Filling a Gap in Toronto's Regional Transportation Network: An Evaluation of the Planned Air Rail Link from Union Station to Lester B. Pearson International Airport

Amanda Leonard
May 4, 2011

A report submitted to the School of Urban and Regional Planning in conformity with the requirements for the degree of Master of Urban and Regional Planning

Queen's University
Kingston, Ontario

EXECUTIVE SUMMARY

Introduction

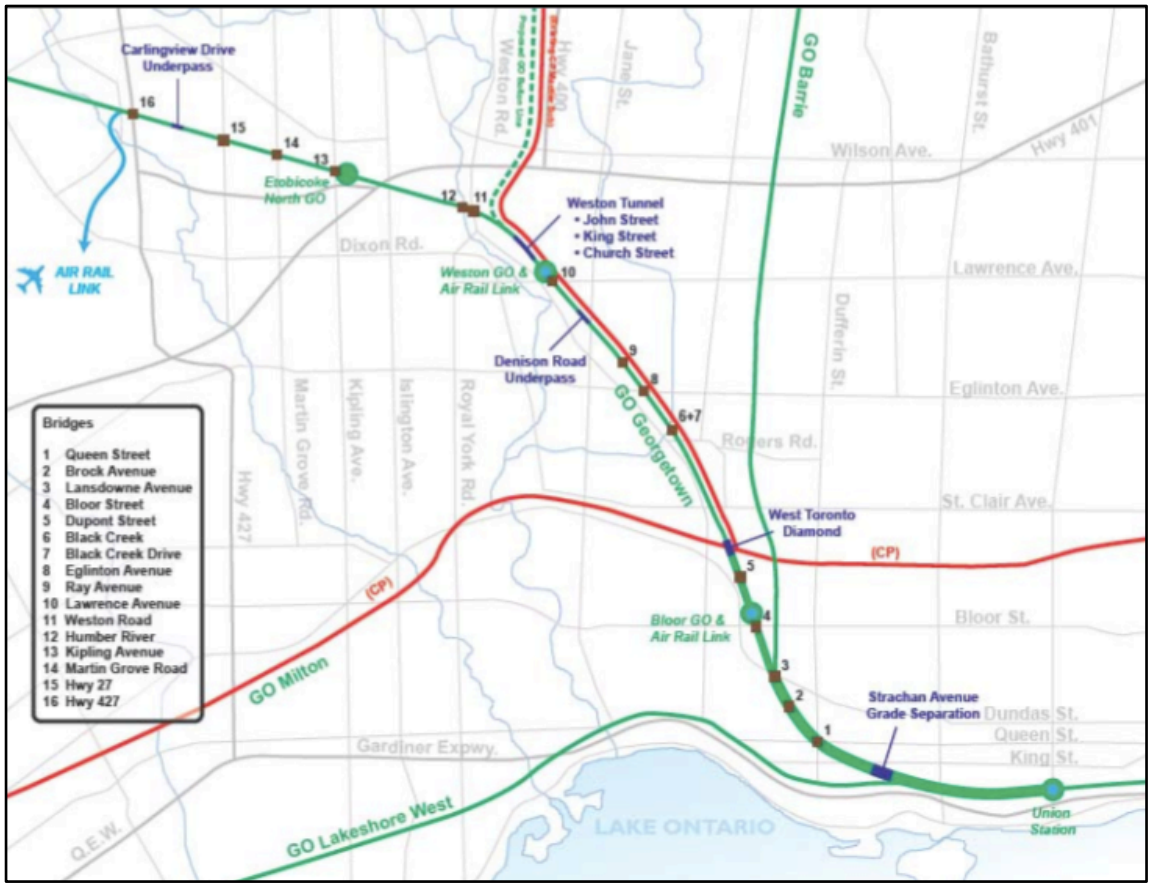
In July 2010, Metrolinx took over the responsibility to deliver the Air Rail Link (ARL) between Toronto's Union Station and Lester B. Pearson International Airport. From its inception in the mid-1990s, the ARL was identified as a key element in the future growth of the Greater Toronto and Hamilton Area (GTHA) (Transport Canada, 2007). Benefits of the project include, a reduction in congestion and air pollution, economic growth, and the filling of a gap in the regional transportation network (Metrolinx, 2011). Therefore, the capacity for the ARL to capture significant ridership is an important question to ask. Similarly, investigating aspects of the plan that may present a barrier to this is a crucial exercise. This research utilizes an established set of characteristics that influence mode share (percentage of riders compared to other modes) to identify both strengths and weaknesses and evaluate the planned ARL. The evaluation is used to answer the research question of this report: *Does the plan for Toronto's ARL represent a good airport rail link and what can be done to contribute to its success?* As indicated, the evaluation will inform recommendations for Metrolinx, the City of Toronto, and other local service providers to consider as they move forward with its construction.

Case Description

The vision for the ARL project has always been to develop a rapid transit link between two of the busiest transportation hubs in Canada. Originally planned as a

public-private partnership (Borges, 2006), the ARL is now the responsibility of Metrolinx, an agency of the Ontario government. It will be accommodated through track sharing along GO Transit's South Rail Corridor from Union Station to just past Highway-427 (**Figure 3.5**). A 3.3 kilometre spur line will then connect to Pearson Airport, shown in blue on the map. A spur line is a line constructed to connect the main line to another destination. After leaving Union Station, the ARL will stop at Bloor and Weston GO Stations before proceeding to its last stop at Pearson's Terminal 1 (GO Transit, 2011a). 140 two-car rail shuttles will make the trip approximately every 15 minutes for 20 hours a day, carrying as many as 5000 passengers per day within the first five years of operation (Mackenzie, 2010).

