



Air Rail Link

Business Strategy & Plan and Customer Experience

Summarizing Customer Experience Best Practices



April 30, 2012



METROLINX
LINKING PEOPLE TO PLACES • ON Y VA

An agency of the Government of Ontario

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Document Background, Context and Purpose

Background and Context

- In December 2011, work was completed by CGA and Metrolinx to identify leading practices of global air rail links (ARLs):
 - CGA defined the leading practices for 9 ARLs
 - Metrolinx defined the leading practices for 17 ARLs
- Deloitte conducted additional primary and secondary customer experience research in order to fill gaps; this research highlights the existing practices of global ARLs as well as near-term plans for change to existing services (by end of 2012)
- Analysis was also conducted to outline the key differentiating factors of leading ARLs against other competing methods of transportation

Document Purpose

- This document leverages existing and new research and consolidates findings into three distinct sections that encapsulate global best practices:
 1. **Comparison of Air Rail Links vs. Other Modes of Transportation:** Presents a high-level comparison of ARLs to other modes of transportation as well as a comparison of leading ARLs to other commuter and metro train services to the airport
 2. **Global Best Practices:** Compiles and supplements existing research with primary / secondary research and highlights two best practices across each touchpoint in the customer lifecycle
 3. **Air Rail Link Landscape Comparisons:** Compiles and supplements existing research with primary / secondary research, and presents a detailed comparison of leading air rail links across a variety of options at each touchpoint within the customer lifecycle

Air Rail Links vs. Other Modes of Transportation

High-level Overview

Air Rail Links provide a host of advantages to other modes of transportation

ARLs have gained considerable traction and popularity amongst travellers in recent years due to their ability to offer eco-friendly, convenient, and fast transport from airports to downtown city locations

An Air Rail Link in Toronto



- ARLs offer fast, convenient, eco-friendly services for travellers looking for a reliable method of transport from an airport to a city centre – they may also provide an enhanced customer experience through a wide array of amenities and services
- As such, leading cities are increasingly establishing their own ARLs, to better serve the needs of their residents / visitors by providing a direct and reliable method of transportation between their city centre and airport
- In anticipation of the 2015 Pan Am games, Metrolinx plans to have a fully operational ARL that connects visitors from Toronto Pearson Airport to Union Station, with stops at Bloor and Weston GO stations
- The Metrolinx ARL will place Toronto alongside global leaders in best in class ARLs by offering a differentiated, memorable experience

Advantages of Air Rail Links Over Other Modes of Transportation

Faster

Often provide direct travel from a city centre to the airport, unlike public transit which may make multiple and frequent stops
Not subject to the traffic jams, which could potentially slow down a journey via taxis, limos, and bus

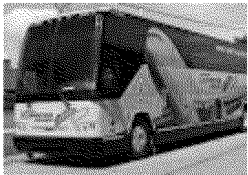
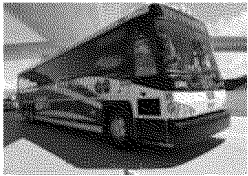
More reliable and convenient

Predictable schedule and departure times
ARL trains tend to move at higher speeds than regular public transit
Stations are usually situated in convenient and easy to find locations
commuter trains
in the city and airport.

Enhanced Customer Experience

- ✓ Wide array of amenities are available (e.g., Wi-Fi, television screens display weather and news, FIDS, onboard washrooms)
- ✓ Tend to adopt a 'customer first' attitude, while other modes of transport tend to provide an agnostic customer experience (e.g.,

There are a variety of transportation options between Toronto Pearson and Downtown, each option offering a unique value proposition

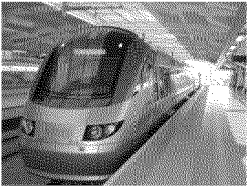
Travel Method	Value Proposition	Trip Duration / Frequency	Price*
 Airport Limo	- Door-to-door service - Comfortable / spacious seating - Privacy - Assistance with baggage	~30-60 minute trip - On demand	~\$60.00 + tip
 Taxi	- Door-to-door service - Privacy - Assistance with baggage	~30-60 minute trip - On demand	~\$53.00 + tip
 Shuttle Bus Airport Express	- Affordable alternative to taxi - Comfortable seating - Wi-Fi, laptop plug-ins - Onboard bathroom	~40-60 minute trip 30 minute frequency	\$23.95
 TTC + GO Subway and Go Bus	- Affordable alternative to taxi / shuttle bus - Frequent subway departure - Customers can use existing passes	~25-60 minute trip ~60 minute bus frequency ~4 minute subway frequency	\$8.00
 TTC Subway and Express Bus	- Most affordable method to get to / from airport - Frequent train and bus departure - Customers can use existing passes	~75-90 minute trip ~10 minute bus frequency ~4 minute subway frequency	\$3.00

A customer's selection often depends on a multitude of factors including price, level of comfort, and trip duration. The development of Toronto's ARL must take into account these alternative transportation options.

*One way, Adult, From Union Station to Pearson Airport

Leading Air Rail Links offer a heightened customer experience compared to other types of rail transport that provide service to the airport

There are ~224 rail links to 175 airports around the world;¹ leading ARLs are often differentiated from other trains that provide services to the airport through a number of attributes

Leading Air Rail Links		Other Commuter and Metro Trains	
	Leading ARLs are characterized by fast, convenient, comfortable service, often providing valued amenities and services beyond the typical commuter or metro rail experience		Other trains that provide services between city centres and airports tend to be slower, with more frequent stops, and less of a focus on the end-to-end customer experience
Fast	Tend to be high speed trains that move at a faster speed than most commuter trains and from airport terminals to downtown city centre locations. Heightened levels of comfort for travellers (e.g., more spacious, comfortable seating) (e.g., Wi-Fi, television screens display weather and news, FIDS, onboard washrooms)	Affordable	Usually cheaper than differentiated ARLs
Convenient		Slower	Often associated with part of a city's public transit system, requires riders to switch train lines, or transportation modes (e.g. airport shuttle)
Comfortable		Less Comfortable	Usually no designated areas to board luggage
Amenities		Lack of Amenities	Primarily in the service of transporting people from station to station

Summary of ARLs Included in this Analysis

- Metrolinx is seeking to provide a differentiated, memorable customer experience; this document reviews the best practices of seven leading ARLs to help inform the current standards of best-in class customer experience



Heathrow Express – London
Best Rail Operator - 2011 Business Travel Awards



KLIA Ekspres Train – Kuala Lumpur
Winner of Best Customer Service- Global AirRail Award



MTR – Hong Kong
Finalist in Best AirRail Link & Winner of partnership of the year - Global AirRail Award



Gautrain – Johannesburg
2010 winner of best New Service initiative - Global AirRail Award



Arlanda Express – Stockholm
Winner Train design of the year 2011- Global AirRail Award

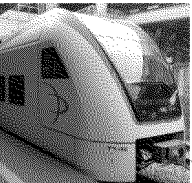


Narita Express – Tokyo
Best Japanese Train of the Year 2010



Rhônexpress – Lyon
Finalist in New Service of the Year 2011- Global AirRail Award

Key Facts of Comparator ARLs (1 of 2)

