenges they faced.

²²⁶ Suzuki et al., *Financing Transit-Oriented Development*, 143.

²²⁷ Yu - chen Dai, *Analyzing Private Investment*, 16.

Section 3

Implementing Development-Based Land Value Capture in Toronto: Learning from The Eglinton Crosstown LRT

In section 3, I provide an overview of the Eglinton Crosstown Light Rail Transit project (ECLRT) and Metrolinx's request for proposal (RFP) to sell the development rights for four properties at ECLRT station entrances. The ECLRT was the first transit project that sparked my interest in understanding land value capture. Through my analysis of secondary sources and my interviews with current and former transit practitioners from Metrolinx, I outline the challenges and barriers that the transit agency faced when attempting to implement DBLVC at the selected ECLRT station properties. Among the challenges for the ECLRT DBLVC implementation were planning, political, and intra-organizational barriers.

The main purpose of this section is for transit planners in Toronto to use the ECLRT as a learning experience for implementing DBLVC instruments. In conjunction with the previous chapters of this paper where I outlined the enabling factors for DBLVC implementation, planners should be able to learn from the DBLVC shortcomings of the ECLRT project and understand what they can improve upon in the future. My analysis of the RFP for ECLRT station properties merely provides an introduction to the DBLVC potential of the project. When the ECLRT is completed, the DBLVC potential for the corridor should be revisited.

Overall, the ECLRT case study emphasizes the main point of my major paper. DBLVC instruments can be an excellent tool for funding transit oriented investments. However, the implementation of DBLVC can be difficult in practice. I am of the opinion that Metrolinx should not be discouraged by the fact that their RFP to sell development rights at selected ECLRT

stations failed. Rather, the organization and its planners should use this project as a learning opportunity for when they choose to implement DBLVC for their future transit projects.

8.0 Planning for the ECLRT

In 2008 the Metrolinx regional transportation plan (RTP) entitled *The Big Move* (2008) called for a 25 year, \$50 billion plan for integrated transit in the GTHA.²²⁸ The heavily politicized *Transit City LRT Plan* adopted by the City of Toronto and co- developed by the former TTC chair Adam Giambroni and Mayor David Miller in March of 2007 was approved by Metrolinx as a part of their RTP (see discussion in Section 1). The goal of this plan was to introduce transit to areas in the City that needed it the most. LRT technology was chosen for *Transit City* because city planners claimed that it had the capability of meeting increased ridership demands at a much lower cost than subways.²²⁹

²²⁸ Metrolinx, "What is the Crosstown?," *The Crosstown*. <http://www.thecrosstown.ca/the-project/> (accessed June 25, 2017).

²²⁹ Toronto, City of. *Transit City Light Rail Plan*, 3.



Figure 11 - The ECLRT Project Corridor²³⁰

²³⁰ Metrolinx, "What is the Crosstown?"

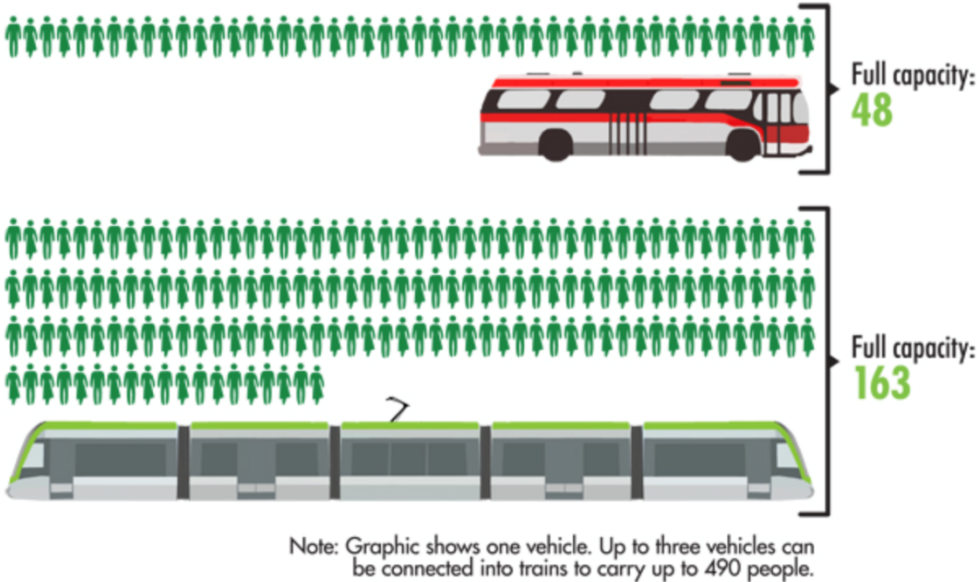


Figure 12 - Illustration of ECLRT capacity compared to bus capacity²³¹

One of the first wave projects of the RTP was the Eglinton Crosstown Light Rail Transit (ECLRT) project. In 2010, the ECLRT was estimated as being a \$5.3 billion investment toward better local transit in the City of Toronto. The ECLRT project “is a light rail transit (LRT) line that will run across Eglinton Avenue between Mount Dennis (Weston Road) and Kennedy Station. This 19-kilometre corridor will include a 10-kilometre underground portion, between Keele Street and Laird Drive” (see Figure 11).²³² The project “will have up to 25 stations and stops. It will link to 54 bus routes, three subway stations and various GO Transit lines.”²³³ In terms of ridership, Metrolinx is expecting the ECLRT to carry 15,000 passengers per hour, per direction (see Figure 12).²³⁴ The ECLRT was planned, is being built by, and is owned by Metrolinx while the TTC will assume the responsibility of operating the line. Construction is

²³¹ Ibid.
²³² Ibid.
²³³ Ibid.
²³⁴ Ibid.

currently underway with service expected to commence in 2021. The overall key objectives of the ECLRT project were outlined by Infrastructure Ontario (2016) as:

- Increased urban transit capacity
- Design excellence
- Managing congestion
- A maintained asset for the long-term
- Seamless customer experience
- Delivery on time and on budget
- Minimized disruption during construction
- Public ownership²³⁵

The ECLRT corridor is located along Eglinton Avenue. This avenue is described as “one of the city’s traditional main streets [that] provides a focus for local neighbourhoods, employment and shopping, and... links some of the City’s major natural features.”²³⁶ The introduction of the LRT line will add another focal east-west route for transit in the City. The vision of the *Eglinton Connects* plan attempts to find a nexus between transit and land use. The ECLRT has been acknowledged by city planners as being able to support development of a predominantly mixed-use and mid-rise character with taller buildings in closer proximity to LRT stations (see Figure 13).²³⁷ The *Eglinton Connects* implementation strategies are based on the three Visions for the project which include the concepts of travelling, greening and building Eglinton (see Figure 14). The objective of this case study, which included my secondary research of planning materials, articles and primary interviews with transit practitioners from Metrolinx, was to determine if the ECLRT and the City’s vision for Eglinton Avenue could support Metrolinx’s attempt to engage in DBLVC.

²³⁵ Infrastructure Ontario. *Value for Money Assessment Eglinton Crosstown Light Rail Transit*. Toronto, ON. (February 2016): 5.

²³⁶ Toronto, City of. *Eglinton Connects Volume 2: Recommendations and Implementation Strategies*. Toronto, On. (April 2014): 24.

²³⁷ *Ibid.*, 30.

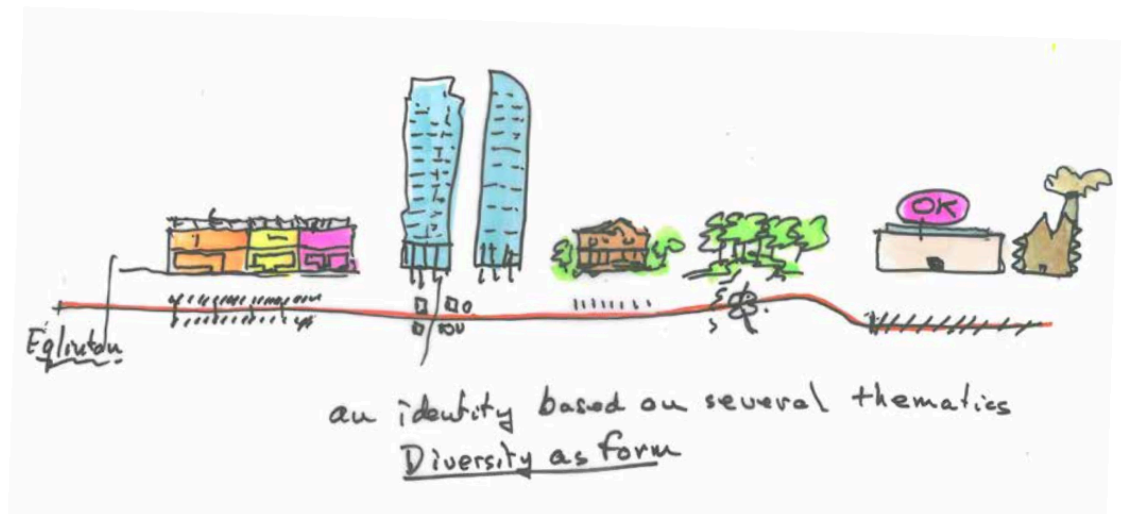


Figure 13 - Eglinton Avenue will show a diversity of urban form²³⁸

²³⁸Ibid., 115.

