



GOING FOR GOLD

# **Efficient Cities: The Interrelationship Between Effective Rapid Transit Systems and the Optimal Utilization of Land Use Entitlements**

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GOING FOR GOLD

The Western Canadian Economy  
in the International Arena

**Canada***West*  
FOUNDATION

# GOING FOR GOLD

Western Canada's economic prosperity is not only good for the West, but for Canada as a whole. But the West cannot rest on its laurels. Like the athletes training for the forthcoming Winter Olympics in Vancouver, western Canada needs to be at the top of its game if it is to continue to compete successfully in the international economic arena, especially as its competitors step up their games. If we are not successful, our standard of living will fall.

The GOING FOR GOLD Project is examining how best to position western Canada in the global economy through a series of research papers, consultations and a seminal economic conference in Vancouver in the fall of 2009.

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## Leading the Way: The GOING FOR GOLD Project Research Paper Series

The primary goal of the Canada West Foundation's GOING FOR GOLD Project is to ensure that Canadians make the right public policy decisions for improving the ability of the country and its regions to compete in the upper echelon of the global economy. The ultimate goal, however, is to ensure that Canada experiences the long-term economic prosperity that underpins a high quality of life and an inclusive and caring society in which all citizens can participate and thrive.

The GOING FOR GOLD Project's Research Paper Series helps achieve these goals by providing thoughtful and timely information combined with practical options for improving public policy's role in fostering Canada's economic competitiveness. The diversity of topics covered by the series is intentional and highlights the many facets of public policy that will need to be working in concert if western Canada—and by extension Canada—are to succeed in the global economy in the decades ahead.

We cannot rest on our laurels and we cannot be reactive. We must take proactive steps today to ensure a prosperous tomorrow. The countries that fumble the public policy ball will fall behind in the global economy and see the opportunities available to their citizens shrink. Much of what must be done is beyond the scope of public policy; it is just one factor, but it is a critical factor. Bad economic policy will hamstring us just as good public policy will propel us forward.

It is important to note that winning in the global economy does not mean that other regions and other countries must lose. Even though only one competitor can rank first, healthy competition can bring out the best in all countries. There is much that Canadians can achieve by working with international partners. This, in turn, will improve economic outcomes both at home and abroad. There is also much that Canada can learn from the experiences of other jurisdictions and this is a key element of the research papers.

There is much to discuss and there is much to be done. Ask any Olympic athlete if their training is ever complete and they will say that they are always training, preparing, and searching for the competitive edge. The same is true of public policy aimed at improving our economic competitiveness—it will always be a work in progress.

The authors of the papers were given the freedom to explore key topics as they saw fit. As a result, the series does not provide a complete set of policy recommendations or a master plan for global economic dominance. Nor does it represent the "top 10" things that must be done to make western Canada more competitive. Rather, it provides a set of useful examples of what can and should be done combined with provocative recommendations across a broad range of relevant policy files.

For more information about the GOING FOR GOLD Project, please do not hesitate to contact me at [roach@cwf.ca](mailto:roach@cwf.ca).



Robert Roach  
Director of Research

**Editor's Note:** In the race to gain and sustain a competitive edge in the global economy, countries and regions around the world that understand the critical importance of cities have an advantage. There are many elements that need to be in place to maximize the economic potential of cities in the 21st century, including a high quality of life capable of attracting and retaining top talent and efficient and cutting-edge urban design that fully incorporates public transit. This paper zeros in on the latter and examines practical public policy options for improving the design of western Canada's cities, their public transit systems and, ultimately, their contributions to the region's international competitiveness. To the extent that western Canadians get this right, we will be ahead of our international competitors; to the extent that we get it wrong, we will fall behind in the race to sustain economic prosperity and the quality of life to which it contributes.

## Executive Summary

Western Canadian cities are typically characterized by extensive urban sprawl, manifesting low density development which makes it extremely challenging for city planners to put in place the public transit systems that are necessary to ensure the efficient operation of urban areas. These challenges, coupled with ongoing population and economic growth, require immediate attention. This paper explores one potential solution from the perspective of real estate and transit management. The focus is on how to achieve sound management of the interrelationship between transit planning and the optimal utilization of public land use entitlements. To facilitate the discussion, the paper presents several case studies that provide examples of both good and bad practices.

Public transit is of critical importance to a city's development because it is an essential part that enables the functionality of an urban setting. In particular, inefficient transport systems incur extra costs to city residents and the government in terms of increased spending, higher taxes, and the loss of city competitiveness. Also, it causes environmental problems such as car exhaust, road congestion, and loss of green space. An efficient public transit system is increasingly viewed as one of the major competitive drivers for a city in the national and international arena. Hence, it is imperative for a city to develop efficient transit systems in accordance with sound city planning. This means that community planning should not be conducted in a vacuum, but should be carried out simultaneously with transit planning and with an eye to how other cities around the world have approached this and what they have achieved.

It is increasingly clear that in order to remain competitive, it is essential for a city to achieve sound transit system planning that goes hand-in-hand with progressive city planning. This means that community planning should not be conducted in a vacuum, but should be carried out in conjunction with transit planning at the very earliest stages. Specifically, city planners should be tasked with coordinating certain land use corridors to offer greater densities along the very same corridors being planned for future transit systems. In other words, planners should seek to optimize the operation of rapid transit systems by increasing ridership through the tailoring of housing and commercial forms towards mid-to-high density development. This not only offers substantial improvements to land use efficiency through densification, but also meets the goal of improving access to rapid transit and increasing ridership.

All three levels of Canadian government possess valuable entitlements that are related to transit infrastructure development and real estate planning. For discussion purposes, this paper provides an illustrative list of three options where government can leverage their entitlements to help shape the form of city growth (horizontal vs. vertical), optimize the relationship between land use planning and public transit systems and, at the same time, capitalize significant financial and non-financial rewards, particularly from real property assets. Furthermore, the paper discusses one particular impediment that exists in most western Canadian cities, namely the disconnect between different levels of government (municipalities, despite responsibility for planning, construction, and financing of municipal infrastructure, do not have the prerequisite

enabling legislature to properly finance these undertakings), and provides suggestions as to how government can pursue means of constructing alternative institutional structures that facilitate the development of public transit infrastructure.

The paper provides observations and recommendations that, although not necessarily fit for each western Canadian city, serve to demonstrate the multitude of development opportunities that could be, or could have been, pursued by government and development parties. Specifically, these actions are explored under two scenarios that are considered applicable to most western Canadian cities: 1) planning for small cities or town centres that are not yet ready for rapid transit, but can significantly benefit from incorporating these systems into current planning initiatives; and 2) planning for municipalities that are already coping with inefficient transit systems and urban sprawl due to the historical lack of coordinated planning.