Figure 3.5: Map of Air Rail Link Project Route
Source: GO Transit, 2011



Evaluation Criteria and Summary of Evaluation

The planned ARL was evaluated against a set of criteria developed by Schank (1999) in an investigation of factors that influence mode share of airport rail links. He identified eleven, however to narrow the scope of this research, only the nine that considered fixed and design characteristics were included. Fixed characteristics are those that are permanent or very difficult to change, such as airport location, while design features are considered controllable, such as frequency of service. The following table illustrates the specific factors or evaluation criteria, as well as, provides a summary of the ARL's performance.

Table 4.2: Summary of Evaluation of the ARL Project

Criteria	Evaluation
1. Link provides low rail/auto time difference	●
2. Station located on-airport rather than off	●
3. Link effectively serves population and employment centres	⭘
4. Airport has a prevalence of short haul traffic and/or low-cost carriers	●
5. Airport is located close to downtown and other major trip generators	⭘
6. Link has high service frequency	●
7. Link is part of a modern, well-designed rail system	⭘
8. Link serves other areas besides downtown	⭘
9. Transit network works to the advantage of airport passengers	○

Legend
● = Meets or exceeds criteria
⭘ = Somewhat meets criteria
○ = Does not meet criteria

Conclusions & Recommendations

Within the scope and framework of this investigation, the planned ARL performs well. The attributes of the link, including its efficient travel time, high service frequency, convenient airport station location, and connection to an airport with ideal flight characteristics, make the link a good alternative to driving to the airport. However, the evaluation also found that the ARL's position as part of the wider public transit system of the City of Toronto and GTHA needs improvement. As such, the following five recommendations focus on the ARL's context within the wider public transit system and provide strategies to help achieve the goals and expected results of the plan.

1. *Create direct connections, via buses and light rail transit, from Bloor and Weston GO Stations to major employment and population centres throughout the region*
2. *Consider and plan for future extensions of the ARL*
3. *Rebrand public transit in the region*
4. *Include the ARL in the PRESTO integrated fare card system*
5. *Implement shared-ride service to the ARL station stops*

Further Research

Although not within the scope of this evaluation, further research into the impact of airport employees and alternative long-term funding sources for local service providers would be beneficial. Public-private partnerships, road-pricing, and regional cost sharing initiatives have the capacity to help Metrolinx and local service providers upgrade service quality, develop infrastructure, and target amenities to airport passengers.

ACKNOWLEDGEMENTS

Thanks to Ajay Agarwal for keeping this process relaxed and stress free. Your easygoing nature and ability to make me reflect by simply asking "why" are much appreciated.

Also to Kevin for his patience and support.

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CHAPTER 1: INTRODUCTION

1.1 Introduction

Since the mid-1990s an Air Rail Link (ARL) between Union Station in downtown Toronto and Lester B. Pearson International Airport, referred to as Pearson Airport herein, has been identified as a key element in the continued growth of the Greater Toronto and Hamilton Area (GTHA) (Transport Canada, 2007). The need for a direct connection between Pearson Airport and downtown Toronto is clearly shown by the estimated 5 million people that make the trip between these two destinations annually (Pearson Today, 2009). This is compounded by the fact that demand for air travel in the region is expected to grow substantially over the next twenty years (Taking Flight, 2008). According to Metrolinx (2011), the GTHA's Regional Transportation Authority, building a link will not only reduce traffic congestion and air pollution, but also stimulate economic growth and fill a gap in the City and Region's transportation offerings. At this stage in the process, a project plan, Environmental Assessment, community consultation, and Electrification Study have all been undertaken, in hopes that the ARL will be operational for the 2015 Pan Am Games (Metrolinx, 2011).

Dedicated airport rail links are relatively new to Canada, with the Canada Line in Vancouver as the only operational example. The United States, however, has many examples that provide a key source for investigation. A glaring shortfall of these U.S. links is their inability to attract a significant percentage of airport passengers (mode share) compared to their European counterparts (Schank, 1999). Research from Transport Canada shows that prominent European examples including Heathrow, Zurich,

Oslo, and Stockholm are able to attract over 30% of airport passengers, while North American examples typically attract below 15% (Borges, 2006). In an effort to understand why this is the case, Schank (1999) investigated 13 airport rail links across the U.S. He identified relationships between specific characteristics of the links and their resultant mode shares. The factors he identified were used to predict mode share for the planned San Juan airport rail link and to suggest changes to its plan that would potentially increase mode share.

This report builds on Schank's analysis by applying his factors to a Canadian context. Rather than using the factors to predict future mode share of the ARL, they are used to identify strengths and weaknesses of the plan and inform recommendations for Metrolinx to consider as it moves forward with construction.