The EGLINTONconnects Plan

VISION

Eglinton will become Toronto's central east-west avenue – a green, beautiful linear space that supports residential living, employment, retail and public uses in a setting of community vibrancy.

Its design will balance all forms of mobility and connect neighbourhoods and natural valley systems to the larger city and the region.

TRAVELLING EGLINTON

- #1 Create a Complete Street
- #2 Provide Wide Sidewalks
- #3 Build Protected Cycling Lanes
- #4 Reallocate Road Space to Meet Future Needs and Mobility Mix
- #5 Maintain Parking Supply
- #6 Extend Network of Rear Lanes
- #7 Implement Streetscape Typologies

GREENING EGLINTON

- #8 Implement Three Primary Greening Typologies
- #9 Create a Network of Green & Open Spaces
- #10 Grow Great Trees
- #11 Relocate Hydro Below-Grade
- #12 Connect Eglinton to Trails & Ravine System
- #13 Green Transit Infrastructure
- #14 Plan a Public Art Program

BUILDING EGLINTON

- #15 Encourage Mid-Rise Buildings on Eglinton Through As-of-Right Permissions
- #16 Maximize Opportunities for Mid-Rise Buildings on Shallow Lots
- #17 Integrate Crosstown Station Sites with New Development
- #18 Plan for Intensification at Focus Areas & Mobility Hubs
- #19 Expand Community Services Facilities, including Green & Open Spaces in Tandem with New Development
- #20 Encourage Street-Related Retail
- #21 Implement Additional Performance Standards to Support Local Character Areas & Heritage

IMPLEMENTATION STRATEGIES



Figure 14 - The Strategic Vision for Eglinton Avenue²³⁹

²³⁹Ibid., 31.

In the next chapter, I will outline how Metrolinx is involved in DBLVC. This will include a review of studies that Metrolinx conducted or commissioned to determine if they should engage in DBLVC financial instruments both in a general capacity and for the ECLRT project. In later chapters, I will review the request for proposal that Metrolinx sent out to developers for the ECLRT station properties. This will help planners to understand what type of DBLVC that Metrolinx was trying to engage in and the scope of their RFP.

9.0 Considering the use of DBLVC in Funding Transit Oriented Investments

In this chapter, I outline Metrolinx's willingness to get involved in the implementation of DBLVC by discussing the commissioned studies and strategic policies of the transit organization. I layout the findings of general studies, strategies and policies on potential LVC implementation, and those that are more ECLRT specific. I will discuss each, in turn.

Big Move Implementation Economics: Revenue Tool Profiles (2013)

The Revenue Tool Profiles report was prepared by consultant AECOM for Metrolinx. As the consultant outlines, “the purpose of [the] document [was] to provide readers with detailed information about each of the revenue tools that have been used in other jurisdictions to support the development of transit infrastructure.”²⁴⁰ The consultant included an analysis of land value capture implementation. The intention of this report was to provide evaluation of potential revenue tool options for the Metrolinx Investment Strategy.²⁴¹ The evaluation of each tool included an analysis on revenue potential, incremental costs, impact on travel behaviour and

²⁴⁰ KPMG, and AECOM. *Big Move Implementation Economics: Revenue Tool Profiles*. Toronto, ON, no. 60236189, (March 2013): 1.

²⁴¹ Ibid.

transportation network performance, scheme design, technical implementation considerations, governance considerations, equity and distributional impacts, and overall efficiency impact.²⁴²

DBLVC was considered in the report as being able to capture additional revenues in two ways. The first was inducing land development on land currently owned by Metrolinx along transportation corridors as a result of joint ventures. The second option discussed was “through a specific delivery agreement with local municipalities in developing privately owned land along key transit corridors. By doing this, Metrolinx can share in the revenues realized by the developer through the sale of new units.”²⁴³

In terms of revenue potential, the consultant mentioned that uplift can vary based on the type of transit investment, the size, its location and type of development located in the vicinity. It was not expected to be a significant revenue generator.²⁴⁴ In particular, they mentioned that “revenues are not sustainable over the long-term as there is a limit to the amount of developable land in the region, particularly along transit corridors.”²⁴⁵ The typical uplift in property values that might benefit a developer in the GTHA as a result of locating a rail station within a half mile of a potential development was outlined as either a one-time yield “between \$78/SF for a downtown office development through to \$1.5/SF for a suburban real estate complex” (see Figure 15).²⁴⁶

²⁴² Ibid., 2-3.

²⁴³ Ibid., 145.

²⁴⁴ Ibid., 146.

²⁴⁵ Ibid.

²⁴⁶ Ibid., 146-7.

Public Value Capture Illustrations for the GTHA (\$ / SF)				
	Downtown office	Mid-market hotel	Suburban office	Suburban retail
Land value without rail service	382	7	10	11
Land value with rail service	695	108	32	17
Increase in supportable land value	82%	1443%	220%	55%
Public value capture (based on 25% capture rate)	78.25	25.25	5.5	1.5

Source: AECOM analysis "Residual Land Value and Development Value Impact of Rail Investment" 22 March 2012

Figure 15 - Value Capture Illustrations for the GTHA for developers²⁴⁷

One barrier that the report outlined was the incremental costs of administrative terms associated with implementing LVC. Additionally, there would be increased legal costs “associated with developing the contracts that Metrolinx or the regional transit authorities will be entering into with the private developers and investors.”²⁴⁸ In terms of the impact on transportation network performance, the consultant report outlined that “If the proportion of land value appreciation attributed to transit initiatives is too high, it could lead to reduced real estate development in the region as developers may not view these types of developments as being profitable.”²⁴⁹ However, “If LVC can be implemented successfully, it could lead to more intensive land uses by making it less profitable for owners to withhold land for speculative purposes.”²⁵⁰

In terms of technical consideration, the report was quick to mention that “zoning changes may be required to ensure that the property in question can realize its full incremental value.”²⁵¹ This could act as a large barrier for the transit agency in working with developers if they cannot achieve a sufficient financial return on their JD investment. When implementing this tool, it

²⁴⁷ Ibid., 147.

²⁴⁸ Ibid.

²⁴⁹ Ibid.

²⁵⁰ Ibid.

²⁵¹ Ibid., 148.

would most likely require Metrolinx to establish upfront procedures and mechanisms for the transit agency to engage with developers and owners to engage in revenue collection.

Overall, Metrolinx's main takeaways from this report were:

- “Land value capture is a modest revenue tool which should be used on a project-by-project basis to generate funding.
- If structured properly, LVC effectively funds infrastructure initiatives by drawing on the land value uplift created by the project.
- The initial implementation [of LVC] may be costly in terms of time and administrative effort, because each LVC tool needs to be adapted to the circumstances of the particular property in question – otherwise, it is not possible to limit the LVC to the extraction of the designated windfall gain.”²⁵²

Metrolinx Investment Strategy (2013)

Metrolinx took what they learned from the *Big Move Implementation Economics: Revenue Tool Profiles* report (2013) and included it in forming their Investment Strategy. The organization identified that they could use land value capture to tie land use and transportation closely together at the local level.²⁵³ In this strategy, the organization acknowledged that their next wave of transit projects would have the ability to increase the value of land near their proposed corridors and stations. Metrolinx would attempt to undertake DBLVC through property development or joint ventures based on a sharing of costs and/or revenues. The organization outlined that:

“LVC is a tool worth pursuing to unlock private sector financial contributions, enhance collaboration and information sharing between the development community and transportation providers to the benefits of all, and reduce the cost of developing public infrastructure and achieve smart growth objectives, recognizing the results will vary on a site-by-site basis. Land value capture strategies also provide incentives for the landowners in the vicinity to move ahead with their development plans, thereby increasing the speed at which the full value of the rapid transit investment is realized in commercial and residential development. It is recommended that Metrolinx work with municipalities and the land development industry to develop a

²⁵² Ibid., 150-1.

²⁵³ Metrolinx, *Investment Strategy*, 49.

land value capture strategy for the Next Wave of rapid transit projects, which also considers existing and under-construction rapid transit assets, to ensure an appropriate private-sector contribution towards the cost of stations and other infrastructure. Metrolinx will work to achieve greater land value capture by strategically planning and advancing rapid transit projects.”²⁵⁴

The *Metrolinx Investment Strategy* (2013) demonstrates that DBLVC implementation is on Metrolinx’s radar.