Of all the options and solutions discussed, the most profitable, yet also the most challenging, is for government development bodies to fully exploit their public sector entitlements for the purpose of achieving the proper planning of transit impact areas such as the incremental values of higher-order land uses, increased densities, and increased absorption rates. This paper explores different methods of pursuing these objectives, but essentially it involves the development parties acquiring, at the appropriate time and in the appropriate manner, those properties that would be expected to experience the highest growth in residual land values. Ideally, the properties to be affected would be acquired at the very earliest stage of project conceptualization (i.e., acquisition at “wholesale” value before the designation of public entitlements), followed by disposition of such properties on a systematically controlled and highly strategic fashion so as to maximize their residual value and minimize any risk exposure for the public sector.

## Abstract

*As economic hubs, western Canada’s cities are critical components of the region’s ability to compete in the international economy. Urban sprawl and inefficient public transit systems are becoming increasingly cumbersome to the efficiency and quality of Canadian cities. This has only been exacerbated by western Canada’s robust economic and population growth in recent years. Cities have gradually realized the unsustainable nature of past development patterns and trends. This paper explores some potential solutions from the perspective of real estate and public transit management. The focus is on how to achieve sound management of the interrelationship between transit planning and the optimal utilization of public land use entitlements. To facilitate the discussion, this study includes several relevant case studies in a variety of countries and provides examples of successes in other cities. The study presents three options for governments to leverage their entitlements to optimize the relationship between land use planning and public transit planning. It also reviews two scenarios that are seen to be particularly applicable to several major western Canadian cities.*

## 1. Introduction

Western Canadian cities have typically developed in the form of relatively low density urban sprawl, interspersed with one or more high density economic and commercial centers. This growth pattern has become increasingly cumbersome to developing effective and financially viable public transportation systems due to the increasing commuting distances between residences and workplaces, and the lack of ridership. This situation has only been exacerbated by western Canadian cities’ robust population growth and economic expansion in recent years. Cities have gradually realized the unsustainable nature of past development patterns and trends, and are faced with the challenges of dealing with the major issues that have plagued most cities: urban sprawl, inefficient public transit systems and the lack of coordinated land use planning.

This paper explores the situation faced by western Canadian cities through public policies that provide sound management of the interrelationship between rapid transit systems and the optimal utilization of public sector entitlements. Furthermore, this study will focus mainly on the rapid transit system (defined for purposes of this study as a rail-based transportation system that is separated from other traffic), due to the fact that it usually entails high capacity and frequent services, and has a greater impact on land development and alternative city planning patterns as compared to lower order transit types, such as buses.

Expanding urban sprawl has led to a situation where residents require more far-reaching roads, which must be provided by government at great expense. At the same time, the cost of building rapid transit systems to serve those residents is typically too great for the low ridership to justify. This is because the density of residential space around the transit system is typically too low to warrant heightened levels of service, and the attendant ridership consequently does not materialize at an economically viable level. The cost of such service provision then has to be made up for by other sources of tax revenue, which leads to inefficiencies and waste. Furthermore, urban sprawl has a substantial negative impact on the natural environment. It consumes farm land and open space, and necessitates long commutes for many residents to get to their workplaces (resulting in congestion, auto emissions, and a decreased quality of life). These concerns, and many others, have resulted in the increasing recognition of the critical role that public transportation plays in the economic and social health of cities. In a sense that effective public transportation enables connectivity, competitiveness, and community development, and affords substantial benefits to the natural environment, public health, and the quality of life of urban communities.

Many countries are taking ongoing initiatives to promote sustainable city planning at local, provincial and national levels, most of which use “smart growth” codes to guide city planning that encourage higher level transit development and the clustering of residential and commercial centres around these transit corridors. Los Angeles is a case in point. The Los Angeles Metropolitan Transit Authority (MTA) is positioning itself to become more entrepreneurial by being proactive in planned station-area development and by becoming an active

participant in land development to recapture increased land value near its transit stations. The city has gradually added subways and commuter trains to its public transportation system, while developers have responded by developing residential, commercial and retail facilities around the new transit corridors (Sierra Club 2000). Traditionally, a low density city like Los Angeles has seen minimal ridership on its rapid transit infrastructure. But this is changing, as the local government increasingly concentrates higher density development around transit impact areas. As a result, increasingly higher benefits are being afforded by these very substantial transit infrastructure investments.

## 2. Role of Public Transit

As mentioned above, public transit is increasingly seen as an inevitable necessity for a high quality of life in urban settings in that it serves to boost the functionality of an urban environment, provides improved transportation choices to residents, increases the efficiencies of city transportation networks, and enhances a city’s competitiveness—both in the national and international arenas.

Urban development in western Canada typically takes the form of a large metropolitan area, which extends far beyond the boundaries of a single city. The resulting multiple town centres, de-concentrated economic activities, and long travelling distances make it especially important, yet at the same time especially challenging, for governments to deliver an efficient public transportation infrastructure to serve these multiple areas that do not necessarily naturally lend themselves to efficient service by public transit.

According to a recent research conducted by GlobeScan and MRC McLean Hazel, a survey of more than 500 public and private sector experts in urban development has ranked transportation as the biggest infrastructure challenge facing cities. Responding to an open-ended question in the survey, 35% of all stakeholders mentioned the transportation system or traffic problems as their city’s most significant infrastructure challenge. Also, when it comes to investment needs over the next five to ten years, transportation emerged as the top priority by a significant margin. Again, when asked with an

open-ended question, transportation was also the most heavily-mentioned item as the area of their city's infrastructure that is the most important competitive driver. Overall, the survey marked transportation as the single biggest infrastructure challenge faced by most cities, and by a large margin (transport questions in the survey encompass mass transit, individual motorized transit, air and surface transport, and people as well as freight transit). Transportation was also identified as the highest priority for spending, with 86% of stakeholders citing this as an important area for investment.

One of the greatest reasons for transportation occupying the top spot on this list is the high cost that an ineffective transportation network imposes on the economy. For city residents, inefficient transit systems cost individuals in terms of increased personal spending, higher taxes, and wasted time. From the perspective of the government, an inefficient transit system incurs costs to all levels of government due to the loss of city competitiveness and the increase of environmental problems such as car exhaust, road congestion, and the loss of green/farm space and developable land as the city spreads outwards. Taking the United Kingdom as an example, the Confederation of British Industry estimates that the cost of congestion is about US\$38 billion a year (Economist 2006). The United States represents a plethora of examples of inefficient transit system caused by the problem of unabated urban sprawl. According to the American Farmland Trust, the US continues to lose nearly one million acres of farm land and open space annually due to road building that extends to rural areas.