1.2 The Problem

Two underlying issues are key to the investigation of airport rail links. Firstly, airports cannot reasonably be located within the downtown core. Space requirements force them out to the fringe. In the case of Toronto, Toronto Island Airport (Billy Bishop) is discounted because although technically located downtown, it is only accessible by Ferry. Additionally, its ability to compete with Pearson Airport in terms of short haul flights is limited, due to island space restrictions. Secondly, pedestrian access to fringe airports is impractical (Schank, 1999). This results in most passengers being transported to and from the airport in personal vehicles or taxis, most often during peak hours (Schank, 1999). Public transit access from downtown Toronto to Pearson Airport is limited, making vehicular travel all the more appealing and contributing to traffic

congestion on major highways and roads in the area. Schank (1999) provides a warning, saying that congestion and time delays have the same isolating and negative economic effects on the city as an airport located 100 miles away. Compound this with increased air pollution and passenger stress (Schank, 1999) and it becomes critical that airport authorities and cities develop strategies to encourage use of public transit and, as a result, reduce ground access traffic (Gosling, 1997).

Public transit options currently providing service to Pearson Airport are described in **Table 1.1** and mapped in **Figures 1.1, 1.2, 1.3, and 1.4**. To put these figures in context a base map of the entire public transit system is provided in **Appendix A**. As aforementioned, public transit options to get to Pearson Airport are limited. Aside from the 192 Airport Rocket bus route, these options have significant travel times. Even the 192 Airport Rocket is deceiving because it picks up passengers at Kipling Subway Station, almost a 25-minute ride from downtown Toronto, making the entire trip approximately 50 minutes. This does not account for transit time delays.

In the face of inefficient public transit options, airport rail links provide a stable and consistent form of access that serves to reduce the number of cars on the road and provide an attractive option for passengers (Schank, 1999; Eichinger and Knorr, 2009). Unfortunately, within the United States, use of existing airport rail links is weak compared to those in other countries (Schank, 1999; Borges, 2006). In order to capture significant mode share, air rail links have the challenge of meeting the needs of passengers better than alternative modes and will only be profitable if a critical mass is met (Eichinger and Knorr, 2009). This raises questions about whether or not Toronto can

buck the American trend, becoming the research question for this report: *Does the plan for Toronto's ARL represent a good airport rail link and what can be done to contribute to its success?*

1.3 Significance of Report

This evaluation attempts to contribute to a relatively small, existing body of knowledge about Canadian airport rail links and stands as a source of information for planners in the development of other such links across Canada. Specifically, it serves as a tool for transportation and airport planners and politicians within the GTHA in the development of policies that may contribute to increases in airport rail link ridership. As Metrolinx moves forward with its Regional Transportation Plan, *The Big Move* and the ARL becomes integrated within the wider GTHA transportation system, these recommendations will become increasingly important.

1.4 Report Structure

Following this introduction, Chapter 2 presents the research methodology. Chapter 3 presents background information into Toronto's public transit system including governance, regional connections, and policy rationale of the ARL. It also outlines a chronology and case description of the project. Chapter 4 presents an evaluation of the ARL against a set of factors that influence airport rail link mode share and therefore illustrate a "good" link. This evaluation will directly inform the conclusions and policy recommendations made in Chapter 5. Chapter 6 presents a possible area for further research.

Table 1.1: Current Public Transit Routes to Pearson Airport
Source: TTC, 2011

Route Name	Description	Service Hours	Approx. Travel Time
192 Airport Rocket	Bus service from Kipling subway station	-5:30 a.m. – 2:00 a.m. -7 day/wk	20-25 minutes
58A Malton	Bus service from Lawrence West Station	-5:00 a.m. until 1:00 a.m. -7 days/wk	60 minutes
300A Bloor-Danforth	Bus service from Bloor-Danforth corridor	-2:00 a.m. – 5:00 a.m. -7 days/wk	45 minutes
307 Eglinton West	Bus service from Yonge and Eglinton	-1:30 a.m. – 5:00 a.m. -7 days/wk	45 minutes