2017-2022 Metrolinx Five Year Strategy (2017)

The Five Year Strategy (FYS) provides Metrolinx with a “roadmap for 2017 to 2022, bridging the RTP and Metrolinx annual business plans. It [shapes their decision] making, influencing [their] priority projects, as well as how [they] go about delivering them.”²⁵⁵ The FYS outlines the importance of DBLVC instruments such as joint development and seeking private partners for transit-oriented development on Metrolinx properties.²⁵⁶ In terms of joint development deals, I believe that Metrolinx does well by announcing their willingness to establish partnerships with the private sector in leasing/selling properties at station locations for cafés and retail stores at station locations.²⁵⁷ These are the necessary small steps when first entering into DBLVC. The groundwork and results must follow this organizational willingness to engage in joint development.

Eglinton Crosstown Rapid Transit Benefits Case (2012)

An analysis of LVC potential was undertaken as a part of the evaluation of four options for ECLRT station alignment in 2012. This analysis was based on the findings of the studies above and Metrolinx’s willingness to engage in LVC as described in their investment strategy.

²⁵⁴ Metrolinx, *Investment Strategy*, 49-50.

²⁵⁵ Metrolinx. *2017-2022 Metrolinx Five-Year Strategy*. Toronto, ON (2017): 6.

²⁵⁶ *Ibid.*, 23.

²⁵⁷ *Ibid.*, 20.

The fact that an analysis of land value uplift estimates was included in the benefits case demonstrated a real willingness for the transit agency to engage in joint development and sale of development rights at station properties. (see Figure16).

TABLE 6.3 LAND VALUE UPLIFT ESTIMATES

Option	Land Value Uplift (\$m)	
	Low	High
Option 1	\$780	\$1,800
Option 2	\$780	\$1,800
Option 3	\$8,30	\$2,060
Option 4	\$770	\$1,720

Figure 16 - Land Value Capture estimates for each ECLRT layout option demonstrate some form of uplift²⁵⁸

Based on these studies and strategies, it is my opinion that Metrolinx does acknowledge the potential use of DBLVC instruments and their benefits at a strategic level. However, the transit agency fails in the delivery step. The ECLRT RFP that was issued by Metrolinx to sell development rights at station properties was an attempt at changing this. The next chapter will describe what the RFP entailed. Later chapters will outline the challenges and barriers that the transit agency faced in engaging in DBLVC for the ECLRT.

10.0 Issuing the RFP – Selling Development Rights at Station Properties

I have previously outlined that Metrolinx has adopted a willingness to engage in the practice of DBLVC. The ECLRT requests for proposals (RFP) were hailed by Metrolinx as the first examples of trying to engage in LVC in the GTHA.²⁵⁹ This project would allow the transit

²⁵⁸ Steer Davies Gleave, *Eglinton Crosstown Benefits-Case*, 32.

²⁵⁹ Tess Kalinowski, "Metrolinx to sell development rights at Eglinton Crosstown LRT stops," *The Toronto Star*. February 25, 2015

agency to engage in a development opportunity to maximize non-fare revenue potential at transit properties and subsequently fund transit oriented investments.²⁶⁰

Metrolinx issued their requests for proposals to build on and above four station properties on Friday, February 27th, 2015. These RFPs were issued to attract developers who wished to develop mix-used transit-integrated projects at and around any of the four selected station properties. The four strategic properties were already either acquired or would be acquired by “Metrolinx in order to locate above and below-ground transit infrastructure required to facilitate the design and construction of the new [ECLRT] system” (see Figures 17, 18 and 19).²⁶¹ These properties were located along Eglinton Avenue in the City of Toronto at Weston Road (1 Hollis Street), two properties at Keele Street (2660, 2615 Eglinton Avenue) for primary and secondary station entrances, and another property at the northeast corner of Bathurst Street (842 Eglinton Avenue West). The RFP described the neighbourhoods where the station properties were located as such:

“The Mt. Dennis neighbourhood in the old town of Weston, and Keele–Eglinton, part of the “Eglinton Hill BIA”, are quite similar. Both are neighbourhoods characterized by diverse ethnicity. Although some high-rise residential buildings are present, the majority of housing comprises affordable single-family homes on narrow lots many of 1920’s wood construction. Retail storefronts provide a variety of restaurants and personal grooming services although the largest and most notable retailers are Caplan’s Appliances and Dollarama. There are several storefront churches as well as traditional churches giving evidence to the vast number of religions and cultures in the area.

https://www.thestar.com/news/city_hall/2015/02/25/metrolinx-to-sell-development-rights-at-eglinton-crosstown-lrt-stops.html (accessed July 1, 2017).

²⁶⁰Infrastructure Ontario, *14-442P - Eglinton Crosstown Light Rail Transit Oriented Development Project*, February 15, 2017.

²⁶¹Metrolinx, *Development Opportunity: Eglinton Crosstown LRT Entrances*. Avison Young (2017): 2.

Bathurst and Eglinton is an upscale neighbourhood serviced by retail establishments located along Eglinton Avenue primarily west of Bathurst Street. These include popular restaurants, convenience stores, banks and pharmacies. East of Bathurst, Eglinton transitions to a residential strip with mid-rise residential brick buildings built in the 50's and 60's. Behind the modest facades of these buildings is the neighbourhood of Forest Hill, one of the most prestigious enclaves in Toronto.²⁶²

The four properties in question were chosen because others were not in compliance with zoning or were not financially viable to undertake increased development.²⁶³

The RFP also outlined the following details for potential development partners:

“A developer who participates in the RFP is referred to in the RFP as a “Proponent”. A Proponent who is selected pursuant to this RFP to enter into negotiations with Metrolinx with respect to one or more Station Sites may, if negotiations are successful, enter into a Memorandum of Understanding (“MOU”) with Metrolinx, pursuant to which the “Successful Proponent” will be provided a 6-month due diligence period (subject to extension by Metrolinx in accordance with the MOU) to assess the development opportunity and prepare a concept design for the applicable Station Site in accordance with the MOU. A Proponent will be chosen for each of the four sites individually, although a single Proponent can be selected for more than one site. The Successful Proponent may wish to use the due diligence period to enhance the development by assembling the adjoining properties. Subject to and in accordance with the terms and conditions of the MOU, the Successful Proponent shall enter into a purchase agreement with Metrolinx to acquire title to that portion of the Station Site on which the proposed development will be constructed.”²⁶⁴

²⁶² Metrolinx, *Development Opportunity*. 4.

²⁶³ "Metrolinx Interview 2." Interview by author. Toronto, June 28, 2017.

²⁶⁴ Metrolinx, *Development Opportunity*. 2.

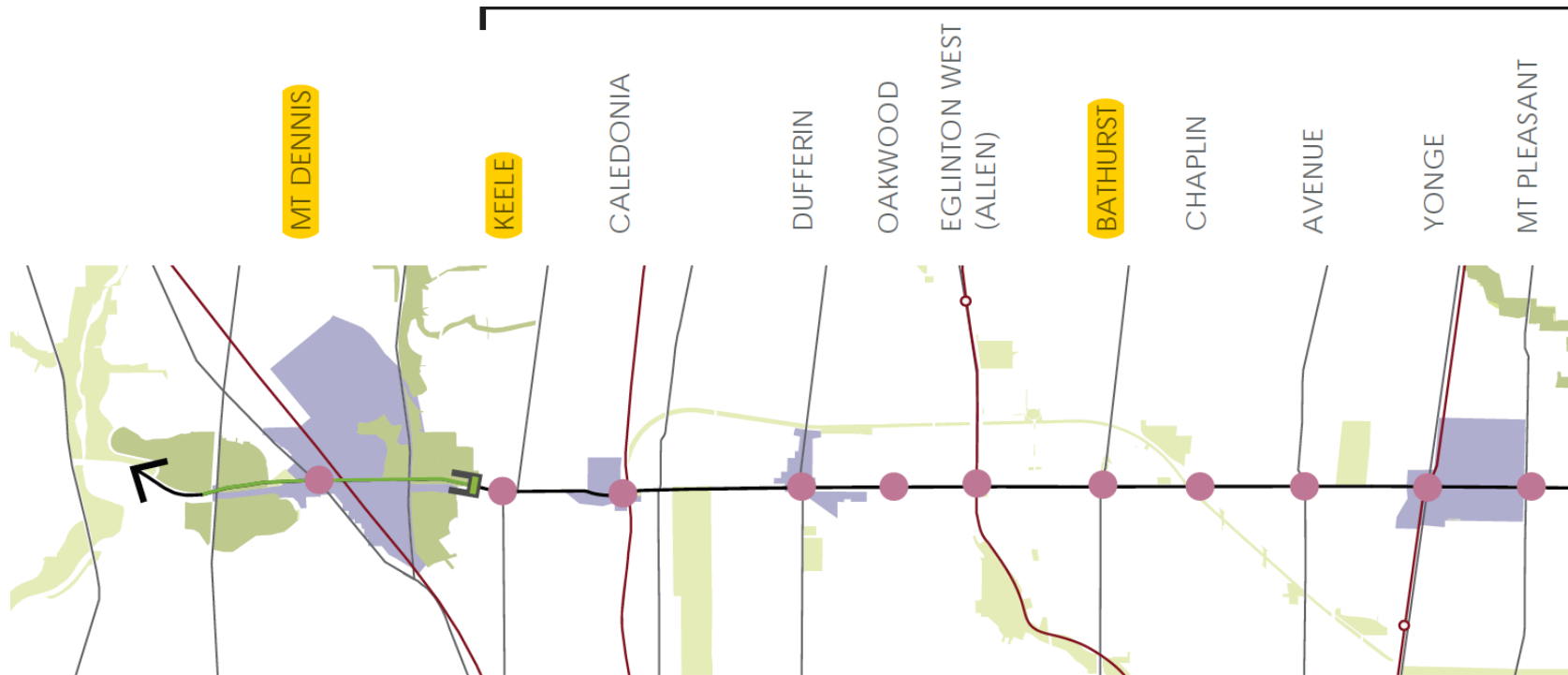


Figure 17 - Western portion of the ECLRT where the RFP station properties were located²⁶⁵

²⁶⁵ Toronto, City of. *Eglinton Connects: Executive Summary*, March 2014 (2), Toronto, ON: City of Toronto.