With these examples in mind, it is increasingly clear that in order to remain competitive, it is essential for a city to achieve sound transit system planning that goes hand-in-hand with progressive city planning. This means that community planning should not be conducted in a vacuum, but should be carried out in conjunction with transit planning at the very earliest stages. Specifically, city planners should be tasked with coordinating certain land use corridors to offer greater densities along the very same corridors being planned for future transit systems. In another words, planners should seek to optimize the operation of rapid transit systems by increasing ridership through the tailoring of housing and commercial forms towards mid-to-high density development. This not only offers substantial improvements to land use efficiency through densification, but also meets the goal of improving access to rapid transit and increasing ridership.

One of the best examples where such an efficient transit system exists is Hong Kong. The city has been successful not only in coordinating high density development with mass transit development, but has also adopted innovative ways of financing public transit infrastructure using proceeds from the very development upon which this infrastructure depends. The transit agency, MTR Corporation Limited, is responsible for the operation of rapid transit in Hong Kong. Besides subway and rail operations, the MTR is also actively involved in the development of key residential and commercial projects above existing stations and along new line extensions as well as many other commercial activities associated with the rail lines.

Property is one of the main businesses of the MTR. The company tries to develop suitable sites related to their new rail projects and to their existing lines. For instance, the reclaimed land situated in West Kowloon that is owned by the MTR will be developed into an area with residential, office and retail space. Two of Hong Kong's largest banks, HSBC and the Bank of China, are to have office towers there, and there will be more than 7,000 housing units in the development, as well. The MTR also owns several shopping centres, as well as the new International Finance Centre. Examples of this type of construction can be seen at Tsing Yi station, which is built next to the Maritime Square shopping centre, and directly underneath the Tierra Verde housing estate. The MTR is also involved in the renting of retail and poster advertising space, ATM banking facilities, and personal telecommunication services.

The MTR has always been reliant on developing properties next to transit stations for its profits (as a result, the Hong Kong transit system is entirely self-financing, and its combined ridership and real estate activities actually generate net profits—a situation that is unparalleled in any other jurisdiction, and is unthinkable in most North American cities), and many recently built stations are directly incorporated into the planning of large housing estates and shopping complexes.

Singapore is also known for its integration of urban planning with transportation planning. Although partly forced by land constraints, the very high density of residential development on the island (almost 90% of the population lives in the very dense HDB Public Housing Estates) makes it very easy to have a public transportation system that can effectively meet the vast majority

of resident's needs. Mass Rapid Transit (MRT) is the main heavy-rail line, and is also supplemented by buses, the free SMRT, and Light Transit Line (LRT) which run to the many of the city's shopping and tourist destinations, and link the MRT to public housing estates. Singapore represents an excellent case of how different levels of government and development bodies can act together and coordinate their efforts to achieve efficient and effective transit planning and city planning.

By comparison, public transit systems in western Canadian cities are inefficient and unprofitable systems that serve only a fraction of the population in their respective cities—quite unlike the efficient, profitable and sustainable models seen in both Hong Kong and Singapore. (It should be noted that although both cities are constrained by their island geography, there is no reason why comparable development patterns could not be emulated in jurisdictions that face no such constraints.)

Calgary offers an excellent example of a large metropolitan region which is well-known for its lack of coordinated transportation planning in the past, especially with regard to conducting land use planning in conjunction with its transit planning. In the absence of geographical constraints, the city has continued its pattern of rapid urban expansion into the hinterland. This, combined with widespread low density residential and employment space, has led to a situation where rapid public transit is no longer feasible in these outlying areas since stops are either too far apart to encourage significant ridership or there are too few people living within convenient access to a station. This leads to a situation where transit simply cannot compete with private vehicles as a viable choice for personal transportation. However, in recent years, Calgary has been increasingly trying to encourage in-fill development to increase density, and gradually expanded the Light Rail Transit (LRT) system, although current population densities still do not support appropriate levels of rapid transit service in most areas of the city. The municipal government has undertaken various initiatives to counter the profusion of private vehicles and the various problems they pose to city planners. These include a free-ride zone in its downtown on the C-Train, which has helped clear some congestion in the downtown core by encouraging people to park and ride, but the effect is still quite limited. Other planned actions include allowing congestion to build in some areas to encourage alternate forms of transportation, removing

parking stalls from downtown to increase transit use, as well as incorporating land use planning into transportation planning.

Vancouver represents another western Canadian metro area that has experienced urban sprawl on its eastern flank, although geographical constraints have generally forced the city to adopt more efficient patterns of land use. Nevertheless, the growth of its suburban areas has resulted in the need to provide transit service through areas of very low density development, resulting in a highly subsidized, unprofitable, and generally inefficient public transit system. The local, regional, and provincial government face the combined difficulty of providing these services, and at the same time convincing the public to pay for extremely capital intensive expansions to the region's transit infrastructure. Increasingly, it is being recognized by both planners and the public that concentrated pockets of density around transit stations are the only way to warrant sufficient ridership to justify such capital costs. However, the transit authorities and the governments who bear the cost of these projects do not receive any of the financial benefits of putting these projects in place. Private sector developers have traditionally been able to capture the incremental value of developing new residential and commercial properties in close proximity to these stations. The result is a mix of skewed incentives, where the public cost of these transit investments is not mirrored by any public financial benefit that accrues to their provision.

The above two examples of western Canadian cities' experience with transit planning is just a sample of the various difficulties faced by transit planning authorities when seeking to provide new or enhanced service of rapid transit infrastructure. There does exist, however, a series of tools available to the public sector which can not only facilitate the development of transit facilities, but can even lead to a situation where the capital expenditures required for such investments is significantly reduced. A discussion of these tools is found in the following section.



### 3. Optimization of Land Use Entitlements

Building on the issues discussed above relating to the challenges and opportunities of providing public transit in western Canadian cities, this section illustrates the magnitude of the value of various public sector entitlements. It also offers a description of how to leverage these entitlements so as to help shape the form (horizontal and vertical) of city growth, optimize the relationship between land use planning and public transit systems, and at the same time, capitalize significant financial and non-financial rewards, particularly from real property assets. By extension, this discussion will comment on how this can be accomplished with minimal risk, and what the disposition and exit strategies are that permit the maximum "lift" in real estate values (used to offset the capital investment required for transit facilities), and thus are seen to be the most effective in financing these projects.

This paper focuses on provincially- and municipally-controlled development entitlements. Although the importance of federal grants and the employment of other strategic public sector resources should not be overlooked, and can represent a very important basis of funding and policy support, they are not examined in detail in this paper.

While each province, municipality, and region is governed by a different set of legal and political structures, it is generally acknowledged that the entitlements that are generally relevant to the provision of public transit infrastructure can be broadly categorized as follows:

#### Federal Entitlements:

- Federal government financial assistance, infrastructure grants, Western Economic Diversification Canada funding, federal government space and facilities requirements, etc.
- Federal policies and regulations governing transportation infrastructure such as airports and harbours, environmental regulations, etc.