ARL	Operations	Ownership
 Heathrow Express 	- Trip Time: 15 mins – 27 mins (depending on terminal) - Frequency: Every 15 mins - Number of Stops: 2* - Hours of Operation: 5:10am - 11:42pm	- Privately-owned - Owned by Heathrow Express Operating Authority (wholly owned subsidiary of BAA)
 Gautrain 	- Trip Time: 15 mins (9 mins to Marlboro) - Frequency: Every 12 mins (peak); 20-30 mins (off-peak) - Number of Stops: 3* - Hours of Operation: 5:30am - 8:30pm	- Public Private Partnership - Owned by Gauteng Provincial Government & Bombela - Gautrain Management Agency (Provincial government agency reporting to the Gauteng MEC for Roads and Transport)
 Rhônexpress 	- Trip Time: 29 mins - Frequency: Every 15 mins (peak); 30 mins (off-peak) - Number of Stops: 4* - Hours of Operation: 5am - 12am	- Public Private Partnership - Conseil general of the Rhone & Rhônexpress (6 companies including, VINCI, Veolia, Vossloh, Cegelec, Caisse des depots)
 Airport Express 	- Trip Time: 24 mins - Frequency: Every 10 mins - Number of Stops: 5* - Hours of Operation: 5:50am - 1:15am	- Public and Private Ownership - Owned by Hong Kong Special Administrative Region Government (77%), private investors traded on Hong Kong Stock Exchange (23%)
 KLIA Ekspres 	- Trip Time: 28 mins - Frequency: Every 15 mins (peak); 20 mins (off-peak) - Number of Stops: 2* - Hours of Operation: 4:33am - 1:03am	- Build-Operate-Transfer - Operated by Express Rail Link Sdn. Bhd. – owned by YTL Corporate Berhad (50%), Lembaga Tabung Haji Bhd (40%), Trisilco Equity (10%) 30-year concession to Express Rail Link Sdn Bhd

*Number of stops includes point of embarkment and airport terminal

Key Facts of Comparator ARLs (2 of 2)

ARL	Operations	Ownership
	Arlanda Express  ▪ Trip Time: 20 mins ▪ Frequency: Every 9 mins (peak); 15 / 30 mins (off-peak / late evening) ▪ Number of Stops: 2* ▪ Hours of Operation: 4:35am - 12:35am	▪ Public Private Partnership ▪ A-Train AB, 'Finance, Build, and Operate' company (5 companies: NCC, Siab, Vattenfall, Mowlem and ALSTON) ▪ Planned/constructed & owns/operates Arlanda, railway facilities transferred to Swedish government in lieu of 45 year exclusive concession
	Narita Express  ▪ Trip Time: 53-59 mins ▪ Frequency: 12 mins (peak); 30 or 60 mins (off-peak) ▪ Number of Stops: 5-12* (depending on schedule) ▪ Hours of Operation: 5:14am - 9:14pm	▪ Privately-owned (privatized in 1987) ▪ Owned and operated by JR East

*Number of stops includes point of embarkment and airport terminal

Based on current working assumptions, the Toronto ARL's value proposition will be superior compared to leading global ARLs and commuter trains

	Differentiator	Toronto ARL ¹	Leading Global ARLs ²	Commuter Trains ³
Pricing and Ticketing	Advanced Ticket Purchase	✓		✓
	Onboard Ticket Purchase	✓		*
	Loyalty Program	TBD		*
Convenience	Pickup Service	✓		*
	Parking at Stations	✓		✓
	In-Town Airline Check-In (without baggage drop)	✓		*
	In-Town Airline Check-In (with baggage drop)	*		*
Comfort	Lounge at the Station	✓		*
	Luggage Storage on the Train	✓		*
	Comfortable Seating on the Train	✓		*
	Washrooms on the Train	✓		*
Amenities	Wi-Fi on the Train	✓		*
	Food and Beverage on the Train	TBD		*
	FIDS on the Train	✓		*
	Entertainment on the Train (e.g., TVs, magazines, etc.)	✓		*

1 – Toronto ARL ratings are based on current working assumptions that are not finalized

2 – Leading Global ARLs analyzed include Heathrow Express, Gautrain, Rhônexpress, Airport Express, Narita Express, Arlanda Express, and KLIA Express

3 – Commuter Trains ratings are based on typical commuter services

Legend for Differentiators of Leading Global ARLs

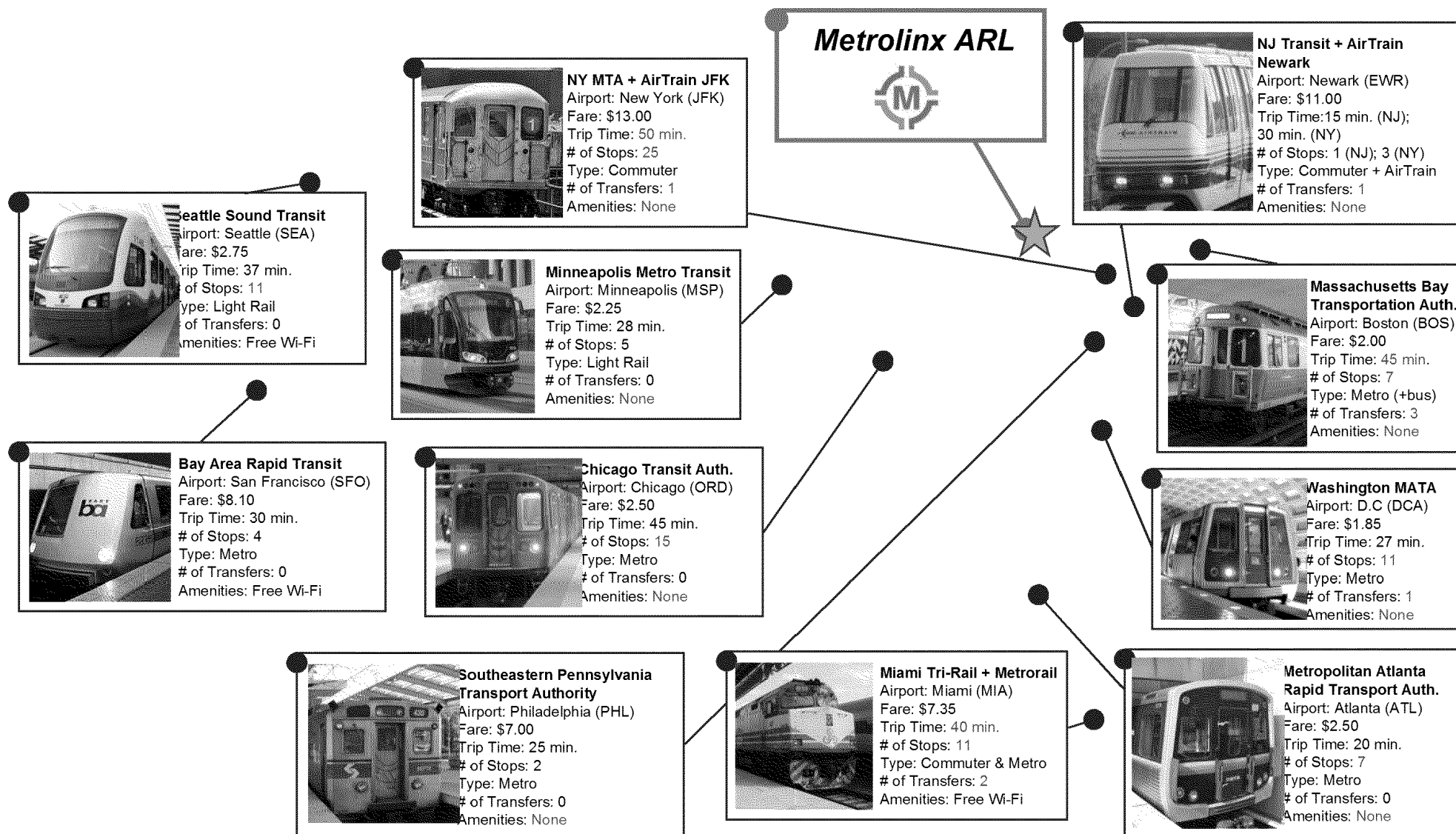
All or Majority of ARLs

Some ARLs

No or Minority of ARLs

The Metrolinx Air Rail Link will be the leading airport rail service in North America