Figure 18 - Locating the RFP station properties on a map²⁶⁶

²⁶⁶Metrolinx, *Development Opportunity. 2.*

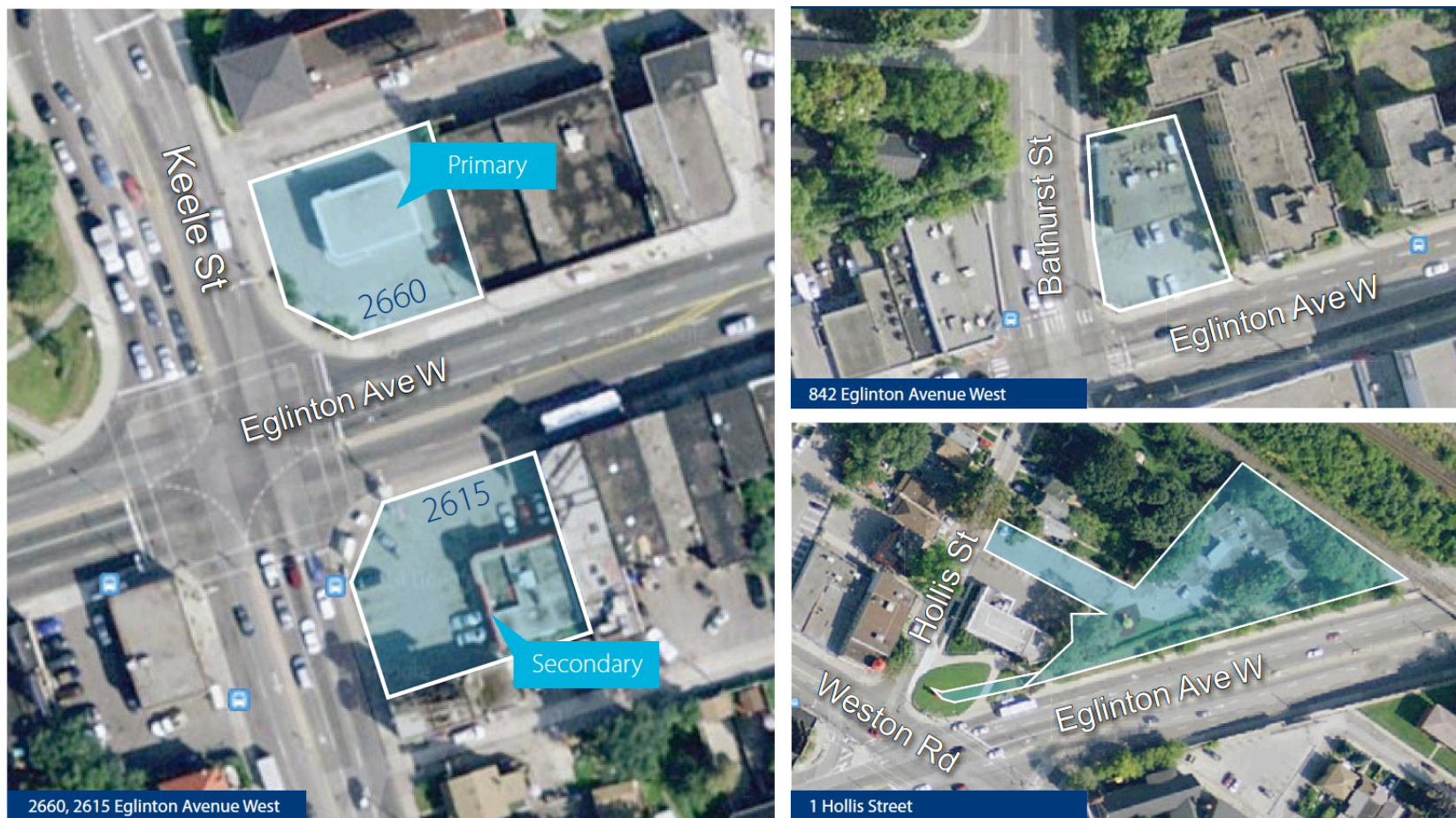


Figure 19 - Close up aerial view of the station properties proposed for development²⁶⁷

²⁶⁷ Ibid., 1.

In terms scheduling for the DBLVC project, the RFP outlined the following timeline:

1. The RFP is expected to be issued on or about February 25, 2015;
2. A Proponents Meeting is estimated to take place in early March 2015;
3. The submission deadline for Proponents to submit their Proposals in accordance with the RFP is estimated to be late April 2015;
4. A successful Proponent is expected to be identified for each Station Site in May 2015;
5. Execution by each Successful Proponent of a MOU for each applicable Station Site is estimated to take place in mid-June 2015
6. The due diligence period and development of a concept design in accordance with the MOU for each Station Site is estimated to take place from June 2014 to January 2016; and
7. The execution of the purchase agreement in accordance with the terms and conditions of the MOU is estimated to take place in early 2016.²⁶⁸

Real estate reporter Tess Kalinowski (2015) reported that Metrolinx expected “to earn up to \$76 million selling rights to build above four LRT stations it will construct on the new Eglinton Crosstown line.”²⁶⁹ In particular, the transit agency expected to “earn between \$14 million and \$19 million per station from developers who build ‘mixed residential and retail spaces,’ which in turn increase ridership.”²⁷⁰ This project was to be the first step into a vision of selling development rights for future locations on the 25-station ECLRT line.

Another positive sign of the RFP was that many municipal planners including City of Toronto Chief Planner Jennifer Keesmaat supported the project by indicating that single-storey stations were not appropriate for the context of Eglinton. In particular, she was quoted as saying that “in an urban context, station entrances should be integrated into buildings... this is a critical approach to linking and integrating land-use planning with transit infrastructure investments.”²⁷¹ Even with all of this support, the RFP to engage in DBLVC did not turn out as planned. The last

²⁶⁸ Ibid., 4.

²⁶⁹ Kalinowski, "Metrolinx to sell development rights".

²⁷⁰ Ibid.

²⁷¹ Ibid.

chapter of this case study will outline the barriers and challenges to DBLVC implementation for the ECLRT project sites identified in the RFP and for DBLVC projects in general.

11.0 Barriers and Challenges to ECLRT DBLVC Implementation

Despite all of the hype and anticipation surrounding the RFP for these potential DBLVC station projects, nothing came to fruition. After the first stage of the procurement process, Metrolinx only received one submission to develop a mix-used transit-integrated project at the Mt Dennis/Weston Road (1 Hollis Street) property. After the six-month due diligence period, the proposal with the developer fell through for a number of reasons.²⁷² This section of ECLRT case study will identify the various challenges and barriers that Metrolinx faced by attempting to engage in DBLVC both in general and at the four RFP station properties. The purpose of this analysis is so planners at Metrolinx can have a record of the challenges and barriers they have faced in DBLVC implementation. This analysis will provide the organization with a starting point so that they can improve on DBLVC in the future.

11.1 Planning Challenges

The first issue with the RFP that Metrolinx planners outlined in our interviews was the planning challenges they faced. I should note that Metrolinx is not in the primary business of real estate development. In fact, provincial legislation prohibits them from acquiring land for non-transit development purposes and participating in a project as a primary developer. By partnering with the private sector in either joint development deals or by selling the development rights for station properties, they would be able to unlock their land value potential this way.²⁷³

²⁷² "Metrolinx Interview 1." Interview by author. Toronto, June 28, 2017.

²⁷³ "Metrolinx Interview 2." Interview by author. Toronto, June 28, 2017.