#### Provincial Entitlements:

In Canada, provincial governments have typically delegated to municipalities the challenge of securing adequate funds for transit development. This challenge is exacerbated by the enormous disconnect among most Canadian cities: cities have the responsibility for planning, building, and financing all municipal infrastructure (including public transit), but do not have the enabling legislation to properly finance these undertakings. In view of the urgency for sound urban design, government should (and indeed is able to) pursue alternative institutional structures that would allow for the inclusion of a multitude of participants to facilitate these projects, and would provide more balanced distribution of public funding for infrastructure, setting up an appropriate time table or criteria to grant funding for municipalities that have achieved certain levels of growth, and are in need of infrastructure upgrade/development.

Generally speaking, the provincial government typically has a much smaller role in land development than does the municipal government. However, it still wields a significant amount of power regarding matters related to transportation, infrastructure, land use and the environment, and is also sometimes responsible for funding significant components of capital infrastructure investments, such as highways and mass transit improvements. Examples of these entitlements include:

- Highway planning authority, which can be done in conjunction with transit planning, so as to harness synergies and locational dynamics of increased traffic, mobility, and accessibility.
- Use of other Crown-owned lands.
- Leveraging other policy-related considerations, especially regarding regulation of the environment, fisheries, land use, etc. For example, provincial governments can employ a policy tool such as an Agricultural Land Reserve, and also reserve the option of removing land from the ALR if a high density transit-oriented development represents a higher order use of land as compared to the current agricultural land use.

Other policy tools at their disposal means that the provincial government can exercise enormous influence on land development patterns in the region.

### **Municipal Entitlements:**

The powers vested in the municipal government have a more direct impact on land development, and therefore should be seen as the source of the most opportunity to harness and unlock the values contained therein.

These entitlements fall within three principal categories:

#### *1. Public Activities Concerning Land*

With respect to land acquisition/assembly, the public sector has several means at its disposal, chiefly:

- it can provide land out of its portfolio of publicly-owned land;
- it can enter the real estate market and purchase land;
- it can use or obtain expropriation/condemnation authority to acquire land; and
- it can make use of air rights, subsurface rights, and surface right-of-way leases to expand the possibilities of development.

The availability of large parcels of land with development potential is obviously a fundamental precursor to effective development activity. A public sector body with the power to acquire land should carefully consider the use of land assembly/acquisition activities to pursue their development objectives. For example, “excess” land acquisition in transit station areas has been the primary means for the public sector to stimulate and participate in development activity. With developable parcels having been assembled, there are several options available to make this land available to private sector investment, if so desired.

#### *2. Planning and Development Regulations*

As development cannot proceed without various reviews and approvals by the public sector, it is the public sector itself that is in the best position to advance these processes to its own advantage. Principally, the local government has authority over:

- Official Community Plan amendments;
- zoning and land use controls;
- development rights, including allocation of densities, fees, and levies;
- the development approval process;
- menu of municipal requirements, including daycare, green space, non-market; housing, seniors’ facilities, etc.; and
- intra-governmental or inter-agency cooperation/coordination.

Not only is the local government able to control its own zoning and development processes, but it can use this to expedite or streamline various review and approval procedures, or it can use this in order to tinker with supply factors to create competition or to constrain development.

#### *3. Taxation*

The municipal government has a variety of tax tools at its disposal, and can exercise a great deal of discretion with regards to:

- property tax;
- special assessment districts;
- tax increment financing (TIF);
- tax concessions and exemptions; and
- other tax issues.

The implication is that not only should the government become aware of its entitlements, but that it should also take full advantage of these entitlements to explore development opportunities, in particular, land development opportunities that naturally present themselves in the immediate vicinity of their own transit infrastructure (both present and anticipated).

## 4. Implementation Strategy Options

With regard to their real estate-related pursuits, governments have three broadly defined options (note that there could exist a multitude of variations on each).

**The first option** is to continue past practices, including the sale of residual real estate holdings. This option is essentially a continuation of previous experience in transit development, and involves the sale of any residual real estate left over after the construction of new mass-transit lines. This is the lowest value-added approach to real estate disposition, however, and results in many lost opportunities to realize substantial gains on the property accruing to its proximity to rapid transit facilities.

**The second option** is to form a subsidiary organization in charge of the management of real estate development. This option requires a more participatory and forward-thinking approach to real estate disposition, and merits a much more elaborate discussion than the previous option. It can also involve a number of different stages of initiatives and interventions of all levels of development.

The creation of a development body as a subsidiary body (likely of the transit authority), with specific delegated and autonomous features, offers the potential as an effective mechanism to pursue profitable development. Being immune to certain legal and political constraints, yet maintaining a degree of accountability to the public sector, a quasi-public development authority may perform a useful role and obtain results not otherwise available or achievable in either private or public sector ventures.

This body would offer some of the flexibility and responsiveness of a private sector firm, while at the same time enjoying the benefit of exemption from much of the procedural, legal, and political restrictions faced by public agencies.

Once a development subsidiary is formed, it would have to decide on the scope of its mandate, and decide how far into the development process it is willing to go. There are generally four different stages at which the subsidiary may feel it should engage in disposition of its real property assets:

**Stage 1** – Land assembly. The government would leverage its public sector ability to acquire or expropriate land in the vicinity of a transit station impact area, and would undertake the proper assembly. The land would then be sold as is to a private sector developer on a competitive basis.

**Stage 2** – Land assembly and rezoning. Building on the first stage, except that instead of selling the land as is, the body would use its public sector influence with the municipality or municipalities involved in the development approval to secure an appropriate zoning amendment as concerns land use type and density. This is the stage at which there is the most “lift” and for which there is little actual cost to the municipality providing the rezoning. The land package would then be sold as is to a private sector developer on a competitive basis.

**Stage 3** – Land assembly, rezoning, and land development. Other than the work described in stage 2, the subsidiary, instead of selling the land package as is, would itself engage in site master-planning, demolition (if appropriate), utility servicing to the perimeter of the site, roadway reconfiguration, landscaping, and environmental remediation. The land package would then be sold as-is to a private sector developer on a competitive basis. The rationale for engaging in this expense is that without the improvements, a private sector developer will bid with a steep discount to account not only for the costs involved, but also the time required to improve the site and account for extra risks involved.

**Stage 4** – Land assembly, rezoning, land development, and construction. As above, but instead of selling the land in its developable, serviced state, the development body engages in the actual construction of whatever development it has planned for the site. This is by far the most capital intensive of the options, but has the highest revenue-generating potential, and allows the development body to leverage its ability to secure fast tracking of development permits, as well as the possibility of accessing capital at a lower borrowing cost than the private sector. Upon completion of the construction, the development body would then market the project for sale or lease, depending on the nature of the development, the market conditions, and the financing requirements of the parent company.