Less than half of the 20 largest U.S. airports have rail services from city centres, all of which are metro or commuter trains with limited or no amenities onboard for their passengers*



* Red text represents significant deviations from leading ARLs; trip times that were more than a 15 minute deviation from the estimated trip time via taxi were also denoted in red

Sources: USA Today, Respective Public Transit and Commuter Rail Websites

Air Rail Link Best Practices Summary

Methodology and Analysis

Air Rail Link Best Practices Summary – Methodology

Overview

- The Air Rail Link Best Practices Summary highlights examples of how leading ARLs are differentiating themselves in the area of customer experience
- For this summary, we selected what, in our opinion, are the top two best practices for each stage defined in the Customer Touchpoint Map.¹ We based this selection on a qualitative high level assessment of what was unique, interesting and innovative

Air Rail Links Selected for Analysis



Heathrow Express – London



Gautrain – Johannesburg



Rhônexpress – Lyon



Airport Express – Hong Kong



KLIA Ekspres Train – Kuala Lumpur

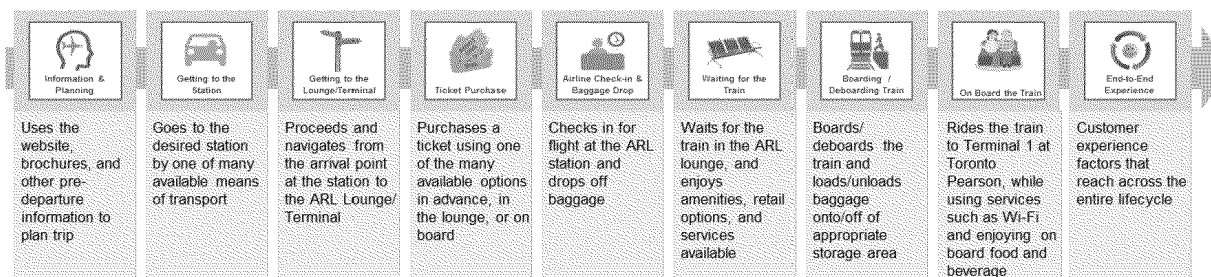
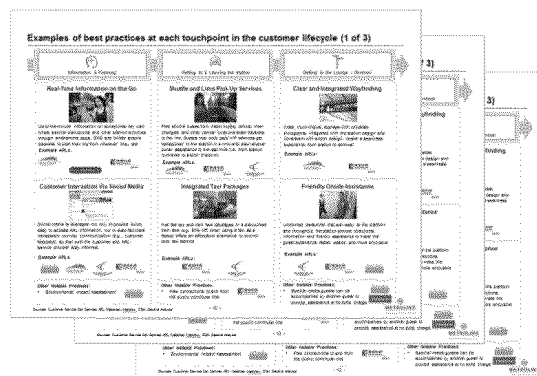


Arlanda Express – Stockholm



Narita Express – Tokyo

Best Practices Summarized Across Each Customer Touchpoint

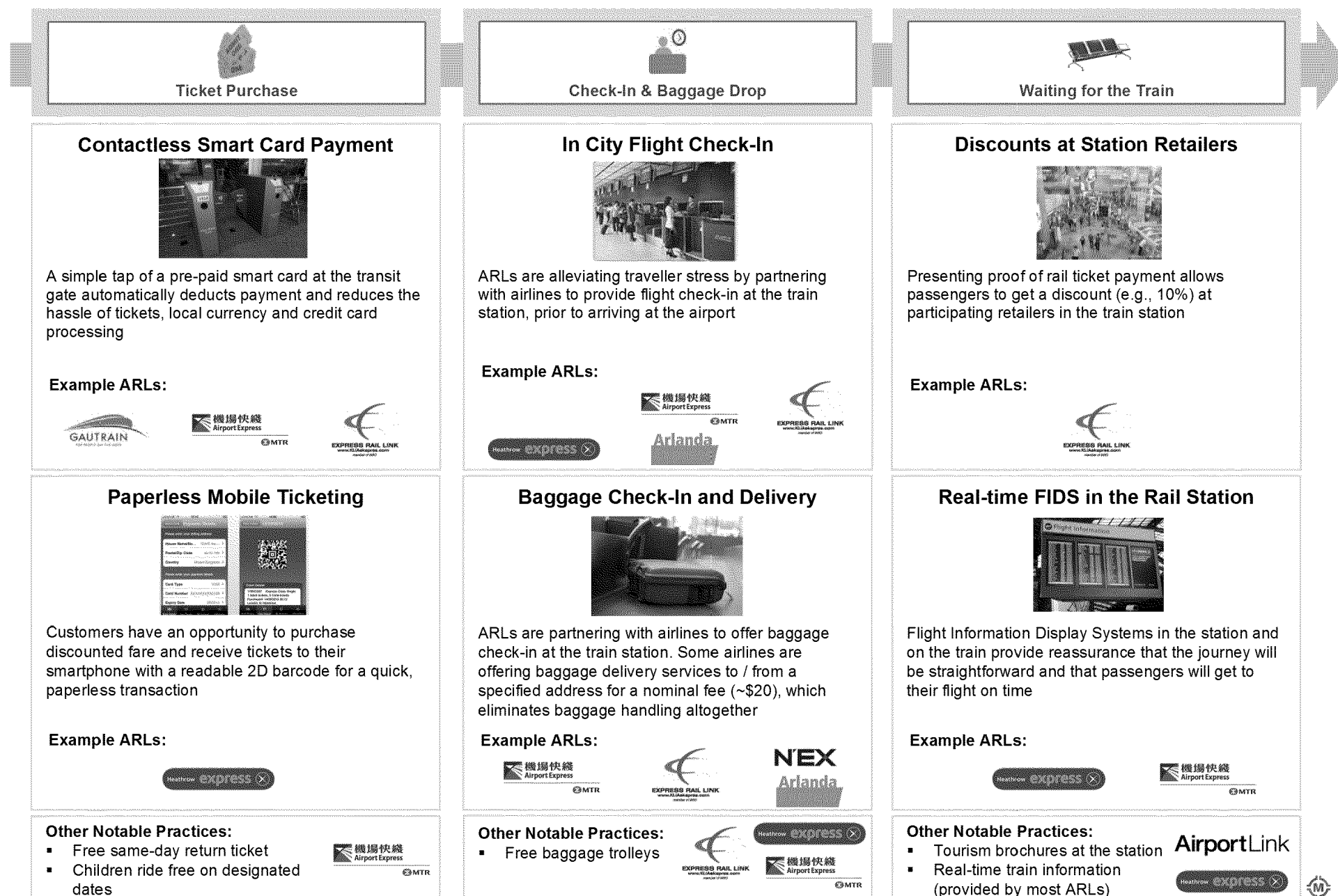


¹Work completed by Deloitte in December 2011; for the current analysis, the customer lifecycle was consolidated into nine key touchpoints