The properties identified in the RFP gave Metrolinx the opportunity to sell development rights to private builders who would increase densities and build mixed-use developments that were integrated with stations. However, municipal plans and zoning codes for the four RFP station sites deterred developers from entering into the DBLVC deals and prevented the transit agency from unlocking their full land value potential. As one of the Metrolinx planners explained to me,

“the existing issue [was] that there [was not] much financial opportunity on a lot of the sites since zoning was low.”²⁷⁴

Zoning was a primary concern for developers who would not get enough of a financial return on their investment. Subsequently, the lack of financial return was also a major concern for the transit agency who would potentially receive little to no financial benefits from a revenue-sharing arrangement with a potential development partner.

The challenge began with the general planning framework that the ECLRT project fit within. This included the city wide (*Official Plan, Avenues and Mid-Rise Guidelines*) and the area specific (*Eglinton Connects*) context (see Figure 20). In terms of this context, *Eglinton Connects* (2014) is where the main barrier rested. *Eglinton Connects* is the comprehensive corridor wide planning study undertaken by the City of Toronto for Eglinton Avenue and the ECLRT that was approved by City Council in May, 2014.²⁷⁵ A consolidated version of the *Eglinton Connects* study states that:

“[*Eglinton Connects*] proposes a holistic Vision for the Eglinton Avenue corridor, a detailed public realm, streetscape, built form and open space plan, and an accompanying implementation plan. It represents the next generation of ‘Avenue

²⁷⁴ Ibid.

²⁷⁵ Toronto, City of. *Eglinton Connects: Six Page Explanation*, 2014 (1), Toronto, ON: City of Toronto.

Study' for the City; one that considers all elements of urban development together to create a sustainable, diverse and accessible future."²⁷⁶

²⁷⁶ Ibid., 1.



Framework

eglington@toronto.ca www.toronto.ca/eglington

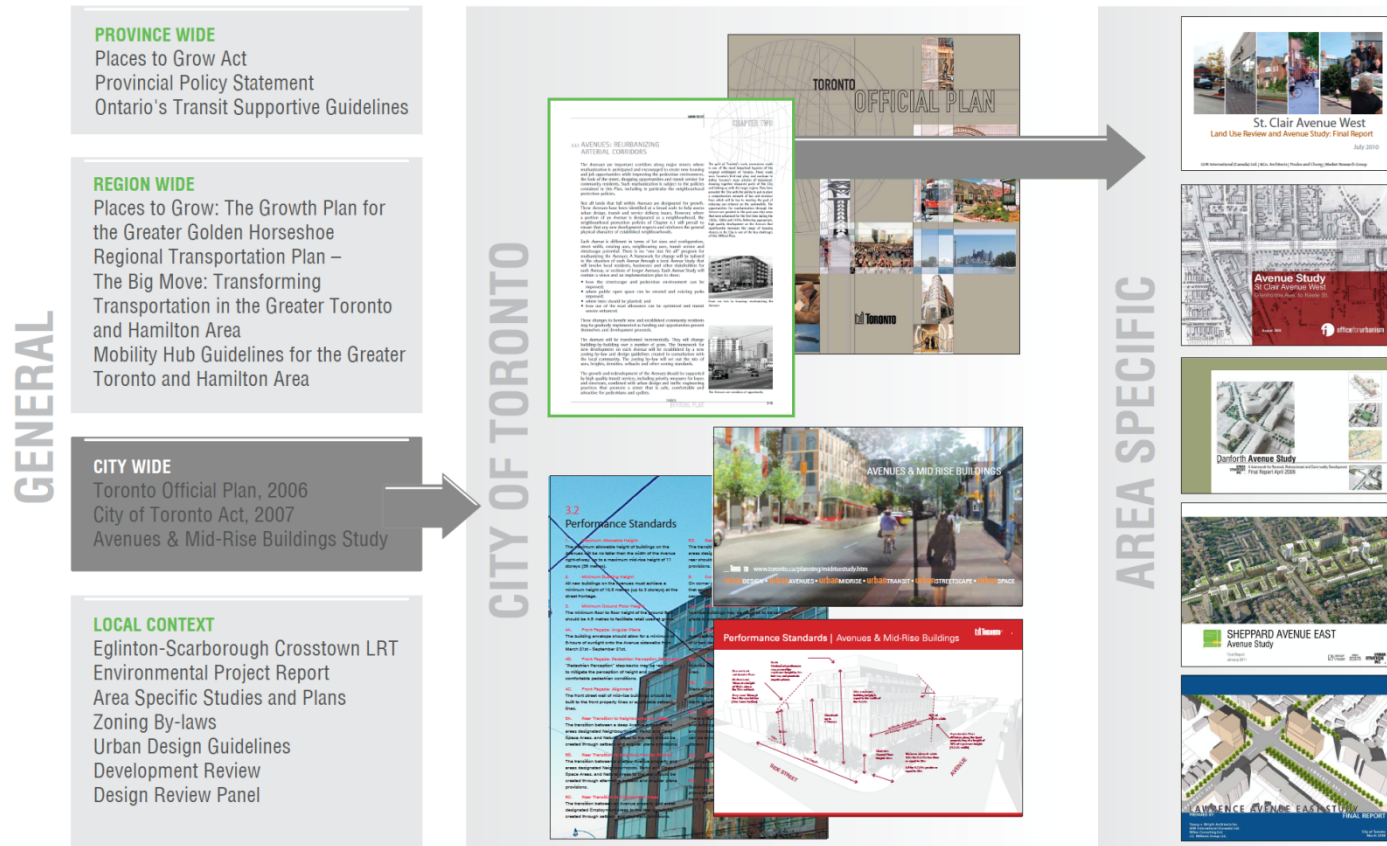


Figure 20 - The ECLRT Planning Framework²⁷⁷

²⁷⁷ Toronto, City of. *Eglinton Crosstown: Policy Framework, 2014*, Toronto, ON: City of Toronto.

The study area for the ECLRT and Eglinton Avenue included 34 kilometers of building frontage on Eglinton Avenue and crossing through 12 wards. In terms of implementing the plan, “updates to the Official Plan and Zoning By-Law... were adopted by City Council in the summer of 2014” to ensure the goals and vision of this plan for Eglinton Avenue were met.²⁷⁸ In conjunction with the City’s Avenues and Mid-Rise Buildings Guidelines, it was recommended by planners to the public that “mid-rise buildings (4-11 storeys) [were only considered] appropriate along the portions of Eglinton that [were] identified as an Avenue in the Official Plan.”²⁷⁹



Figure 21 - Zoning for mid-rise buildings was encouraged along Eglinton Avenue²⁸⁰

When analyzing the permitted height and density at the four RFP station properties, the Metrolinx planners that I interviewed stressed that the current zoning and vision for Eglinton Avenue would not allow for high-rise development in most cases. The zoning provisions would not allow developers or the transit agency to receive a worthwhile return on their financial investments at some station sites and would therefore spoil the DBLVC potential. The Metrolinx planners also mentioned that improved Eglinton Connects Zoning (By-law 1030-2014) did not

²⁷⁸ Toronto, City of. *Eglinton Connects: Six Page Explanation*, 4.

²⁷⁹ Toronto, City of. *Eglinton Connects: Executive Summary*, 5.

²⁸⁰ *Ibid.*, 10.

increase the height and density enough to meet the financial goals of a development proforma for high-rise, transit supportive, and station adjacent development (see Figure 22). In particular, “the Weston Road site can take high-rises, while eight-storey buildings are the tallest permitted by the city on the other three”.²⁸¹ One of the Metrolinx planners that I interviewed provided an example of the best case scenario for the transit agency if one of the RFPs advanced through the first stage of procurement:

“[The transit agency] could look at the profit and it would [for example] be \$8 million and the costs of the station would be \$50, \$60, \$70 million dollars and the cut wasn’t going all to [the transit agency]. In the scale of things, of these multi-million dollar projects, [DBLVC] wasn’t going to generate a lot of revenue here.”²⁸²

It was also mentioned by the Metrolinx planners whom I interviewed that, “midrise [was] the standard height that was set along most of Eglinton Avenue because through the public consultation process, the majority of the public expressed [their satisfaction for this].”²⁸³ On the other hand, “developers always want to maximize their profit. Wherever density is possible they have a better chance of making money. As far as the [City] planners are concerned, they just want to listen to the public. They do not want to get a lot of resistance from the public”. This demonstrated that the *Eglinton Connects* plan and City zoning set a vision and guideline for midrise development along the Avenue that could not financially support the potential for DBLVC implementation at the four RFP station sites.

²⁸¹ Stephen Wickens, "Toronto transit agency Metrolinx to take ‘modest first step’ into real estate," *The Globe and Mail*. February 25, 2015, <https://www.theglobeandmail.com/news/toronto/toronto-transit-agency-metrolinx-to-take-modest-first-step-into-real-estate/article23194119/> (accessed July 1, 2017).

²⁸² "Metrolinx Interview 2." Interview by author. Toronto, June 28, 2017.

²⁸³ "Metrolinx Interview 2." Interview by author. Toronto, June 28, 2017.