However, in most cases, it may not be necessary for the development subsidiary to go as far as the final stage and

engage in the construction of the projects, as it may not necessarily be the mandate nor the specialty of the subsidiary. It is also the riskiest, most complicated, most capital intensive, and lengthiest of the options, and therefore perhaps neither appropriate nor politically acceptable (for fears of crowding out the private market or of risking the loss of public funds).

It is felt, though, that as a minimum, government or a quasi-governmental organization should be the intervener who acquires and exercises the use of the entitlements prior to disposition. Indeed, it is the government who is in a better position to negotiate and secure these various public sector entitlements, far more so than any third-party private developers. Therefore Stage 2 or 3 is likely the most appropriate extent of public sector involvement in this regard.

**The third option** is to partner with alternative private sector development interests to develop non-operating/residual land holdings. In other words, this option requires actively involving the private sector in the development of transit infrastructure and the real property along the transit corridors or surrounding the new stations. This option is almost an extension of the previous option, except that it more directly involves the private sector in three primary roles:

**Joint Venture Partner:** This option involves partnering between the public and private sector to develop and build transit infrastructures such as transit lines and transit stations, as well as the development of transit impact areas in conjunction with the public transportation authority. Each entity has specific strengths and competitive advantages that can be contributed to such a venture. For example, the private sector might contribute its building expertise and a greater willingness to undertake risky ventures. The private sector, on the other hand, can, in addition to providing the land package, offer to absorb many of the development soft costs (i.e., planning and feasibility studies, architectural and engineering design work, landscaping, etc.) and can work to expedite and smooth over the approval process(es).

**Owner in Fee Simple:** Once the land package has been assembled and repackaged, it is sold by the public development authority to a private builder, who will finish the building process.

**Lessee:** This is essentially the same as the fee simple option, with the exception that the private builder does not gain ownership of the land, but instead, acquires the land on a long-term lease basis, which allows the builder to operate with much lower up-front capital requirements, and improves the ability to access capital.

Another related topic regarding this option stems from the various options regarding land disposition that would enable the government to gain the most from these developments with the lowest risk and lowest capital increases involved. Time and time again, it has been found that the “sweet spot” (that is, the maximum lift in land values with the minimum cost and risk) occurs following the acquisition of *all* land and appropriate entitlements (at a very minimal cost), putting together a marketing package and disposing of it on a sophisticated, competitive, and possibly phased, basis to a private development interest. The following is a discussion of some general options available.

**Land Leasing:** The sale of land is now less frequently used as a means to dispose of property possessing a high degree of development potential than in the past. The sale of such land removes valuable property from the public portfolio and limits the opportunity to benefit directly from escalating property values and property tax. Increasingly, governments have made use of long-term leases as a preferred means to dispose of land. The financial benefits derived from the land are then determined under the negotiated terms of the lease.

There has been an increased willingness to share in the potential profits and risks of a project via the way of participation (percentage) rent agreements. With this mechanism, a municipality agrees to accept a moderate base rent in anticipation of a larger overall income from the property resulting from its percentage share of the project’s cash flows. This mechanism serves as an incentive to development as the public sector risks some of its capital investment in the early years of a project – an incentive for reduced payments in the critical early years of development.

Where the land lease is selected as the mechanism to facilitate joint development, the public sector should be aware that a wide variety of agreements are possible. While long-term leases provide a significant income to the public sector, it is the property and business taxes from the leased properties which

can amount to a much higher amount than obtained by the leases alone.

**Air Rights Leasing:** Another type of lease utilized with increasing frequency is the air rights lease. This simply entails a legal separation of development potential from traditional surface/subsurface development rights creating the opportunity to negotiate leasing agreements on the rights to the air above a site. This is especially attractive for utilization over rapid transit station areas where the viability of transit can be enhanced by attracting development over the right-of-way or the station itself.

**Interim Land Uses:** Because the market fluctuates, and it is not always possible to sell land at the optimal time, there is also potential for interim uses that allow the land holder to earn sufficient return from the property so as to carry the land until time of disposition or future use.

One of the primary means of achieving this is through using the land for storage space. With the cost of residential and office space so high, increasingly residents and businesses of B.C.'s Lower Mainland have turned to outside storage facilities to store most of their unused or underused items. These storage facilities can be constructed with a very minimal capital outlay, and have very stable operating margins and strong demand. Thus, they represent an excellent approach to interim land use for a property being held for future development.

The City of Toronto has been widely regarded as an early pioneer in transit-oriented development in its downtown area, and the following is a particular case that demonstrates where the public sector and the transit authority worked together to facilitate development and obtain financial benefits.

The Hudson Bay Centre project is a large mixed-use development located in downtown Toronto over the intersection of the Bloor and Yonge subway lines. Construction costs of the development totalled some \$80 million (\$280 million in 2006 dollars) and the complex contains a 256-room luxury hotel, 500,000 square feet of office space, a 700,000 square foot Bay Department Store, and 290,000 square feet of small retail shops.

The participants in this project were the Toronto Transit Commission (TTC), the Metro Toronto Planning Department, and a private developer (Fidinam Canada Ltd). Fidinam had acquired some property in the Bloor/Yonge station area. They leased surplus subway land (over 59,000 square feet) from the TTC and another 12,000-15,000 square feet from Metro Toronto (which had been acquired from the TTC). Construction took five years, and was finished in 1975. The project has access points to the two underground subway lines with some 80,000 (at the time of completion, likely much more now) riders per day passing through the retail concourse of 2 Bloor Street East.

The Toronto subway system was specifically designed to encourage and concentrate growth in nodes along transit routes. With an established policy to promote development related to transit, the TTC acquired excess property around its station areas (more land was acquired along the subway lines than was needed for the transportation right-of-ways) with the intention of leasing these parcels to private developers. The TTC uses the revenue from its many long-term leases to help defray land acquisition costs and to contribute towards annual operating costs.

The TTC has an established policy of arranging long-term leasing agreements on surface or air rights surrounding its subway stations, and uses a transit access agreement to coordinate land and transit development. The agreements between the TTC and adjacent property owners offer direct station access to these properties at no charge, but connecting property owners must pay all capital costs of extending pedestrian walks to the stations. The goal is to enable the developer to receive the financial benefits of this access and to support transit ridership.

The TTC has followed a simple formula where the lease is fixed for 33 years with further renewals possible to 66 and 99 years. By 1979, the TTC was leasing 17 blocks of surplus development rights, producing a net income of over \$500,000 annually (\$1.4 million in 2006 dollars), and leasing 70 retail concessions in its stations on a base-plus-participation rent basis, returning over \$800,000 per year (\$2.2 million in 2006 dollars).