Figure 1.1: 192 Airport Rocket Route Map
Source: TTC, 2011

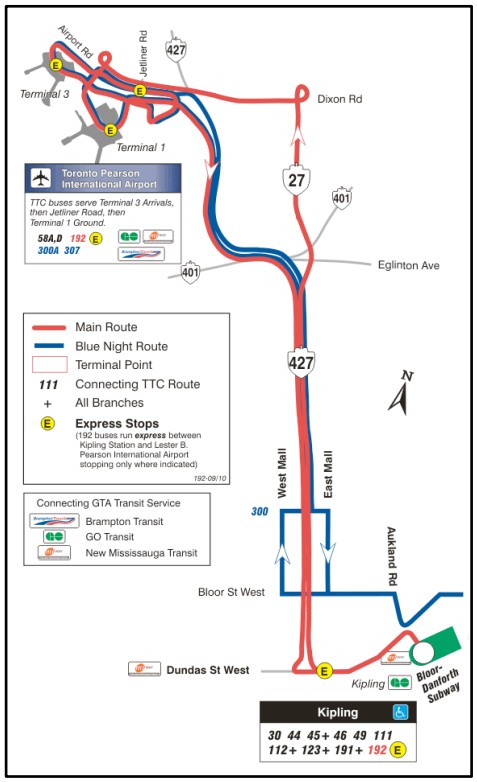


Figure 1.2: 58A Malton Route Map
Source: TTC, 2011

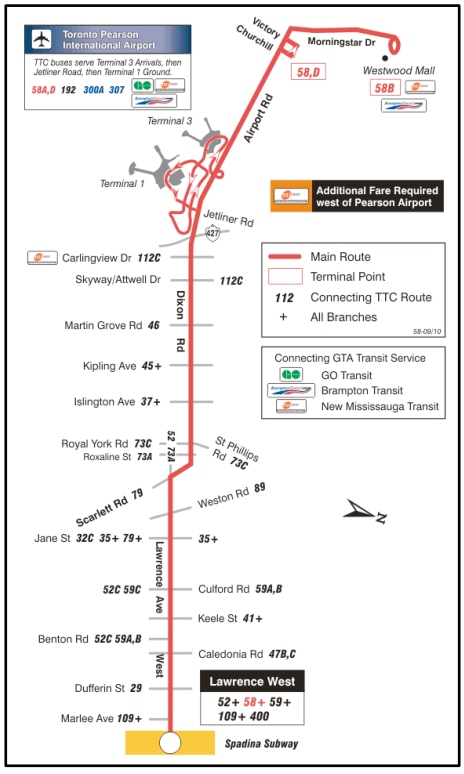


Figure 1.3: 300A Bloor-Danforth Route Map
Source: TTC, 2011

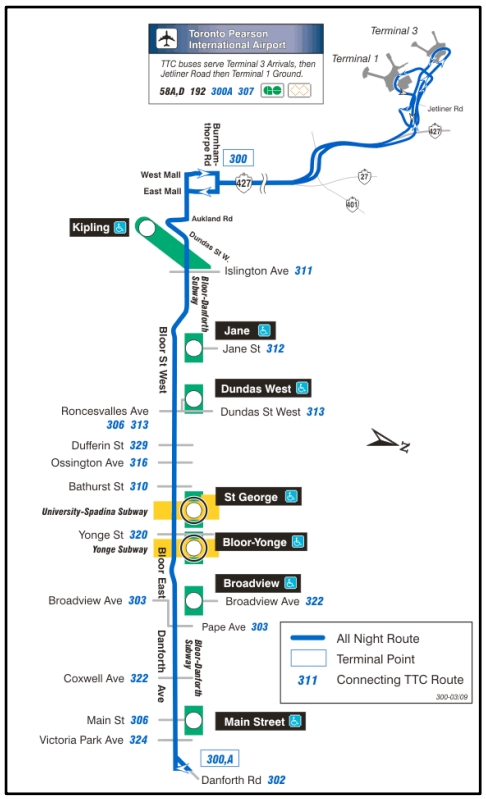
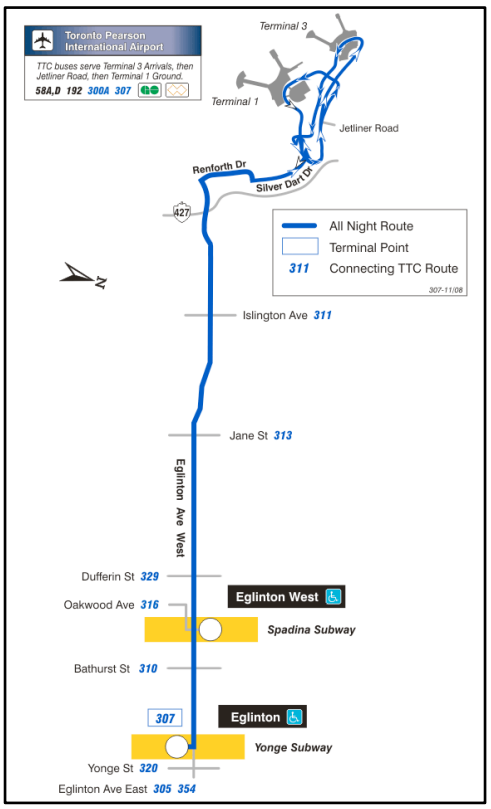


Figure 1.4: 307 Eglinton West Route Map
Source: TTC, 2011



CHAPTER 2: METHODOLOGY

2.1 General Approach

Using an established set of criteria for analysis, a case study approach is employed for this research. This particular research strategy is used because it focuses on an in-depth understanding of one single situation and also because the case itself is of special interest (Eisenhardt, 1989). The relative novelty and innovative nature of airport rail links in Canada warrant this choice of method.

2.2 Evaluation Criteria: Factors That Influence Mode Share

The criteria used for this evaluation were interpreted from previous work completed by Schank (1999). Developed from an investigation of 13 U.S. airport rail links, he suggests eleven key characteristics necessary to attract significant airport passengers. Recognizing that the best performing airport rail links do not always excel in every category and that the worst performing links can have excellent qualities, Schank (1999) suggests that new links should meet most factors and be exceptional in others. Using his characteristics as criteria, the plan for Toronto's ARL will be evaluated, exposing the strengths and weaknesses of the plan.

In order to narrow the scope of this research, only characteristics that consider the fixed and design features of links will be considered. Fixed features are those that are permanent or very difficult to change, such as airport location, while design features are considered controllable, such as frequency of service. The following provides a list of

Schank's (1999) characteristics and explains each using his findings as well as those of other academics.