Municipal Address	1 Hollis Street	2660 Eglinton Avenue West	2615 Eglinton Avenue West	842 Eglinton Avenue West
Site Area	35,736 sf	9,085 sf	10,086 sf	9,311 sf
Estimated Transit Building Footprint & Minimum Height	16,400 sf (1,524 sm) 7.5m Height	6,050 sf (562sm) 10.5m height	1,340 sf (124sm) 4.5m Height	6,000 sf (557 sm) 10.5m height
Current Status	Day Care Centre	Vacant	Short-term lease	Short-term lease
Adopted City-wide Zoning (By-law 569-2013)	CR - Commercial Residential 2.5x max FSI Max height of 24m or 8 storeys	CR - Commercial Residential 2.5x max FSI Max height of 24m or 8 storeys	CR - Commercial Residential 2.5x max FSI Max height of 24m or 8 storeys	New By-law 569-2013 does not apply
"Eglinton Connects" Zoning (By-law 1030-2014) (Appealed)	Part of Mt. Dennis Mobility Hub - not part of EC zoning by-law. Further study required given "Special Study Station Site" designation. EC study identifies Mt. Dennis as area where taller buildings may be appropriate.	CR - Commercial Residential Performance Parameters Max height of 25.5m	CR - Commercial Residential Performance Parameters Max height of 25.5m	"Special Study Station Site" As such, site may be suitable for higher density and height subject to setbacks, angular plains, etc.
Proposed Transit Infrastructure	Main Entrance Ventilation structures, elevators, escalators, & stairs. Pedestrian connection below adjacent tracks to GO station and Union Pearson Express platform.	Main Entrance Ventilation structures, elevators, escalators, & stairs.	Secondary Entrance Stairs Only	Main Entrance Ventilation structures, elevators, escalators, & stairs.

Figure 22 – An Overview of the four station sites including zoning, site area and proposed transit infrastructure²⁸⁴

²⁸⁴ Metrolinx, *Development Opportunity*, 3.

The RFP to engage in DBLVC practices at the four station properties also failed because City planners did not put in the groundwork to identify what might be appropriate as a “taller building” for some of the RFP station sites with DBLVC potential such as 1 Hollis Street or 842 Eglinton Avenue West.²⁸⁵ As one of the planners explained:

“The city conducted a planning exercise [for densities along Eglinton Avenue] but in their approach they took the easy route rather than the hard one. So for three-storey buildings they said maybe you can now go to five, but what tended to happen if there was a corner site or potential station site, well that should be investigated through further studies. So [City planners] didn’t advance planning on any sites that would actually be helpful for [Metrolinx and their RFPs] in terms of getting additional permissions on them. This includes those big sites that had development opportunities.”

Many locations along Eglinton Avenue received as-of-right permissions which sped up the development application process for mid-rise development.²⁸⁶ For developers wishing to submit a proposal for denser development at some of the RFP station locations, they would be required to engage in additional due diligence. This due diligence would determine if the height and density permitted by City planners on these projected “taller” sites would allow for a reasonable financial return that could justify the execution of a purchase agreement with the transit agency. This added an amount of risk to the project that some developers would have wanted to avoid.

One Metrolinx planner that I interviewed also wondered whether creating a midrise guideline for the entire Avenue was detrimental to the RFPs success and the implementation of potential DBLVC for the ECLRT. One of the planners that I interviewed posed an interesting question for the transit agency and municipality to consider in the future:

“What I would wonder is that by [conducting] a recent planning exercise [like *Eglinton Connects*] do you make it harder for the developer to make their case for higher densities because it has recently been reviewed and found to be [midrise]?”

²⁸⁵ Ibid.

²⁸⁶ Toronto, City of. *Eglinton Connects: Executive Summary*, 10.

Would it be better If the study didn't happen and instead [the developer] just puts forward an application [with] the best case [they] have?"

The alternative to creating an comprehensive vision for the Avenue would be the review of sites on a case-by-case basis. This could potentially help developers and transit agencies in receiving the additional height and density required for DBLVC implementation. As City of Toronto Chief Planner Jennifer Keesmaat however explains, "It should be noted that densification does not mean 'anything goes' or any intensification is good... the city's "built form" framework "provides direction to ensure this intensification is in keeping with the character of existing neighbourhoods and respects adjacent sites."²⁸⁷ Ultimately, unlike midrise zoning which was regarded as a major financial barrier for the transit agency and private developers, this was an interesting discussion point rather than a definitive barrier for the RFP and DBLVC implementation. This approach might be considered for future projects. The next section addresses the political challenges that the transit agency faced after issuing their RFP.

11.2 Political Challenges

The second barrier that Metrolinx planners faced with their ECLRT RFP was a political challenge. Specifically, this was the challenge of preparing station development RFPs for a transit line that was initially planned for without any discussion of DBLVC implementation or transit oriented development (TOD) objectives. Early on, the ECLRT was envisioned purely as a 'transit project' with service and capital investment goals. This was evidenced by Mayor Miller's political platform that called for light rail transit projects to connect all corners of the city. From a land acquisitions standpoint, the properties surrounding the ECLRT corridor were solely planned for standalone stations without any opportunity for increased TOD.²⁸⁸ By the time

²⁸⁷ Kalinowski, "Metrolinx to sell development rights".

²⁸⁸ "Metrolinx Interview 1." Interview by author. Toronto, June 28, 2017.

that the City of Toronto approached Metrolinx to implement TOD components for the ECLRT project, the footprints required for larger scale mixed-use developments that were integrated with station entrances were not readily available.²⁸⁹ As one planner explained the challenge to me in detail:

“When the ECLRT project was first politically initiated, it was simply for the transit purpose. Nobody was talking about TOD or LVC. This is why there was no appetite for TOD and joint development then. This is why we just acquired land for stand-alone stations then. There would not be enough of a footprint for further development, so this handcuffed our potential on these sites. For the station, say you needed three properties to build the station, to build any kind of development associated with the station you probably needed another 3 or 4, you probably [could not] use expropriation to buy the other properties because you don't have a transit reason to do that, and that is the reason why we didn't really acquire other properties.”²⁹⁰

The Metrolinx planners that I interviewed believed that TOD and DBLVC considerations should have been taken into account in the earliest planning stages of the ECLRT project and the *Eglinton Connects* corridor study. As one Metrolinx planner explained to me:

“As far as TOD and LVC is concerned, we need to get the TOD component into the planning stage as early as possible.”²⁹¹

By introducing the TOD component into the early planning stages it would have allowed for transit and city planners to anticipate a vision for higher-order station infrastructure. The planners I interviewed mentioned that this would have helped avoid rushing the RFP to sell development rights at stations to the market and avoid other problems.²⁹² If TOD considerations were included in the vision for Eglinton Avenue, Metrolinx may have also anticipated the need

²⁸⁹ Ibid.

²⁹⁰ "Metrolinx Interview 2." Interview by author. Toronto, June 28, 2017.

²⁹¹ Ibid.

²⁹² "Metrolinx Interview 1." Interview by author. Toronto, June 28, 2017.

for larger station sites in the early stages of the ECLRT project. These could have helped in the success of DBLVC implementation along the corridor.

Because TOD and LVC considerations were introduced as secondary components of the Transit City ECLRT project, there was also an organizational belief within Metrolinx that the RFPs for station property developments would slow down the entire transit project. The transit project RFP was already in the works with billions of dollars granted by different levels of government. The ECLRT and all of its funding could not face the risk of the additional developments at station sites that could potentially prolong the development of the transit line. As one Metrolinx planner expressed:

“There is a funding announcement, a deadline, you need to deliver the project in that timeframe and that is pretty darn important. Things perceived as slowing it down are a risk for the project.”²⁹³

Prolonging the project would have generated even more public backlash that Metrolinx was already facing with the ECLRT.²⁹⁴ With the transit project already facing a number of delays, and with one of its main objectives to be completed on time and on budget, the RFP was considered as a risky venture for the transit agency to engage in.

The politicized nature of the Transit City plan and the ECLRT project also prevented Metrolinx from capturing the largest potential land value uplift. The fact that David Miller and Adam Giambroni decided to implement LRT technology for the ECLRT prevented this greater uplift from happening. Typically, as the Metrolinx planners explained to me, it is “the rule of thumb that higher order rapid transit generates greater development benefits. The top of this

²⁹³ "Metrolinx Interview 2." Interview by author. Toronto, June 28, 2017.