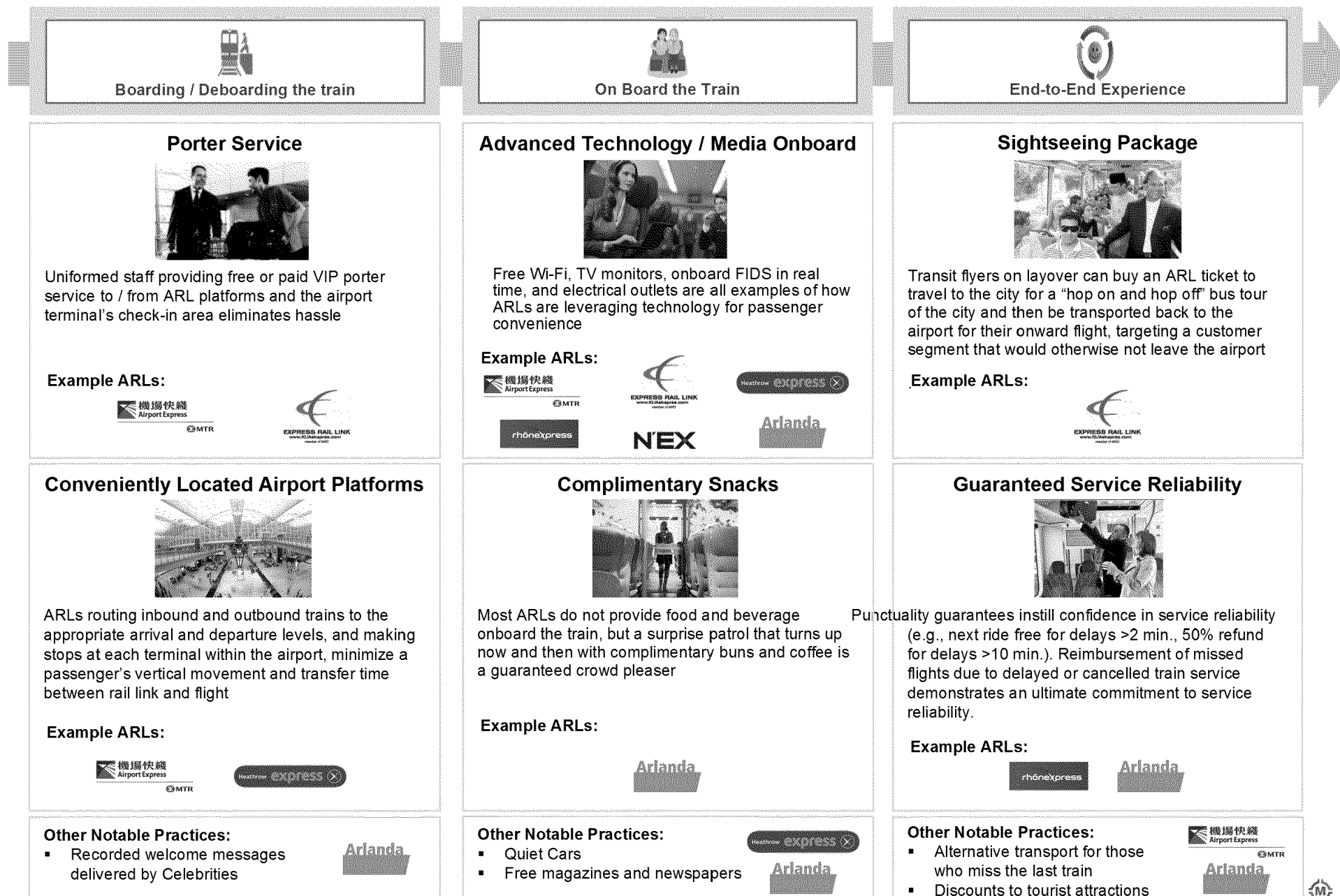
Examples of best practices at each touchpoint in the customer lifecycle (1 of 3)



Examples of best practices at each touchpoint in the customer lifecycle (2 of 3)



Examples of best practices at each touchpoint in the customer lifecycle (3 of 3)



Air Rail Link Landscape Analysis

Methodology

Air Rail Link Landscape Analysis – Methodology

Overview

- The Air Rail Link Landscape Analysis summarizes the degree to which a select group of seven air rail links offer convenient, affordable, and efficient services to its customers
- The analysis enables a more detailed and granular view, by providing specific, and often quantified, details for each service
- Information was collected through air rail link websites, third-party websites, customer forums, and discussions with customer service representatives (i.e., primary research)

Air Rail Links Selected for Analysis



Heathrow Express – London



Gautrain – Johannesburg



Rhônexpress – Lyon



Airport Express – Hong Kong



KLIA Ekspres Train – Kuala Lumpur

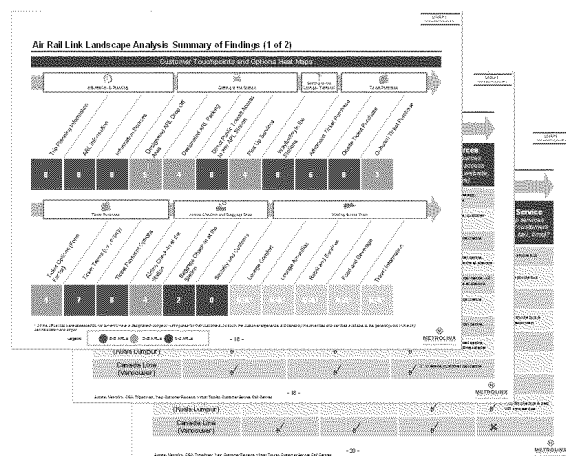


Arlanda Express – Stockholm



Narita Express – Tokyo

Analysis of Best Practices Across Each Customer Touchpoint Option



Information & Planning	Getting to the Station	Getting to the Lounge / Terminal	Ticket Purchase	Airline Check-in & Baggage Drop	Waiting for the Train	Boarding / Deboarding the Train	On Board the Train	End-to-End Experience
- Trip Planning Information - ARL Information - Information Source	- Drop Off - Parking - Public Transit - Pick-Up Service	Navigating to the Lounge / Terminal	- Advanced Ticket Purchase - On Site Ticket Purchase - On Board Ticket Purchase - Ticket Options (From / To) - Rate - Time - Payment Options	- Airline Check-in - Baggage - Security and Customs	- Lounge Access - Lounge Amenities - Food and Beverage - Payment Options - Train Information - Entertainment - Media for Information and Entertainment	- Accessing the ARL System - Getting to the Platform - Waiting on the Platform - Boarding the Train - Seating - Train Information - Entertainment - Media for Information and Entertainment	- Train Comfort - Train Amenities - Food and Beverage - Payment Options - Train Information - Entertainment - Media for Information and Entertainment	- Customer Service Staff - Customer Service Channels - Customer Service Practices - Language - Loyalty - Partnerships and Sponsorship - Security

A yes / no question was asked around most options under the customer touchpoints, in order to assess the current practices of the leading ARLs