1. Link provides a low rail/auto time difference

Any air traveler will say that time is important. Harvey (1986) supports this statement saying, that when deciding on mode of access to the airport, time, cost, and convenience all play important roles. Considering time, he attributes his conclusions to three key things. There appears to be a premium placed on time by affluent air travelers, there is significant inconvenience associated with late arrival at the airport, and a short access trip helps to mitigate the length of air journeys (Harvey, 1986).

It stands to reason then, that passengers may be more likely to choose an airport rail link if they know it will not take them much longer than an automobile to make the trip. To substantiate this, Schank (1999) found that airport rail links that provided travel times most comparable to personal vehicles (at non-peak hours) have the highest mode shares. If the difference between each mode is ten minutes or less it may not have an effect, but when greater than 20 minutes, mode share significantly decreases. Auto travel times during peak hours present an interesting consideration. Intuitively, peak hour travel may increase auto travel times substantially, contributing to increased use of public transit options to access the airport.

Associated with a low rail/auto time difference is the concept of reliability. Driving to the airport in a personal vehicle is not reliable in terms of time. Due to unexpected circumstances such as congestion, construction, or weather it may not take the same amount of time each trip. Additional time must therefore be built into each trip

to account for these situations. An airport rail link however, provides for increased reliability because trip time is much more consistent.

2. Station located on-airport rather than off

In cases where the airport is serviced by shuttles from a station located off airport, rather than on, Schank (1999) found lower mode shares. He attributes this to two main reasons. Having to transfer to a shuttle in order to get to the airport increases travel time and hassle for the passenger because, unless off-site check in is possible, they must also transfer their baggage. Also, off-airport stations create a disconnection between the plane and train and travel is therefore less seamless. These may deter passengers from utilizing the service.

3. Link effectively serves population and employment centres

There are spatial effects on the provision of public transportation (Murray *et al*. 1998). This is clear when considering access as a fundamental component of such service because it provides the opportunity to use the service (Murray *et al*. 1998). Therefore, Murray *et al*. (1998) discuss ensuring suitable service coverage as an important public transit objective. The airport rail links that Schank (1999) investigated served only a fraction of their area's population. He expands this observation to conclude that no U.S. airport rail link effectively serves their metropolitan area employment centres or population and believes this contributes to their inability to capture significant mode share. Similarly, Mandle *et al*. (2000) believe that rail service that serves a large catchment area results in a larger potential market. Therefore, an air rail link that is part of a rail system that reaches a significant portion of the population and has extensive

regional coverage may result in increased use of the link. An important consideration however, is the realistic ability for transportation authorities to provide such wide reaching service in the face of increasing sprawl development and increased auto dependence (Murray *et al*., 1998; Mandle *et al*., 2000).

4. Airport has a prevalence of short haul traffic and/or low-cost carriers

Type of air travel is likely to influence use of an airport rail link because each attracts different kinds of passengers (Schank, 1999). For example, Chicago's Midway Airport has only domestic and short-haul routes and has higher mode share compared to Chicago's O'Hare Airport which serves short and long-distance domestic and international traffic (Schank, 1999). A further comparison between New York's JFK and Oakland emphasizes this point. Schank (1999) found that JFK has a comparatively low mode share to Oakland. These airports service almost exclusively long-haul traffic and domestic traffic respectively.

Long-haul air traffic, serving international and vacation destinations, is typically associated with longer stays and more baggage (Schank, 1999). In a study of the differences between leisure and business travelers, Dresner (2006), found that leisure travelers are more likely to check two to four bags when they fly. Mandle *et al*. (2000) indicated that these family oriented trips result in a decreased likelihood of utilizing public transit to get to the airport. The amount of baggage carried presents a severe impediment that has a negative impact on mode choice to get to the airport (Coogan, 2008; Schank, 1999). Not everyone can live directly adjacent to a public transit facility, meaning that a walk is typically required to initially get into the system. Not only is

hauling baggage an inconvenience, but also seasonal weather conditions can make for a horrible journey. Additionally, rail systems designed for the commuter do not meet the needs of air passengers with large baggage in terms of space and ease of use (Coogan, 2008).

Business and short-break travel are gaining ground in the domestic market (Taking Flight, 2008; Hudson and Ritchie, 2002). According to Dresner (2006), these short stay trips are typically associated with no bags or only one bag. Passengers with little to no baggage are more likely to use rail (Mandle *et al*. 2000). Additionally, business travelers are generally more concerned about time efficiency and consistency when travelling to the airport than leisure travelers (Harvey, 1986). Therefore, a prevalence of short-haul flights that attract business and short-break travel may positively influence mode share to the airport.

Within this criterion, Schank (1999) also identifies a prevalence of low cost carriers as a possible determinant of mode share to the airport. He suggests that cost sensitive passengers traveling on low fare domestic airlines may be more willing to utilize public transit to get to the airport (Schank, 1999). It is reasonable to assume that those looking to save money on flights may not want to pay for a taxi to the airport or gas and parking for their personal vehicle. This however, is based on the airport rail link fare being less than either the taxi or personal vehicle option.