²⁹⁴ Tess Kalinowski, "Eglinton Crosstown to open a year later than expected," *The Toronto Star*. September 24, 2015, <https://www.thestar.com/news/gta/transportation/2015/09/24/eglinton-crosstown-to-open-a-year-later-than-expected.html> (accessed July 1, 2017).

hierarchy would be subway development, the bottom is bus, and LRT is somewhere in the middle. LRT is not true rapid transit.”²⁹⁵ Some of the planners that I interviewed believed that higher order transit may have convinced city planners to permit higher density developments along Eglinton Avenue such as on the four RFP station properties.²⁹⁶ One of the Metrolinx planners that conducted the benefits case for what became the ECLRT project outlined the entire political issue for me :

“The problem with Eglinton [Avenue] from the get go was the Metrolinx board. It was dominated at the time by the mayor of Toronto David Miller and the [former] TTC Chair Adam Giambroni. They refused to listen to the best technical alternative. From my standpoint, as the so called technical expert, what should have been built was a truly rapid transit line and because of the spatial constraints on Eglinton [Avenue], you would have run the line overhead along the eastern extremity of Eglinton [Avenue] and through the centre you would have went through a tunnel. But the objective from our standpoint was to create the fastest possible trip time between Scarborough City Centre over to the Pearson Airport area so that transit would be competitive with Highway 401. I'm afraid that streetcars and LRT don't quite cut it, especially when they are running at grade... To make a long story short, I think we have a different outcome on Eglinton [Avenue] if the [Metrolinx] board did not reject our advice... in 2008 to go with genuine rapid transit. It would have generated higher ridership and revenue numbers and Eglinton [Avenue] would have become a regional rapid transit corridor as opposed to what we are building today which is a very high cost but local transit system... The technology choice, the project scope were poor decisions... As a result, Eglinton will never reach its full potential as the next Bloor Line running east-west through the heart of Toronto. In terms of DBLVC potential, we would have had fewer stations and the stations would have been aligned even more closely with development potential. But the ridership numbers would have been greater, because a more rapid Eglinton line would have been more successful in achieving modal shift, and not just modal shift from the Eglinton corridor, but modal shift from other east-west corridors including HWY 401. This would have driven denser development and the increased potential for land value uplift. The city politicians in particular and the Metrolinx board were so [invested] in Transit City and achieving the LRT dream that Mayor Miller rode into office on.”²⁹⁷

²⁹⁵ "Metrolinx Interview 1." Interview by author. Toronto, June 28, 2017.

²⁹⁶ "Metrolinx Interview 2." Interview by author. Toronto, June 28, 2017.

²⁹⁷ "Metrolinx Interview 1." Interview by author. Toronto, June 28, 2017.

Overall, the political intervention involved in planning a transit line for Eglinton Avenue compromised the potential for denser mix-use developments on station sites including those identified in the RFP. As I established, this was because TOD objectives were considered in the later stages of the planning process. Additionally, the former Mayor, ex-TTC Chair and Metrolinx Board decided on the implementation of LRT technology along Eglinton Avenue. The decision prevented Metrolinx from capturing the largest potential land value uplift for station properties along the corridor. This was because an LRT line might not have generated the additional ridership to support higher densities in the area. Both of these factors established a challenge for implementing DBLVC along Eglinton Avenue and created a barrier for development on the RFP sites.

11.3 Intra-Organizational Challenges

The third barrier that Metrolinx planners faced in DBLVC implementation was general intra-organizational challenges. These challenges extended among divisions within the transit agency and were apparent in the case of the station development RFP. As I noted in Chapter 8, Metrolinx has some willingness to engage in DBLVC at a strategic level. However, as the Metrolinx planners that I interviewed explained, there is a clear lack of experience within the transit agency when engaging in DBLVC projects. As one former Metrolinx employee who worked on the ECLRT described this lack of DBLVC expertise:

“I don't think at the transit agency level there are skilled people who know how to cut real estate deals, and even if we did they do not necessarily have the mandate, because at some levels there is still some kind of aversion to deal making. At [the transit agency] level between the public and the private sector there is a belief that there will come connotations of collusion. So we need to grow up a bit in that regard... I think it should be the organic evolution of planner to have more of an economic dimension to it and this continuous read of the market.”²⁹⁸

²⁹⁸ Ibid.

Adding to this statement that planners must learn about urban economics and real estate development, another Metrolinx planner explained that:

“There is not enough astute deal making in the transit agency. The transit agency in a dense urban environment, and in an environment that is led by a strong economy and market forces should be adept at real estate development. In some of these more advanced transit systems, the real estate imperative comes first. I’m not saying that it should be the case here, but it should be more advanced than it already is.”²⁹⁹

Additionally, there was the belief among some planners that once Metrolinx disbanded their economic practice, the organization would be dominated by planners who do not understand the real estate market. For example, one Metrolinx planner that I interviewed mentioned that:

“[Some] planners [In either Design or Station Planning] spend an inordinate amount of time and money developing the so called *Mobility Hub Strategy* and after all of these years, maybe 10 years of getting it underway, there is very little to nothing to show for it on the ground. Unless you bring in the real estate market dynamics it is completely an academic study.”

It was clear that Metrolinx as a transit organization was still in a stage of infancy. They did not have the track record of engaging in DBLVC projects. Metrolinx acknowledged that the RFP was the first time they were looking to engage in any sort of DBLVC implementation in the GTHA. As a result, it was hard for the entire transit agency to accept DVBLC as a good idea. This lack of recognition for DBLVC implementation among the entire organization may have deterred developers from submitting proposals for the RFP. For instance, simple mistakes such as “not owning the land in question before issuing an RFP” could have alerted developers that they might be wasting their time with their proposals if they could not even acquire the site in the end.³⁰⁰

²⁹⁹ "Metrolinx Interview 2." Interview by author. Toronto, June 28, 2017.

³⁰⁰ "Metrolinx Interview 1." Interview by author. Toronto, June 28, 2017.

As one Metrolinx employee reiterated in our interview, it was clear that they lacked DBLVC experience:

“As far as we are concerned we are new and lack DBLVC experience... It is very hard to sell this idea even within Metrolinx because this is primarily a transit organization. The primary business is transit so the people’s mentality is always about operations and delivery of capital projects while everything else is a barrier to their projects. Because Metrolinx is focused on operations they don’t have the savvy of the track record to be proactive in engaging developers... they even lack the message that they are open for business.”³⁰¹

The transit agency’s lack of DBLVC experience and entrepreneurial drive to engage in development was outlined in another of my interviews. One current Metrolinx planner stated that:

“I think based on a lot of history and smart decisions, if there were four corners and there was a large parcel with development potential, in a lot of cases [Metrolinx] would stay away from that parcel and say ‘why would we take a piece of the large parcel and sort of spoil the development opportunities. Let take what we need... for the station... rather than taking a piece of a large property or taking a large property that if people are being honest’ with ourselves. Whether it’s the TTC or us, we are not really great about talking about development so we would not doing anyone a favour by acquiring a large parcel was our thinking at the time.”³⁰²

While on one the hand there was a willingness and anticipation for DBLVC implementation within the agency from the Business Strategies and Corporate Real Estate divisions, other divisions focusing primarily on service and operations did not buy into the idea of engaging in DBLVC because of the lack of expertise. Although Metrolinx executives understood that TOD objectives and DBLVC implementation was important for their projects, they were ultimately averse to any change. Other groups within the organization were focused on implementing other large projects such as regional express rail (RER). One planner that I interviewed believed that a focus on large organizational

³⁰¹ "Metrolinx Interview 2." Interview by author. Toronto, June 28, 2017.

³⁰² Ibid.

service projects such as RER was taking away from Metrolinx's ability to focus on any DBLVC projects. As a result, the time and effort that should have went into projects such as the development RFP was not given.

12.0 Lessons Learned from the ECLRT DBLVC Project

The ECLRT case study emphasizes the main point of my major paper. DBLVC instruments can be an excellent tool for funding transit oriented investments. However, the implementation of DBLVC can be difficult in practice. The transit agency and its planners should use this project as a learning opportunity for when they choose to implement DBLVC for their future transit projects. Based on the planning, political, and intra-organizational challenges outlined in this case study, Metrolinx should be able to learn from the shortcomings of the RFP.

In terms of zoning, transit planners could potentially engage in deeper discussions with city planners and officials to encourage discussions around higher densities along Avenues in Toronto. This can be established through the creation of a forum that is open to discussion between the transit agency, the municipal planners and the developers. At the same time, by putting in the groundwork to establish as-of-right zoning for potential high-density station areas, this could provide financial certainty for developers and alleviate the risks that might deter them from entering into DBLVC arrangements with transit agencies.

In regards to the political challenges that the ECLRT project RFP faced, the transit agency should be able to meet their strategic objectives such as DBLVC implementation without having to abandon them in favour of meeting a political timeline of a project. Transit agencies like Metrolinx could work closely with their municipality and incorporate TOD and LVC objectives within the project framework at an early date. The implementation of DBLVC cannot

be a secondary objective introduced at the later stages of a transit project or else it risks the potential for DBLVC implementation at station properties.

Finally, when it comes to intra-organizational challenges that a transit agency could face, the entire organization must adopt a value planning philosophy that allows for DBLVC implementation to happen. Even if there is a learning curve to each project, transit agency planners will gain the experience of working on DBLVC projects and will learn from their mistakes. Future planners could train themselves in simple financial exercises such as being able to produce a proforma or taking real estate development and urban economics courses in university to make up for their lack of expertise in real estate deal making and DBLVC implementation.