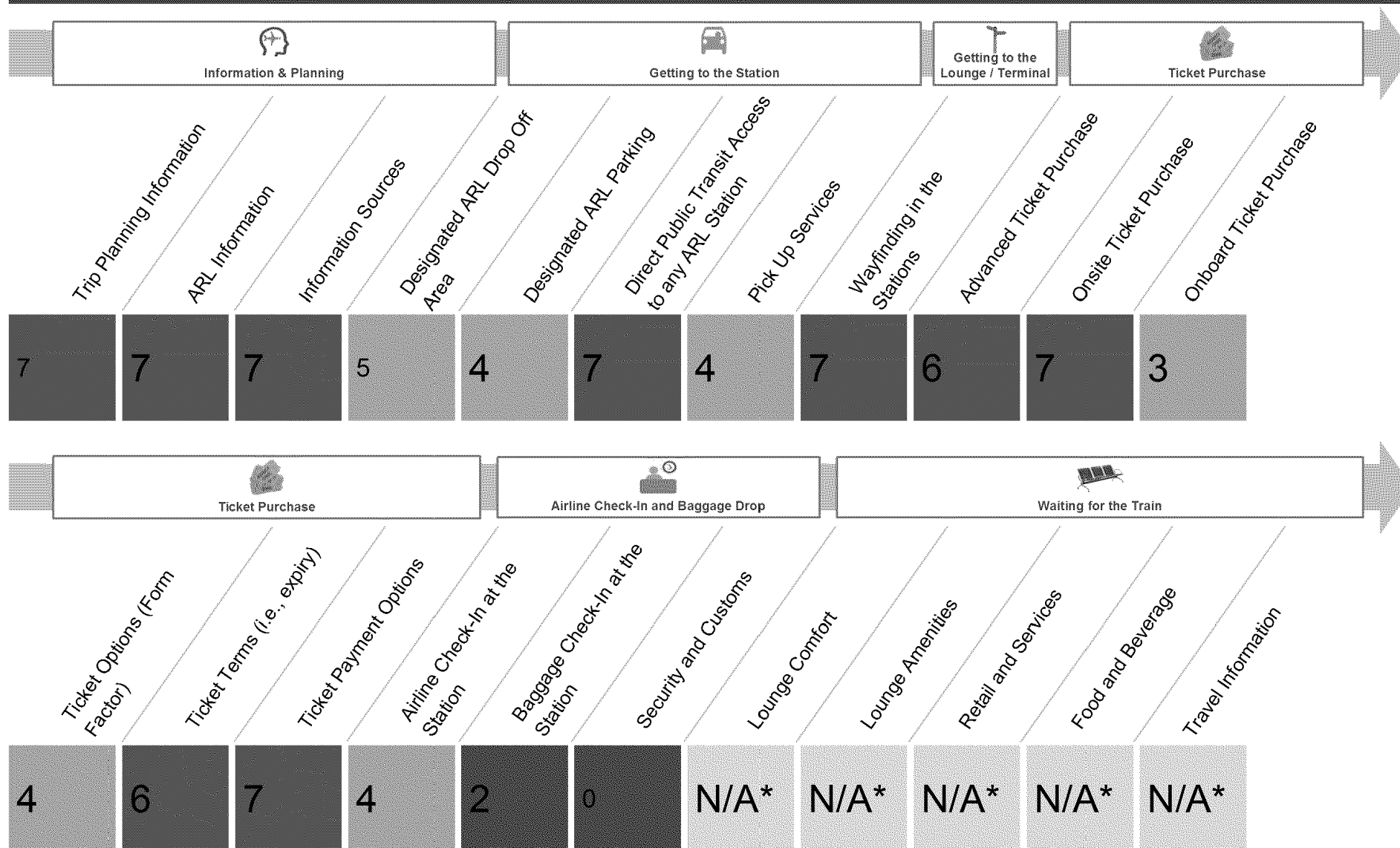
The landscape analysis reveals that current leading ARLs provide services that can be placed in three categories: Tablestakes, Optional, and Not Common Practice

Tablestakes	Optional	Not Common Practice
<i>Most ARLs (i.e., 6-7) are providing these services to their customers, thereby implying that such offerings are tablestakes that customers have become accustomed to expecting from ARL services</i>	<i>A mix of ARLs (i.e., 3-5) are providing these services, implying that they may potentially present an opportunity for differentiation in customer experience</i>	<i>Few to no ARLs (i.e., 0-2) offer these services, which potentially implies that these services are operationally difficult to implement, have little added value from a customer experience perspective, or are newly established “cutting edge” services</i>
All ARLs provide a wide variety of trip planning information for their customers, through multiple media sources All ARL city centre stations are directly accessible by public transit (i.e., buses and/or subway), and are easy to navigate through (i.e., proper signage and wayfinding) All ARLs provide onsite	Some ARLs offer designated drop off / parking spaces at stations While many ARLs offer advanced ticketing options, most do not provide onboard ticketing services, and approximately half provide an electronic ticketing option Some ARLs provide enhanced seating	Most ARLs do not allow customers to pass through security and customs clearance prior to their arrival at the airport Most ARLs do not assign seats on the train (i.e., first come first serve) Most ARLs do not provide retail and services / food and beverage on the train. In fact, many trains prohibit food and

The services that the Metrolinx ARL chooses to include as part of its customer experience can be informed by existing leading ARL practices

Air Rail Link Landscape Analysis Summary of Findings (1 of 2)

Customer Touchpoints and Options Heat Maps



* All the ARLs that were assessed do not currently have a designated lounge or waiting area for their customers. As such, the customer experience is dictated by the amenities and services available to the general public in the city central station and airport.

Legend

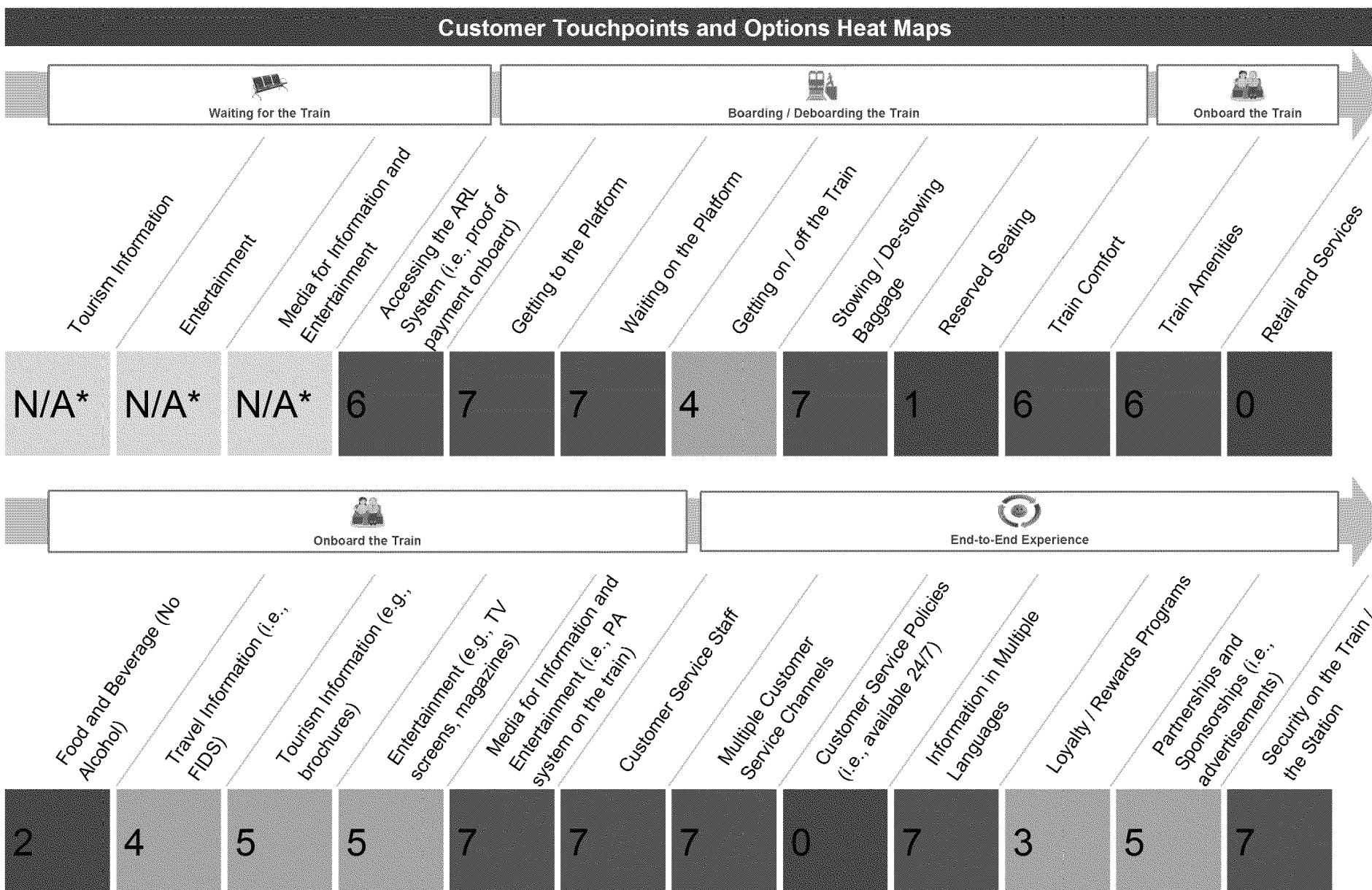
6-7 ARLs

3-5 ARLs

0-2 ARLs

AR

Air Rail Link Landscape Analysis Summary of Findings (2 of 2)



* All the ARLs that were assessed do not currently have a designated lounge or waiting area for their customers. As such, the customer experience is dictated by the amenities and services available to the general public in the city central station and airport.