5. Airport is located close to downtown and other major trip generators

As aforementioned, Schank (1999) found that there is a strong relationship between how long it takes to get to the downtown core from the airport and the popularity of airport rail links, meaning that the shortest times typically have the highest mode shares. Location of the airport in relation to downtown plays a role in influencing this travel time, with links connecting distant airports showing very low ridership (Schank, 1999). Additionally, passengers generally avoid airport rail links if the trip is over 45 minutes. Schank (1999) also found that a perfect location in relation to downtown does not always guarantee a successful airport rail link, if it is not connected to other major trip generators. Therefore, the airport rail link must either sacrifice travel time by making frequent stops to capitalize on flow of people at other major trip generators, or not stop at all and risk losing that connectivity.

6. Link provides high service frequency

Identifying late Sunday as peak travel time for air passengers, but a quiet period for overall transit ridership, Schank (1999) highlights a key difference between the transit needs of daily commuters and airport passengers. He goes on to say that no U.S. airport rail link provides high service frequency with consistent headways (distance between vehicles) throughout the day. In an investigation of airport passenger mode choice, Mandle *et al*. (2000) indicate that rail service waiting times of 10 minutes are preferred, while the availability of late night and weekend service is also important. Airport rail link service frequency must therefore better reflect the timing needs of airport passengers in order to encourage ridership.

7. Link is part of a modern, well-designed system

As air rail links do not operate in isolation, a modern, well-designed system can play a significant role in positively influencing use of the link. Alternatively, one that is poorly designed and pre-dates the airport rail link it serves can negatively influence use (Schank, 1999). Therefore, designing an airport rail link from scratch is desirable over creating a link from a previously constructed rail line (Schank, 1999). Some characteristics of a modern system are that every line connects to every other line and there is an on-site airport station stop. Similarly, more than one line connecting to the airport as a valuable design feature (Schank, 1999). These features serve to increase the number of people who have direct access to the airport rail link and decrease the number who must go out of their way to use the link (Schank, 1999).

On the operational side, a modern, well-designed system has high service quality. Service quality can include things such as convenience, travel time, comfort, information access, reliability, and safety (Levinson, 1992). Van Vugt *et al*. (1995) found that an important determinant of public transit use is the difference in quality of cars versus the quality of public transit. Therefore, the aforementioned aspects of service quality can help to mitigate the perceived difference in quality of cars and therefore influence ridership.

8. Link serves other areas besides downtown

Although an airport rail link may be fast, if it only provides direct access to downtown, passengers traveling to other destinations throughout the City are in for a long and inconvenient ride. Upon leaving the airport rail link, passengers must use other

forms of transport to finish their trip because, compared to personal vehicles and taxis, airport rail links do not represent a door-to-door trip. The inconvenience of these additional transfers may influence decisions to use the link. A link that has stops en route offers many destinations, while also providing reasonable direct access to downtown, potentially reducing this inconvenience (Schank, 1999).

9. Transit network works to the advantage of airport passengers

Arguably, the most important characteristic of an airport rail link's ability to capture significant ridership is the capacity of the transit network to work with, rather than against, airport passengers. As Schank (1999) says, it is not enough to just have an extensive system; it must also be efficient for airport passengers. He provides examples of New York and Philadelphia to illustrate this. Airport rail links in both cities experience low ridership, while their associated transit systems are widely used. He argues that each network is designed to cater to the daily commuter not the airport passenger, resulting in low link ridership.

Boyd and Caton (2001) identify the connection between air and rail travel as a matter of both convenience and necessity. They conclude that the entire intermodal system should function to allow a passenger to seamlessly travel from one location to another, using different modes, on the same ticket. Additionally, the trip should be, "tailored to meet the passenger's needs from travel information, cost, scheduling, comfort, and other considerations" (p. 7). Specific initiatives in this regard include, but are not limited to; baggage check-in at stations; information systems that display airline flight information; passenger amenities like telephones, benches, and vending machines;

and passive and active security features (Boyd and Caton, 2001). Overall, transit connections to airports, including networks of buses and subways, must be as attractive as possible to persuade people to use them. Architectural style and the physical provision of things like airline ticketing and check in are also ways to accomplish this goal (Sharp, 2004).

2.3 Information and Data Collection

Information for this report can be separated into four main categories; evaluation criteria, information about Pearson Airport and the Greater Toronto Area, ARL project specific information, and supplementary information. A list of factors that strongly influence mode share of airport rail links, developed by Schank (1999), forms the evaluation criteria used. Taking Flight: The Airport Master Plan 2008-2030 and technical reports from the TTC provide necessary information about Pearson Airport and the GTA including, passenger statistics, land-use and capital projects, and transit mode to the airport. Project specific information comes from a combination of technical reports from Metrolinx and community organization and project websites. Finally, foundational information from various academic sources supplements this evaluation.

In addition to the aforementioned document review, quantitative data and qualitative observations were used in order to complete a comprehensive evaluation of the ARL. Quantitative data analysis was used to classify flights as long or short haul. The distance from Pearson Airport to each destination and the approximate flight time was determined using an online Flight Network travel calculator. Each destination was then grouped and displayed graphically based on approximate flight time.

Observations about the condition of Toronto's current public transit system are supplemented by the author's personal experiences. Daily use of the system for four months during the summer of 2010 facilitated an understanding of how the system functions. Formal observations were conducted on two occasions; February 12, 2011; and February 26, 2011. On these occasions the author travelled to Toronto and rode the subway system and select bus and streetcar routes. Notes were taken about the condition of the stations, amenities, and overall customer service. These observations provide evidence as to the current condition of Toronto's public transit system.