The major monetary benefits to Metro Toronto are the result of annual property taxes. By 1979, just four years after development,

the 2 Bloor Street East complex had paid over \$2.7 million dollars (approximately \$7.4 million in 2006 dollars) annually in property taxes. The TTC receives a significant sum from its total land and air rights leases, but they still represent only a small portion of the TTC annual operating budget or the capitalized subway construction cost. Meanwhile, the development around stations supports transit ridership and reduces road congestion, and the creation of mixed-use development serves a variety of public needs.

The careful planning, timing, and design of the subway system in Toronto has led to the growth of development nodes in station areas – a major success with respect to the land use and transit planning objectives. The TTC is frequently cited among transit agencies as a successful pioneer of long-term leasing of surface and air rights surrounding subway stations, and the Toronto experience demonstrates a reasonable example of transit financing potentials related to an ambitious programme of excess land acquisition and the subsequent sale or lease of this property. From the Metro Toronto perspective, the return on public investment in transit is regarded primarily in terms of greater economic activity and property taxes, which serve to recapture some of the transit-induced value-added.

The Washington Metro Area Transit Authority (WMATA) represents a strong in-house commitment to transit joint development. Key to its success has been the formation, early on, of a real estate division within the transit agency. With financial and institutional support, WMATA's real estate office has over time amassed an impressive portfolio of land holdings, much of it purchased on the open marketplace. WMATA generally executes long-term ground leases with private developers, and in a few cases has made fee simple sales. These leases not only provide base rent but also a percentage rent that affords the agency an opportunity to participate in the success of a transit joint development project.

During the acquisition of land for the construction of its rail system in the 1970s, WMATA purchased land anticipated for future expansions. As of 2004, WMATA had participated in 54 joint development projects and station connection agreements at a value of more than USD\$2 billion. As of 1998, the agency was collecting almost \$6 million in joint development revenues each year. By 2002, WMATA was provided with over \$10

million in annual revenue, and by 2005 that was projected to increase to between \$15 and \$17 million. As of 2004, there were an additional 25 joint development projects in the pipeline. WMATA reaps over \$2 million annually in air rights income from two projects alone: mixed-use buildings at the Bethesda and Ballston stations.

Rather than waiting and reacting to developer proposals, WMATA's real estate office aggressively seeks out mutually advantageous transit joint development opportunities. The agency actively encouraged joint development projects for selected stations, using land leases, air rights development agreements for stations, station-retail connection leasing, and cost-sharing agreements (e.g., shared use of heating systems) with surrounding properties/developments on non-WMATA land.

Station connection fees, another common form of joint development, are especially popular with retail developers since they can deliver transit riders (and potential shoppers) to the ground floors of connecting buildings. In the case of the Friendship Heights Station, a major retailer paid WMATA a one-time fee of \$300,000 (in 1982 dollars) for the right to connect to the station rotunda and also paid for the design and construction of the tunnel. This was followed by two other retail developers who paid tie-in fees of \$737,000 and \$775,000, respectively, plus annual rents, for their own connections to Friendship Heights.

A pivotal joint development project for WMATA was in the mid-1970s when a developer approached the authority for a land lease to construct a building over Farragut North station. This office and retail complex generated \$600,000 per year for WMATA in 1998, and was projected to increase to \$1 million in 2000.

## 5. Risk Management

It is very important that the issue of public sector development must always be approached from the perspective of minimizing risk and outlays of capital. Therefore, governments who engage in such creative approaches to transit infrastructure development need to be aware of the risks and impediments involved, and explore ways of potentially mitigating these risks.

## Political Impediments/Democratic Process

The democratic and approval process relating to property development can be complicated, convoluted, tortuous, and rife with stalling, delays, and conflicting interests. Additionally, there can be problems from municipalities who fail to see the benefits of densified land development in transit impact areas, or who want to share in the revenue implications of new development, or who lack the political will to engage in “private sector” activities for fear of *profiting* from new development!

The first approach to mitigating political risk is simply to acknowledge and accept the vagaries of municipal councils and their democratic process.

- One must recognize the “silly season” at the end of a municipal term, and therefore that certain activities must be dealt with at the beginning of the term, and not the end.
- Timing can be critical to the success or failure of a project.
- The government and its public sector real estate development body would have to sit down with municipalities to explain the mutual advantages that accrue to *both* parties.
- A further approach would be to secure support from several levels of government. This can be effectively done by sharing the costs with, and obtaining grants from, more senior levels of government and from several different agencies, which effectively secures wider support for any given project.

## NIMBYISM

Although it will vary considerably by location, there is no question that due to misperceptions of opportunities and benefits involved in such development, the public can be difficult and will politicize what could be a rational planning decision. It should not be forgotten that municipal officials can be easily persuaded by NIMBYISM outbursts.

Of course, each situation must be examined on a customized fashion, but there are commonalities across potential mitigations:

- From an education standpoint, the public at large must be aware of the issues involved, and as a subset of that, proper education and advisory of the media is also required
- From a planning standpoint, a transition zone must be allowed between the transit impact area (with their attendant increased density) and the areas outside of the transit impact area, involving “contour” planning and “decaying” topographies of land uses and land densities to interface with the surrounding area.

## Market Conditions

Market conditions, involving unpredictable real estate market cycles and varying supply and demand dynamics, can present a significant obstacle.

The solution is to embark on strategies of acquisition and disposition which minimize exposure to those fluctuations, or even allow the agency to take advantage of changing market conditions.

- First, responsible development must be preceded by carefully prepared land use market studies, so as to ascertain more accurate information regarding timing and phasing, and what can be expected in terms of market conditions.
- Second, the use of CD (Comprehensive Development) zoning can build in flexibility to a project. This allows the contemplation of “swing zoning” to accommodate fluctuations in market conditions and whatever zoning adjustments are appropriate to a specific project at a given time.
- Third, the use of alternative acquisition strategies:
  - Purchase contracts with exceptionally attractive and flexible terms;
  - Optioning contracts, which can be structured in a very sophisticated way so as to provide optimum flexibility at the lowest cost.

In summary, transit and land use planning involves risks due to its intertwined relationships with many complex factors in the political, social and economic environment. Thus, these risks must be realized and properly measured. In order to do so, proper contingency plans must be made (to allow for increased construction costs, rising costs of capital, etc.). The initial capital outlay must be kept low, and appropriate strategies must be pursued which would allow the initial outlay to remain low. For example, property should be bought in large parcels at “wholesale” price, or can be acquired from portfolios in the domain of other public sector agencies. Also, one must create and maintain realistic exit strategies right from the beginning such that there is sufficient assurance that there is a means to extricate oneself from the situation at each step.

These strategies can be created through the use of property acquisition options, which allow for withdrawal (albeit with a cost involved), or by exercising alternative disposition points which offer the optimum combination of land value “lift” at a minimum level of risk. This would likely involve regular engagement in cost-benefit analysis in order to measure the cost of exercising the withdrawal option versus the cost and risk of remaining engaged.