Overall, my analysis of the RFP for ECLRT station property development merely provides an introduction to the DBLVC potential of the ECLRT project. When the ECLRT is completed, the DBLVC potential for the corridor should be revisited.

Section 4

Summary and Conclusions

Overall, it is my opinion that I have successfully met the objectives that were set out earlier in my major paper. From the outset I was able to set a lineal context for land value capture implementation in Toronto. The City of Toronto previously had a storied history of value planning and land value capture implementation. I outlined how the development of the Yonge Subway line demonstrated the positive financial uplift effect that transit projects can have on land values in the City. This case of the Yonge Subway line also proved that land value capture implementation could be successfully implemented by transit agencies in Toronto. Despite the success of the Yonge Subway project, the practice of land value capture ultimately faded away with political interference and financial pressures mounting on the transit agency. Many of these pressures are still causing challenges for transit agencies who wish to engage in land value capture in Toronto and elsewhere in North America.

Moving on, I was able to describe to planners how land value capture works and why it is a growing practice for transit agencies looking to fund their transit projects. The economic impacts of transit-induced land capitalization have proved to be a strong case for DBLVC implementation.

Furthermore, I was able to explain that transit agencies who have an interest in land value capture should implement DBLVC instruments over their tax-based counterparts. Some of these factors include higher revenue potentials, lower financial risks, lower political risks and lower implementation costs. There are also benefits when it comes to joint development partnerships. All of these factors prove that Development-Based Land Value Capture instruments have a significant advantage over Tax- or Fee- Based Land Value Capture instruments when it comes

“ease” of implementation. The case of the Washington Metropolitan Area Transit Authority’s Joint Development practice demonstrated these advantages. Implementation of DBLVC instruments is still no easy task and I outline some of the common challenges of DBLVC implementation. Transit agencies and their DBLVC partners must ensure that they meet various enabling factors such as ensuring intergovernmental relationships that foster DBLVC practices, adopting an entrepreneurial approach towards transit development and finance, and ensuring clarity in DBLVC by establishing guidelines within the organization and for DBLVC partners. These enabling factors will allow for smooth implementation of these DBLVC revenue generating instruments.

Lastly by analyzing the Eglinton Crosstown request for proposal to sell development rights at station properties, I was able to highlight the challenges that Metrolinx planners faced in DBLVC implementation in Toronto. I initially believed that this project signalled a strong re-emergence of land value capture in Toronto. Although my case study proved that transit agencies in Toronto such as Metrolinx have some interest in using DBLVC as a strategy to fund their transit oriented investments, not everyone in the transit agency is on board with this idea. A lack of real estate and DBLVC experience within the organization has created a barrier for successful land value capture implementation. Additionally, municipal planners have not worked closely enough with the transit agency to ensure that zoning and floor area ratios at station sites would be sufficient enough to generate the return on investments that would attract developers towards entering into DBLVC ventures with the transit agency. Political barriers specific to the Eglinton Crosstown LRT also greatly reduced the DBLVC success of this project. In particular, DBLVC and transit-oriented development goals have not been incorporated into transit and land-use plans from the outset. Additionally, plans believed that more discussions surrounding transit

technology should also occur with DBLVC objectives in mind. These discussions should occur because different transit technologies have been proven to have various impacts on ridership and transit-induced land capitalization that affect DBLVC objectives.

In summary, it is my hope that this research will encourage all planners in the City of Toronto to once again engage in serious conversations around Development-Based Land Value Capture. Hopefully city planners, the transit agency and the development industry can understand why DBLVC is so useful for funding transit oriented investments. Furthermore, I expect that transit planners in Toronto can work around the barriers of development-based land value capture implementation once they learn from the shortcomings of the Eglinton Crosstown LRT request for proposal. I believe that using DBLVC implementation to fund transit oriented investments is certainly a possibility in Toronto. It might take a few attempts for a transit agency without much value planning experience like Metrolinx to have a successful RFP bid for a DBLVC project. However, it is my opinion that this will happen in the next few years if they are able to work around the planning, political and intra-organization challenges they alongside many North American transit agencies currently face.

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Appendices

Informed Consent Forms – Interviews

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Informed Consent Form

Study name:

Re-Imagining Transit Development in Toronto: Assessing the Potential for Development-Based Land Value Capture in funding Transit-Oriented Investments

Researchers:

Anthony Robert Soscia
Graduate Candidate, Master's in Environmental Studies (Planning), York University Faculty of Environmental Studies
Email: soscia@ualberta.ca
Phone: 647-551-8098

Purpose of the research:

This major paper will assess the feasibility of using development-based land value capture (LVC) to fund future transit-oriented investments in the City of Toronto. This assessment will be undertaken through interviews with academia and practitioners from Toronto's transportation and development fields to determine the current state of financing and land value capture, and outline the strengths, weaknesses, opportunities and threats of using development-based land value capture in the City of Toronto to fund transit-oriented investments. An analysis of the Eglinton Crosstown development will also be a case study for future land value capture execution in the City of Toronto. The research will be reported in a paper format as a part of the researcher's MES Major Project and will be presented to faculty members from York University Faculty of Environmental Studies as a part of an MES Final Examination.

Procedures:

If you agree to participate in my research, I will conduct an interview with you at a time and location of your choice. The interview will involve questions about land value capture, transit development and land acquisition in Toronto. It should last about 1 hour. With your permission, I will audiotape and take notes during the interview. The recording is to accurately record the information you provide, and will be used for transcription purposes only. If you choose not to be audiotaped, I will take notes instead. If you agree to being audiotaped but feel uncomfortable at any time during the interview, I can turn off the recorder at your request. Or if you don't wish to continue, you can stop the interview at any time. I expect to conduct only one interview; however, follow-ups may be needed for added clarification. If so, I will contact you by mail/phone to request this.

Risks/Discomforts:

If some of the research questions make you uncomfortable, you are free to decline to answer any questions you don't wish to, or to stop the interview at any time.

Benefits of the research and benefits to you:

There is no direct benefit to you from taking part in this study. It is hoped that the research will benefit the City of Toronto, its urban planners and transit authorities in gaining a better understanding of an alternative form for financing transit oriented investments in the city. The research will benefit the researcher in potentially awarding them their Master's in Environmental Studies (Planning) degree.

Rights:

Your participation in the research is completely voluntary. Participants can decline to answer any questions and are free to stop taking part in the project at any time. Whether or not you choose to participate in the research and whether or not you choose to answer a question or continue participating in the project, there will be no penalty to you. A participant's decision not to continue participating will not influence their relationship or the nature of their relationship with researchers or with staff of York University either now or in the future.

Withdrawal from the study may be at any time and for any reason if you so decide. Your decision to stop participating, or to refuse to answer particular questions, will not affect your relationship with the researchers, York University, or any other group associated with this project. In the event that you withdraw from the study, all associated data collected will be immediately destroyed wherever possible.

Confidentiality:

Participant's names and their organizations will be used in the research unless you wish to not be named. Data will be collected through an electronic recording device and/or through typed notes. When the research is completed, this information will not be destroyed. To minimize the risk to confidentiality, the recorded/typed interview information will be saved on its own portable hard drive and securely kept in storage with limited access. Only the researcher will be able to access this information. The study data will be handled as confidentially as possible. If results of this study are published or presented, your explicit permission will be sought after. Consent forms will be securely kept by the researcher for a minimum of two years following the completion of this study.

Compensation:

You will not be paid for taking part in this study.

Questions about the research?

If you have any questions about this research or your role in the study, please feel free to contact me. I can be reached at 647-551-8098 or soscia@ualberta.ca.

Alternatively, my supervisor Laura Taylor can be reached at (416)736-2100 x 22628 or taylorL9@yorku.ca.

The Faculty of Environmental Studies graduate program office may also be contacted at (416) 736-5252.

This research has been reviewed and approved by the FES Human Participants Research Committee on behalf of York University.

This research has been reviewed and approved by the Human Participants Review Sub-Committee, York University's Ethics Review Board and conforms to the standards of the Canadian Tri-Council Research Ethics guidelines. If you have any questions about this process, or about your rights as a participant in the study, you may contact the Senior Manager and Policy Advisor for the Office of Research Ethics, 5th Floor, York Research Tower, York University, telephone 416-736-5914 or e-mail ore@yorku.ca

Legal rights and signatures:

I David T. Murray, consent to participate in "Re-Imagining Transit Development in Toronto: Assessing the Potential for Development-Based Land Value Capture in funding Transit-Oriented Investments" conducted by Anthony Robert Soscia. I have understood the nature of this project and wish to participate. I am not waiving any of my legal rights by signing this form. My signature below indicates my consent.

Signature David Murray
Participant

Date June 28, 2017

Signature Anthony Robert Soscia
Principal Investigator

Date June 28 / 17