Legend

6-7 ARLs

3-5 ARLs

0-2 ARLs

Air Rail Link Landscape Analysis – Information and Planning

 Information & Planning			
Air Rail Link	Trip Planning Information <i>Is trip planning information available to customers online? (e.g., ticket prices, schedules)</i>	ARL Information <i>Is specific ARL related information available to customers online? (e.g., benefits of ARL over other transport)</i>	Information Sources <i>Are there multiple sources where customers can access ARL information? (e.g., website, information centre)</i>
Heathrow Express (London)	✓	✓	✓ Website, smartphone app, customer call centre
Gautrain (Johannesburg)	✓	✓	✓ Website, mobile site, customer care call centre
Rhôneexpress (Lyon)	✓	✓	✓ Website, customer call centre
Airport Express (Hong Kong)	✓	✓	✓ Website, customer call centre, customer service booths at stations
Narita Express (Tokyo)	✓	✓	✓ Website, customer call centre, JR East service centres at stations
Arlanda Express (Stockholm)	✓	✓	✓ Website,
KLIA Ekspres (Kuala Lumpur)	✓	✓	✓ Website, customer call centre, ✓ Website, customer call centre, Facebook, Facebook, Twitter, E-newsletter

Source: Metrolinx, CGA, Tripadvisor, Yelp Customer Reviews, Virtual Tourist, Customer Service Call Centres

Air Rail Link Landscape Analysis

Detailed Analysis

Examples of Information Available on Air Rail Link Websites

Heathrow express The fastest way between Heathrow Airport and Central London

Home Tickets & Deals Timetable Business & Corporate Travel Onboard FAQs Jobs

Current service information: All services are currently running normally.

Key Aim

Facts & Figures

PR

- The fastest way between Central London and Heathrow Airport.
- Central London's Paddington Station to Heathrow Central Terminals 1 & 3 in just 15 minutes every 15 minutes, with Terminal 5 taking a further 4 minutes.
- The free transfer service to Terminal 4, departing every 15 minutes, can be reached in 4 minutes from Heathrow Central.
- 150 Heathrow Express services run every day.
- 16,000 passengers daily.
- Carried over 60 million people since launch in June 1998.
- Single tickets in Express class cost £10.50 online. Returns tickets cost £32.00 saving passengers £4.
- First train company to launch e-ticketing so that customers can buy tickets online. They then receive a barcode either via email or direct to a mobile phone that can then be scanned on the train.
- 98% reliability.
- 97% repeat travel rating.
- 96% recommend us to colleagues and friends.
- 93% overall satisfaction in the latest independent National Passenger Survey 2010, which makes Heathrow Express one of the top 3 scores.
- Trains have saved enough energy in the past decade to have boiled 400 million kettles.
- Heathrow Express has saved 204 million kg of carbon emissions since launch and offers customers a 64% reduction in carbon emissions over a taxi.

Heathrow Express – London

N'EX provides direct access
Between Narita Airport and major urban stations.
Tokyo, Shinjuku, Shibuya, Shinjuku, Rebukuro and Yokohama.

Timeline: Tokyo, Shinjuku, Shibuya, Shinjuku, Rebukuro, Yokohama.

About N'EX Tickets Suica & N'EX Seating Facilities Narita Airport Travel Service Center

July 1, 2010 – All N'EX trains will operate with new cars. N'EX is the best choice for access to Tokyo from Narita Airport.

The N'EX is fast, convenient and pleasant to ride, directly connecting Narita International Airport with major urban areas in and around Tokyo including Tokyo, Shinjuku, Shibuya, Shinjuku, Rebukuro and Yokohama. With the convenience of N'EX, there are no more stressful transfers.

- The N'EX takes you from Narita Airport to Tokyo Station in only 53 minutes.
- Trains run to Tokyo Station, Shinjuku and Yokohama every 30 minutes during most of the day.
- All N'EX seats require prior reservation, so you can be sure of sitting.
- There is no concern about traffic congestion because the N'EX runs on high-speed rail.

N'EX is the best choice for access to Tokyo. With ample on-board facilities, we promise to make your traveling time pleasant.

Narita Express – Tokyo

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What's New Getting Around Fares & Tickets Tourist MTR Club Shops & More Community

Homepage > Getting Around > Airport Express Services

Airport Express Services

The Airport Express is one of the world's leading Airport railway systems and offers you swift, sure links between Hong Kong International Airport (HKIA) and Hong Kong's vibrant Central business hub. The 35.3km journey between the Airport and the city takes as little as 24 minutes.

The Airport Express is also your fastest and most convenient route to AsiaWorld-Expo, which is just a one-minute ride from the Airport Station. Onward journeys to the city centre from AsiaWorld-Expo Station take around 28 minutes.

All five Airport Express stations in Hong Kong have been designed to world-class standards. Their many outstanding, customer-friendly facilities include a convenient In-town Check-in desk and regular Airport Express Shuttle Bus services. The ultimate aim is to provide you and your loved ones with a pleasant and seamless travel experience.

To book tickets online, please click here.

Airport Express Stations

- Asia-World Expo Station
- Airport Station
- Tsing-Yi Station
- Kowloon Station
- Hong Kong Station

Privileges and Complimentary Services

- Free Porter Service
- Free MTR Connections
- Free Airport Express Shuttle Bus Service
- Free Return Journey for Same Day Return Trip
- Free In-town Check In Service
- Wireless Broadband Services
- Parking

Downloads

Airport Express Service Guide (PDF leaflet)

Promotion & Offers

- The new Airport Express "Sure Thing" music video is released.
- Take a taxi as a feeder to enjoy Airport Express offer.
- Online Ticketing Promotion

Airport Express – Hong Kong

- Information on fares and ARL timetables
- Information for tourists on interesting places to visit and how to get there

- Links to promotions and offers, including discounted online ticketing and discounted taxi feeders

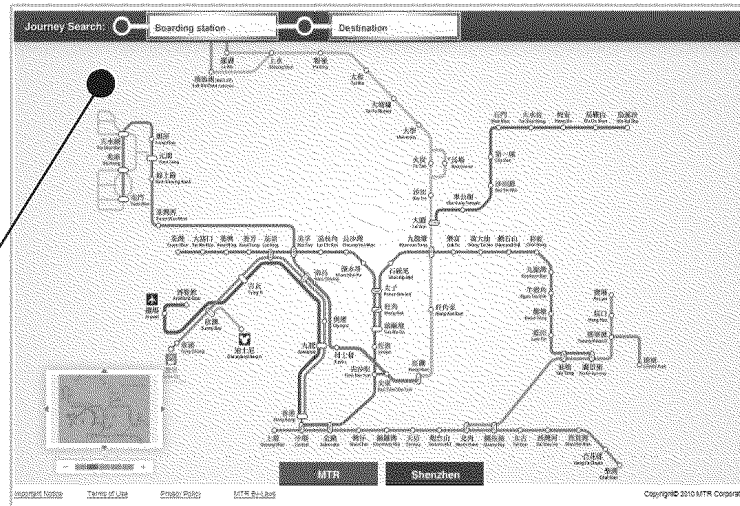
- Links to detailed information on amenities and services