2.4 Case Selection

The author's interest in the ARL started during an internship with the Ontario Ministry of Finance. Internship work was largely focused on the governance and regional linkages associated with subway building. Having recently shifted to provincial control from a public-private partnership and providing a much needed transportation connection, the ARL provides a natural research progression.

Although a personal desire to learn more about the ARL was the impetus for this research, the choice of case certainly has implications for the wider planning profession. As one of only two dedicated airport rail links in Canada, the ARL can be considered a "hot topic" with various interests at stake. Its successes or failures will have significant impacts on how Canadian airport rail links are planned in the future. Identifying potential areas of weakness in the plan and seeing how recommendations made at this stage, if applied, mitigate such weaknesses provides a model from which planners can learn.

CHAPTER 3: BACKGROUND

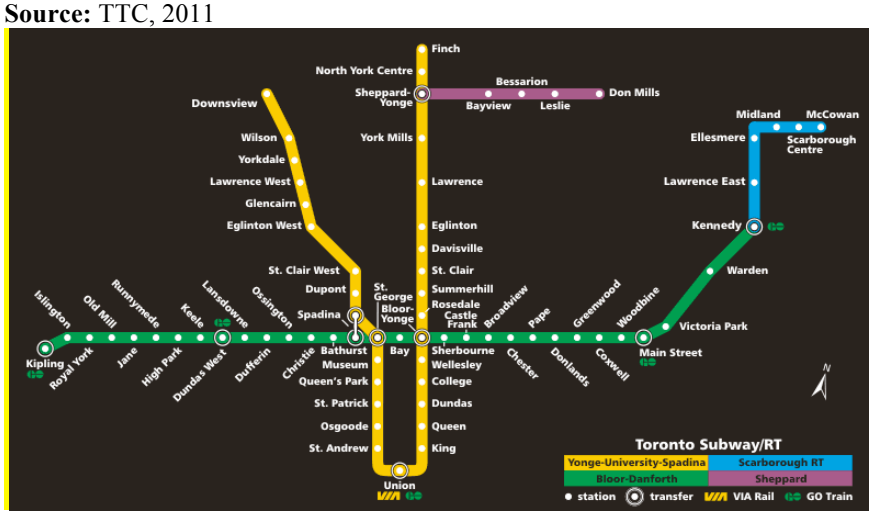
The following chapter outlines the context and background information for this research. A brief history of public transit in Toronto is provided in order to frame this research into the context of the wider public transit system. Although the ARL and public transit system are governed separately, they will not function in isolation. Therefore, it is crucial to also understand the governance, regional connections, and policy context of the project prior to outlining a detailed case description.

3.1 Public Transit in Toronto

In 1920, the Toronto Transportation Commission, later renamed the Toronto Transit Commission (TTC), was created via a Provincial mandate. Its first order of business was to amalgamate nine existing fare systems into one citywide public transit system, which it did in 1921. During World War II, public transit in Toronto prospered and by 1953 the TTC had added 35 new routes and extended 20 more (TTC, 2010a).

The inability for Toronto's city streets to cope with increasing vehicular traffic and severe traffic flow problems required the construction of Canada's first subway system in 1949. **Figure 3.1** illustrates the subway system as it looks today. The subway was highly regarded for its special soundproofing features and automatic electrical signaling system, putting Toronto in line with other world capitals. Throughout construction, safety, cleanliness, and convenience were the guiding principles of the subway and the TTC maintains these principles today (TTC, 2010a).

Figure 3.1: Toronto's Subway System Map
Source: TTC, 2011



Currently, Toronto's public transit system is comprised of four subway lines, 11 streetcar routes, and more than 140 bus routes (**Appendix A**). It serves approximately 460 million customers a year with approximately 1.5 million on a typical weekday. Rail alone accounts for approximately 800,000 of those passengers a day (TTC, 2003). The TTC boasts that with this combination of options it is able to provide service within a five to seven minute walk of most areas within the City of Toronto (TTC, 2011).

3.2 Regional Connections

With a population of over 6 million, the GTHA is one of the largest and fastest growing urban regions in North America, expected to reach 8.6 million people in 2031 (Metrolinx, 2008). The region is comprised of two single tier municipalities, four regional municipalities, and 24 lower tier municipalities (**Figure 3.2**) (Metrolinx, 2008). The pattern of development throughout the GTHA is one that focuses on low-density, dispersed development, which has resulted in a region designed for cars and the congestion that comes with that.

Public transit in the Region is made up of nine different local transit service providers and one regional transit provider, GO Transit (**Table 3.1**) (Metrolinx, 2008). A VIA Rail corridor also runs through the GTHA, providing a connection to passengers from all over Canada. However, this is not considered a public transit option. These systems are all operated under different fare systems and with different mandates and organizational structure, making commuting throughout the GTHA frustrating and inconvenient. Metrolinx (2008) cites that one in four trips within the GTHA cross a regional boundary, making the use of public transit potentially costly for passengers (Metrolinx, 2008). Similarly, years of under-investment have resulted in a regional system that has not kept pace with population growth (Metrolinx, 2008).