## 6. Recommendations

If government can recognize the potential for a significant number of development opportunities in anticipated transit impact areas, both before and after construction of the transit line, it may be advisable to create a subsidiary corporation charged specifically with pursuing transit-related real estate development opportunities so as to offset the capital costs of construction of any new transportation infrastructure. This subsidiary company should ideally be empowered with the following authority:

- to designate transit impact zones;
- to prepare and adopt plans, programs, and projects for the development or re-development of property (including sub-surface and/or air rights) within the transit impact zone;

- to acquire real property in these zones by a variety of legally appropriate means;
- to re-zone properties to higher order land uses and/or to higher densities;
- to sell, convey, transfer, lease, or otherwise dispose of real property to any public or private legal entity under terms deemed to be appropriate for the development objectives;
- to be a vehicle for attracting funds from other levels of government;
- to participate as an equity partner in joint development, if need be;
- to be the sole owner and developer of certain parcels; and
- to be responsible for all licensing and other administrative decisions and actions within the transit impact area normally performed by a variety of municipal departments and public agencies usually involved in the development process.

Two scenarios regarding transit and city planning generally apply to most western Canadian cities. Under both scenarios, a first consideration and priority for the creation and pursuit of development opportunities would involve a high degree of coordination between the provincial, regional, and municipal government. In addition, one should be aware that a variety of planning objectives (e.g., recovery of capital outlays associated with rapid transit development, enhancement of system viability and ridership, etc.) may be more effectively achieved with a single, formally coordinated development body.

**Scenario 1** – *For small city or town centres that are not yet ready for rapid transit, but can significantly benefit from incorporating it into current planning initiatives.* This scenario represents an ideal situation where extensive planning would take place in the early planning stages of a transit system to carefully set out a strategy which would maximize the beneficial impacts of the system while minimizing the negative impacts, and as a parallel, maximizing the revenue-generating or cost-saving opportunities, and minimizing the expenses required to build such large projects.



**Scenario 2** – *For municipalities that are already faced with inefficient transit systems and urban sprawl due to the historical lack of coordinated planning.* While many opportunities have already been lost in these municipalities’ transit and land development, there is still sufficient reason and opportunity for provincial and municipal government, as well as any quasi-public development bodies, to coordinate their efforts and explore the following options:

- identify the joint development opportunities in transit impact areas; that is, compile an inventory of all public land, undeveloped parcels, transition areas, and “strategic” land held privately;
- identify the range of strategies available to achieve development opportunities, e.g., public improvements, land acquisition/assembly and disposition alternatives, financing options, development incentives and criteria, etc.;
- formulate a development plan for transit impact areas (both along transit corridors and around transit stations), e.g., thought to location, type, and timing of desired developments, etc.;
- formulate a clear definition of the roles, tasks, and strategies to be employed by each party, such as a joint committee to negotiate with private developers, determination of how land will be “disposed,” how additional public improvements/expenditures (e.g., site remediation, etc.) will be financed, and so forth; and
- implement the strategies for possible joint development.

When attempting to identify joint development opportunities, the government bodies involved would naturally focus their attention on identifying publicly-owned land and/or development rights or options in the proposed corridor, particularly in the immediate vicinity of a proposed station. In some cases, the municipality will hold land in the immediate vicinity of the station, and in other cases, other levels of government may hold some as well. Thus, a number of options arise with respect to land acquisition/assembly:

- In select cases, it may be advisable for all government bodies at all levels to assemble all of their land holdings in order to create an attractive development parcel which can better meet their combined planning objectives, especially when compared to a “piecemeal” approach to land development.
- The municipality may recognize the importance of acquiring additional “strategic” parcels of land that is privately held. The means available to the public sector to do so include: purchase or optioning of land, use of expropriation/condemnation powers, and the possibility of “land exchanges” or swaps of land in the public land portfolio.
- The municipality should consider developing bylaws/policies specifically to ensure that all parties involved cooperate with the aims of promoting the development. This need not be untowardly difficult, given that all parties have much to gain.

An alternative approach would be to conduct an analysis of properties in certain municipalities, to examine areas where redevelopment seems appropriate, especially in major transit impact areas (both current and planned), such as areas in close proximity to transit stations. The analysis findings would form the basis on which to discuss any propositions regarding the assembly/redevelopment of these parcels. Again, such propositions would be subject to the municipality’s conveying, on a non-obligatory basis, their interest in supporting rezoning of certain properties to higher-order land uses or comprehensive development, including higher densification. In the course of such discussions, it could be made clear to all parties the benefits that would accrue through such processes. These benefits could include:

- increased ridership from and to surrounding development;
- revenue from redevelopment (to offset capital costs);
- high density development that assists in complying with the municipality’s development plan that deals with critical issues such as population distribution, urban sprawl, concentration of public services, pollution, etc.;

- transit-oriented development that supports harmonization of city planning with transportation planning objectives;
- increased property tax base generated by such development; and
- improved social planning outcomes and the creation of more compact liveable communities.

It is not necessary for the semi-public development body to have to immediately share the proceeds of these dispositions with other parties (provincial and municipal government, private sectors, etc.) involved. Proper dialogue will ensure that all parties involved are aware of the qualitative and financial benefits that such a development would create. Furthermore, the retention of these proceeds can expedite re-investment in further projects along new corridors.

## 7. Conclusion

These observations are not necessarily recommendations about specific actions which are deemed to be appropriate for every western Canadian city, but rather are meant to demonstrate the multitude of development opportunities that could be or could have been pursued by both private and public interests in furthering their transportation objectives.

In particular, for emerging cities, sound urban planning typically pursues real estate development opportunities prior to, or simultaneously with, the construction of transit infrastructure. For transitional cities that are already coping with urban sprawl, in the interest of reducing the fiscal burden of the costs of a major capital investment such as a LRT system, it would seem logical to ensure that the investing agency be allowed to fully realize the increases in real estate values that invariably attend the creation of a transportation system that provides a greater deal of accessibility and connectivity.

There are many different aspects of the increased revenues that attach to an improved transportation system, but the most challenging (and most profitable) relates to the full exploitation, by the government or public development bodies, of the entitlements that can be rationalized in respect to the proper

planning of transit impact areas—that is, the incremental values of changing land uses, increased densities, and increased absorption rates. This study has explored various alternative methods of pursuing this, but essentially it involves the development parties acquiring, at the appropriate time and in the appropriate manner (and preferably by option), those properties that would, at the very least, be expected to experience the highest growth in residual land values as a result of improved access. Ideally, the properties to be affected would be acquired at the very earliest stage of project conceptualization—acquisition at “wholesale” value (that is to say, pre-designation of entitlements) followed by disposition of such properties on a systematically controlled and highly strategic fashion.