Air Rail Link Landscape Analysis – Getting to the Station

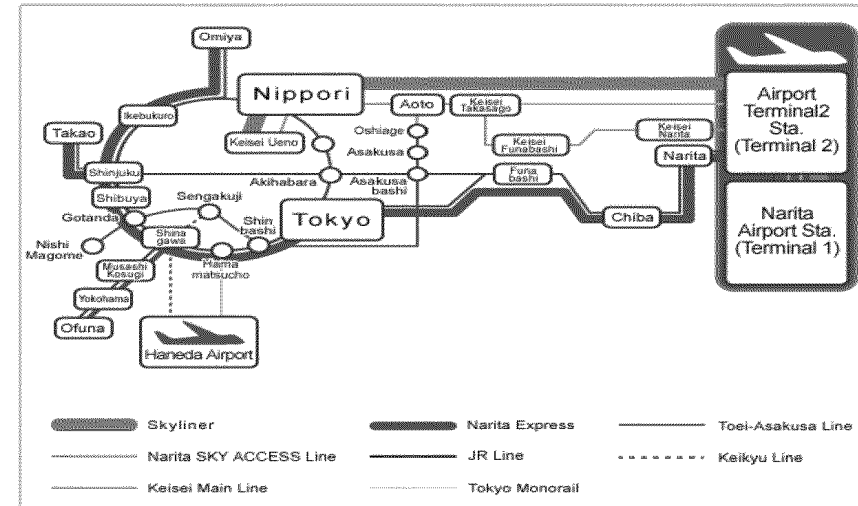
Getting to the Station				
Air Rail Link	Drop Off <i>Is there a designated drop off area at the end point stations?</i>	Parking <i>Is parking available for customers at the stations?</i>	Public Transit <i>Are the stations directly accessible by public transit?</i>	Pick Up Service <i>Are pick up services available for customers (e.g., shuttle, taxi, limo)?</i>
Heathrow Express (London)	✗	✗	✓	✓ Paid
Gautrain (Johannesburg)	✓	✓	✓	✓ Free shuttle bus
Rhôneexpress (Lyon)	✗	✗	✓	✗ shuttle bus
Airport Express (Hong Kong)	✓	✓	✓	✓ Free shuttle bus
Narita Express (Tokyo)	✓	✓	✓	✗ shuttle bus &
Arlanda Express (Stockholm)	✓	✗	✓	✗ connector train
KLIA Ekspres (Kuala Lumpur)	✓	✓	✓	✓ Free Shuttle bus & paid VIP limo service

Examples of Maps of ARL Stations Linked to City Public Transit

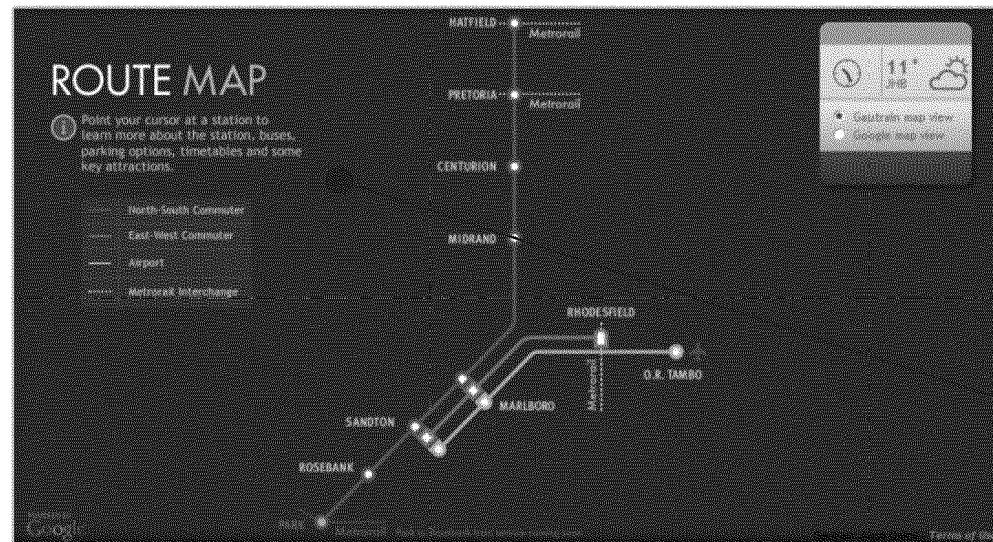
- Interactive map allows customers to learn more about individual stations and train schedules
- Includes a trip planner to help customers plan their trips by selecting their boarding and deboarding stations



Airport Express – Hong Kong



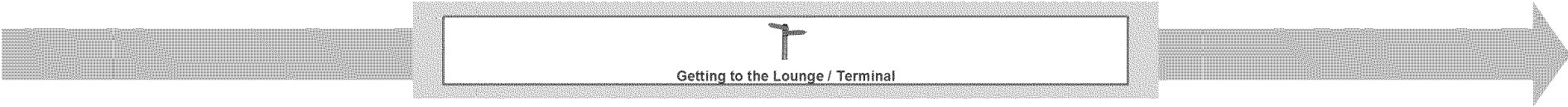
Narita Express – Tokyo



Gautrain – Johannesburg

- Interactive map allows customers to learn more about individual stations

Air Rail Link Landscape Analysis – Getting to the Lounge / Terminal

	
Air Rail Link	Wayfinding <i>Is adequate signage (i.e., amount and clarity) available for customers to find their desired destinations (e.g., lounge, terminal, platform)?</i>
Heathrow Express (London)	✓
Gautrain (Johannesburg)	✓
Rhôneexpress (Lyon)	✓
Airport Express (Hong Kong)	✓
Narita Express (Tokyo)	✓
Arlanda Express (Stockholm)	✓
KLIA Ekspres (Kuala Lumpur)	✓

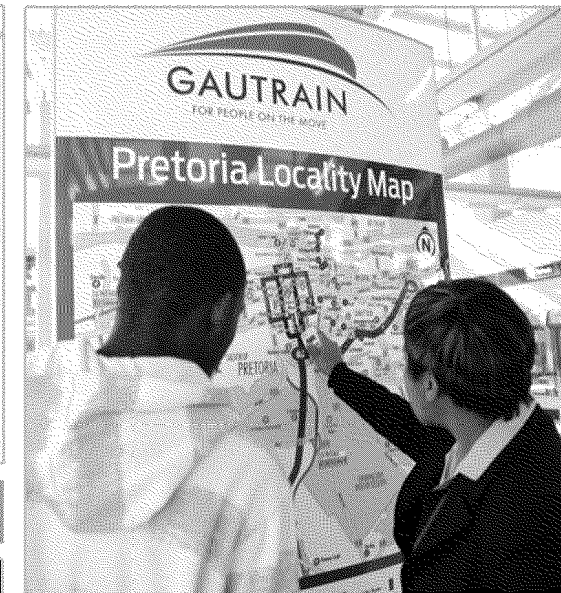
Examples of Wayfinding Across the Leading Air Rail Links



KLIA Ekspres – Kuala Lumpur



Airport Express Line – Hong Kong



Gautrain –



Arlanda Express – Stockholm

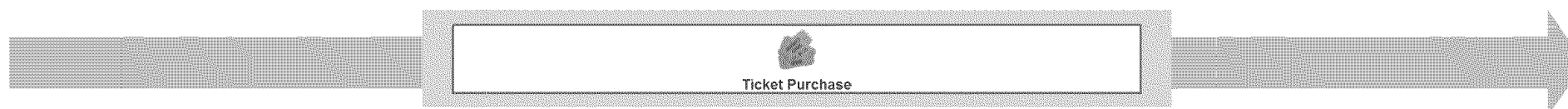


Heathrow Express – London



Narita Express – Tokyo

Air Rail Link Landscape Analysis – Ticket Purchase (1 of 2)