Figure 3.2: Greater Toronto and Hamilton Area (GTHA)
Source: Metrolinx, 2008

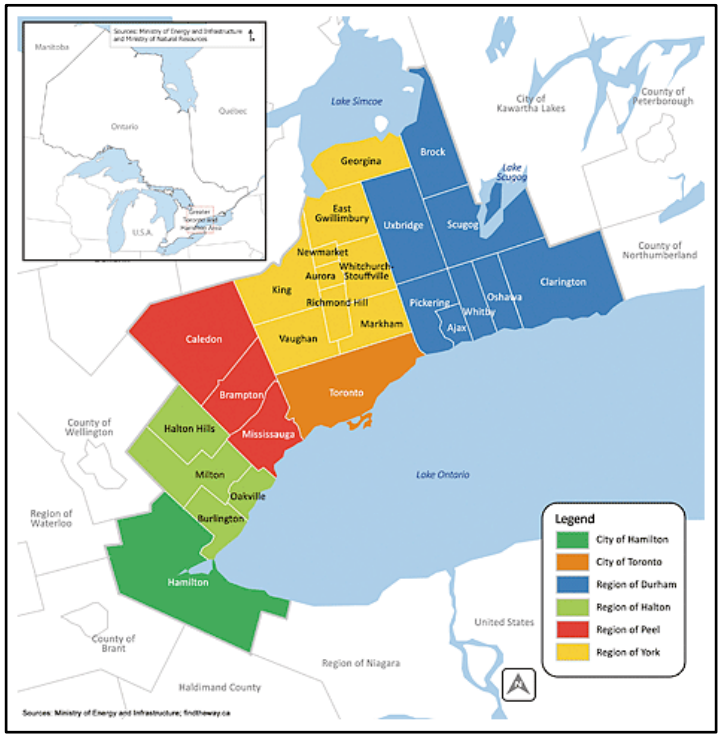


Table 3.1: Public Transit Providers in the GTHA
Source: Metrolinx, 2008

Local	Regional
•Toronto Transit Commission (TTC) •York Region Transit •Oakville Transit •Burlington Transit •Brampton Transit •Hamilton Street Railway Co. •Durham Region Transit •Mississauga Transit •Milton Transit	•Go Transit

3.3 Governance

The initial plan for the ARL was to have it designed, built, financed, and operated through a public-private partnership in order to avoid the use of public funds (Borges, 2006). However, in 2010, Metrolinx, an agency of the Province, took over the plan. The following provides a brief overview of Metrolinx and its mandate.

In 2006, The Greater Toronto Transportation Authority (GTTA) was established via the Provincial *Greater Toronto Transportation Authority Act*. The GTTA was charged with the management of transportation planning within the GTHA. Within a year, it adopted the name Metrolinx and the *Greater Toronto Transportation Authority Act* was amended to the *Metrolinx Act*. Formally accountable to the Province through the Minister of Transportation, Metrolinx's first initiative was to create a Regional Transportation Plan (*The Big Move*) that would see the establishment of a coordinated public transit plan for the GTHA. In 2009, the Ontario government introduced legislation to merge GO Transit and Metrolinx, all under the name Metrolinx (Prichard, 2010).

3.4 Policy Rationale

Although the ARL has been on the books since the mid-1990s, it was not formalized into planning policy until 2006. The following section, charts the policy evolution of the ARL.

Growth Plan for the Greater Golden Horseshoe, 2006

The *Growth Plan for the Greater Golden Horseshoe, 2006* was prepared under the *Places to Grow Act, 2005* and builds on the *Greenbelt Plan*, *Planning Act*, and *Provincial Policy Statement, 2005*. It is a 25-year plant that provides a framework for growth management within the Greater Golden Horseshoe. Key aims within the Government of Ontario's vision include;

- revitalizing downtowns to become vibrant and convenient centres;
- creating complete communities that offer more options for living, working learning, shopping, and playing;
- providing housing options to meet the needs of people at any age;
- curbing sprawl and protect farmland and green spaces; and
- reducing traffic gridlock by improving access to a greater range of transportation options.

The focus of the final aim is providing alternative transportation options to reduce traffic congestion and is key in the context of the ARL (Places to Grow, 2006). This is the foundation for the development of a more efficient public transit connection between downtown Toronto and Pearson Airport found in subsequent policy documents.

MoveOntario 2020

From the *Growth Plan for the Greater Golden Horseshoe, 2006*, the Province recognized the need to develop a sustainable transportation system that encourages the use of public transit. They created *MoveOntario 2020* as a multi-year rapid transit plan for the GTHA with an overarching aim to create jobs and investment by reducing congestion. The plan represents the largest transit investment in Canadian history by identifying 52 projects that amount to approximately 900 kilometres of new or improved rapid transit. The Pearson ARL to Union Station is one of these 52 projects (MoveOntario 2020, 2007).

The Big Move, 2008

MoveOntario 2020 identified Metrolinx as the governing body in charge of overseeing the entire project. At the time of its announcement, *MoveOntario 2020* charged Metrolinx with finalizing the plan by 2008. They did so in their 2008 Regional Transportation Plan, *The Big Move*. Within *The Big Move*, Metrolinx formalized the 52 key transit infrastructure projects (**Figure 3.3**) and identified 15 as priority rapid transit projects, with nine "big moves." Number seven on the list of big moves is the ARL, indicating its priority at the Provincial level (Metrolinx, 2008).