It should be noted that this type of activity is not a new approach to transit development. Indeed, as pointed out in the case studies from the earlier sections and in the appendix, there are numerous examples of how transit authorities elsewhere in the world have leveraged their ability to extract entitlement-related gains in order to help finance their public transit development program. □

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## Appendix: CASE STUDIES

Complementing the case studies mentioned in the body of this study, this appendix makes reference to some of the best practices as seen in case studies in Canada and the US.

### CANADIAN CASE STUDIES

#### Montreal: Place Bonaventure

Place Bonaventure is a 3.2 million square foot mixed-use development connected to the Metro subway system in the Central Business District of Montreal, and is composed of a 400-room hotel (on the upper floors of the building), some 100,000 square feet of office space, two levels of retail shopping totaling 375,000 square feet, and an exhibition hall of 250,000 square feet.

The project was planned and constructed by a private developer on CNR air rights, and is largely the result of efforts made by the Montreal Transportation Commission (MTC) and the city's planning commission. Their deliberate policy to exploit transit improvements by attracting development along subway lines was critical to this development.

Both the city planning commission and the MTC were involved in the development before, during, and after construction, reviewing early plans for development, securing changes in the design of the Metro station, planning and undertaking various vehicular and pedestrian and corridor improvements, and providing major elements of infrastructure for the project. The city also negotiated a long-term land lease for the subsurface area with the private developer to be used for development of a parking garage. The CNR leased air rights for development to the private developer on a fixed-plus-participation basis.

In Montreal, urban development objectives figure prominently in transit planning, and efforts are made to combine the transit system with development projects so as to shape the type of growth the city wanted.

The CNR (at the time, a quasi-public body, but which acted like a private corporation) has taken advantage of its large land portfolio and existing development opportunities to profit from underdeveloped land and/or air rights. Unlike the municipal government, the CNR can negotiate the terms and conditions of its lease periods and payment schedules on a parcel-by-parcel basis.

The city of Montreal, during construction of the Metro, was allowed to acquire, through expropriation, more land than required for the right-of-ways and stations. Combined with MTC policy to stimulate development along Metro lines, the city has entered into several joint venture agreements whereby excess land acquired by the City is disposed of to private developers via long-term lease.

The Place Bonaventure private developer insisted on a pedestrian link from the project to the station, and the city built and operated a pedestrian tunnel to connect the parking garage, the development project, and the station in exchange for private construction of new utilities on and below a nearby site.

Place Bonaventure is noteworthy not only due to its size and mix of uses and access nodes, but also because of the successful coordination and cooperation of public and private sector interests for mutual benefits, using careful planning and design to exploit the site's accessibility, and to provide a development programme that provided improvements in urban design, access, internal circulation, economic performance of the project, and overall contribution to the city of Montreal.

As in Toronto, property and business taxes are the major revenue sources for the City, and land leases are not a major source of revenue related to Place Bonaventure. The leases are negotiated on 60+ year bases with participation components, but the City's policy is not to engage in profit-making activities.

## AMERICAN CASE STUDIES

There is vast experience of public transit authorities' (primarily with subway and heavy rail) involvement in real estate value recapture for numerous cities throughout the USA, such as Boston, New York City, San Francisco, and Portland. The following cities have been selected by virtue of the diversity of their experiences in doing so:

### Farragut North Station – 1101 Connecticut Avenue

This downtown project involves the joint use of a small parcel of property used as an off-street entrance and exit to the transit system. Over 17,500 square feet was leased from WMATA to accommodate the development of a 14-level office and retail project with direct, below-grade access to Farragut North Station. The development contains 60,000 square feet of retail over 4 floors (2 basement levels, a ground, and a second floor), and 160,000 square feet of office space in the 10 floors above.

The station site, which included small commercial structures on three separate parcels, was acquired by the WMATA, and an excess parcel of land, not required for transit operations, was offered for lease to the private sector on a competitive bid basis. WMATA offered a long-term ground lease (50 years with an option to renew for a further 49 years) for the parcel with a minimum annual rent based on the cost of the land and the net operating income of the project. WMATA thus retained title to land it had acquired for transit purposes, leased the excess to a private developer, and shared a percentage of the project's income over the period of the lease.

### Bethesda Metro Centre

The most financially remunerative transit joint development project to date has been the Bethesda Metro Center in downtown Bethesda, Maryland. The Metro Center features 378,000 square feet of office space, a 380-room Hyatt Hotel, and 60,000 square feet of retail space. The project has spurred other nearby office, retail, and residential development within walkable distance, including a popular restaurant, arts, and entertainment district. The project generates \$1.6 million annually in air rights rent for the WMATA.

As of 2002, it was estimated that this sum might even be eclipsed by the lease payments generated by the planned 32-acre office-retail residential project at the White Flint station in Montgomery County.

### Other American Examples:

In **Denver**, the Regional Transit District (RTD) leased air rights over the city's Civic Center Transit Facility to a developer for \$400,000 in each of the first 15 years plus 38 percent of the developer's profit after it first deducts a 13.5-percent return on its cash investment. Upon expiration of the lease, RTD will own the 600,000 square foot office building.

**Atlanta's** Metropolitan Atlanta Rapid Transit Authority (MARTA) receives nearly a half-million dollars each year in lease payments from owners of the Resurgens Plaza that sits above the Lenox station. Atlanta ranks second behind WMATA in earnings from lease payments, receiving revenues from air rights leases at IBM Tower, Southern Bell Tower and George State Office Building, as well as three major station connection projects at Atlantic Plaza, Resurgens Plaza, and Rich's Department Store.

Offices towers were built on six acres of land above and adjacent to **Miami's** Dadeland South station, and were leased in exchange for a 99½-year air rights lease above the station. The lease also requires the developer to share 4 percent of gross income with the Miami-Dade Transit Authority over the lease period, with a guaranteed annual income of \$300,000.

**King County**, Washington, has been working on bus-related transit-oriented development projects since 1998. King County projects are under way in the cities of Redmond, Renton, Seattle and Shoreline. These projects include transit centers, park-and-ride lots, off-street bus layover facilities, and residential, institutional, retail, office, hotel and entertainment uses. Project concepts range from 300 apartments above a park-and-ride lot in Redmond (near Microsoft world headquarters) to four skyscrapers above an underground bus-layover facility in downtown Seattle near the state Convention & Trade Center.

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In 1970, the One Prairie Province Conference was held in Lethbridge, Alberta. Sponsored by the University of Lethbridge and the Lethbridge Herald, the conference received considerable attention from concerned citizens and community leaders. The consensus at the time was that research on the West (including BC and the Canadian North) should be expanded by a new organization. To fill this need, the Canada West Foundation was created under letters patent on December 31, 1970. Since that time, the Canada West Foundation has established itself as one of Canada's premier research institutes. Non-partisan, accessible research and active citizen engagement are hallmarks of the Foundation's past, present and future endeavours. These efforts are rooted in the belief that a strong West makes for a strong Canada.

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