			
Air Rail Link	Advanced Ticket Purchase <i>Do customers have the option to purchase their ticket online in advance of their trip?</i>	On Site Ticket Purchase <i>Do customers have the option to purchase tickets in the airport / train station?</i>	Onboard Ticket Purchase <i>Do customers have the option to purchase tickets onboard?</i>
Heathrow Express (London)	✓	✓	✓
Gautrain (Johannesburg)	✗	✓	✗
Rhôneexpress (Lyon)	✓	✓	✓
Airport Express (Hong Kong)	✓	✓	✗
Narita Express (Tokyo)	✓	✓	✗
Arlanda Express (Stockholm)	✓	✓	✓
KLIA Ekspres (Kuala Lumpur)	✓	✓	✗

Air Rail Link Landscape Analysis – Ticket Purchase (2 of 2)

Ticket Purchase				
Air Rail Link	Ticket Options (Form Factor) <i>Is there an electronic ticketing option available?</i>	Rates* <i>What are the adult ticket rates? What discount rates are available?</i>	Terms <i>Does the ticket have an expiry date?</i>	Payment Options <i>Are diverse payment options available to customers (cash, debit, credit, etc.)?</i>
Heathrow Express (London)	✓ Smartphone mobile ticketing (2D Code) E-tickets sent via email	One Way: \$28.50 - \$30.00 Return: \$54.00 Carnet (11 trips + 1 free): \$313.00	✓ 3 days from purchase date	✓ Credit cards, debit cards, cash
Gautrain (Johannesburg)	✗ Contactless "Gold Card"	One Way: \$14.00 - \$16.50	✗ 45 minutes	✓ Credit cards, debit cards, cash
Rhôneexpress (Lyon)	✓ E-tickets sent via email Can present credit card or e-ticket with barcode	One Way: \$17.00 - \$18.00 Return: \$30.50 6 trips: \$87.00	✓ 90 days from purchase date	✓ Credit cards, debit cards, cash
Airport Express (Hong Kong)	✗ Contactless "Octopus Card" Purchase online and pick up at station	One Way: \$11.60 - \$13.00 Return: \$23.00 Group of 2-4: \$20.50 - \$32.00	✓ Only valid for the time slot reserved	✓ Credit cards, debit cards, cash
Narita Express (Tokyo)	✗ Reserve online and pick up at station	One Way: \$38.00	✓ Only valid for the time slot reserved	✓ Credit cards, debit cards, cash
Arlanda Express (Stockholm)	✓ E-tickets sent via email Can present credit card as a proof of purchase	One Way: \$42.00 10 tickets: \$390.50 12 month unlimited pass: \$3,754.00	✓ Only valid for the time slot reserved	✓ Credit cards, debit cards, cash
KLIA Ekspres (Kuala Lumpur)	✓ E-ticket with barcode sent via email	One Way: \$11.50 Return: \$23.00 Easy Card (10 trips + 1 free): \$116.00	✓ 1 year	✓ Credit cards, debit cards, cash

* All rates are rounded approximations expressed in CAD

Source: Metrolinx, CGA, Tripadvisor, Yelp Customer Reviews, Virtual Tourist, Customer Service Call Centres

Examples of Ticket Points of Sale Across Leading Air Rail Links



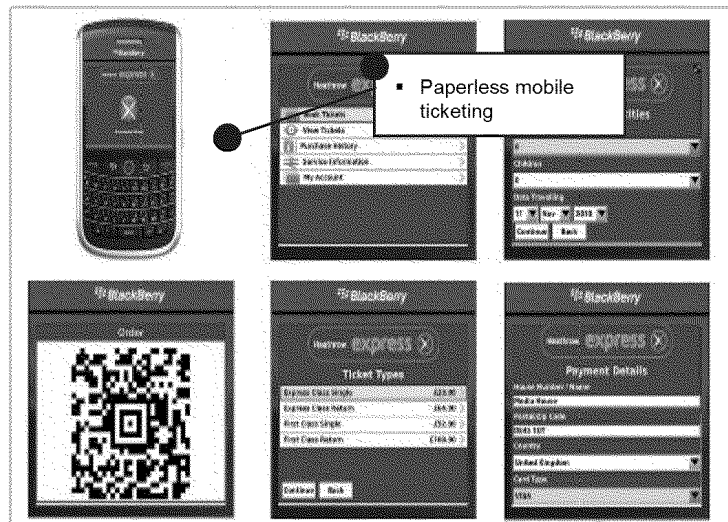
Narita Express – Tokyo



Gautrain – Johannesburg



Arlanda Express – Stockholm



Heathrow Express – London



Airport Express – Hong Kong



KLIA Ekspres – Kuala Lumpur

Air Rail Link Landscape Analysis – Airline Check-In and Baggage Drop

 Airline Check-In and Baggage Drop			
Air Rail Link	Airline Check-In <i>Can customers check-in to their flight at the station prior to arriving at the airport?</i>	Baggage <i>Can customers check-in their baggage at the station prior to arriving at the airport?</i>	Security and Customs <i>Can customers pass through security and customs at the station prior to arriving at the airport?</i>
Heathrow Express (London)	✓ Air Canada, Air France, KLM, American Airlines, Continental Airlines, United Airlines, etc.	✗	✗
Gautrain (Johannesburg)	✗	✗	✗
Rhôneexpress (Lyon)	✗	✗	✗
Airport Express (Hong Kong)	✓ Air Canada, Air France, Cathay Pacific Airways, Hong Kong Airlines, Qantas Airways, etc.	✓ Free porter service	✗
Narita Express (Tokyo)	✗	✗	✗
Arlanda Express (Stockholm)	✓ Norwegian Airlines, Finnair, Høga Kusten	✗	✗
KLIA Ekspres (Kuala Lumpur)	✓ MAS, Cathay Pacific Airways, Royal Brunei Airlines	✓ Free porter service	✗

Examples of Airline Check-In Across the Leading Air Rail Links



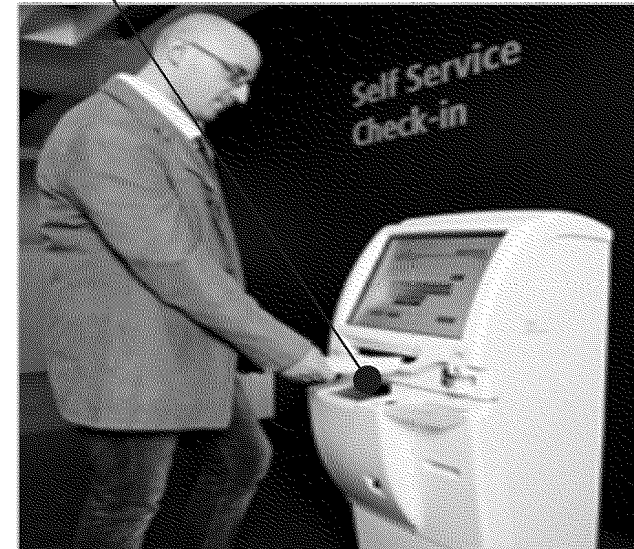
KLIA Ekspres – Kuala Lumpur



Airport Express – Hong Kong



Heathrow Express – London



Arlanda Express – Stockholm

Air Rail Link Landscape Analysis – Boarding / Deboarding the Train (1 of 2)

Boarding / Deboarding the Train				
Air Rail Link	Accessing the ARL System <i>Is there a proof of payment system in place onboard? (e.g., conductor check)</i>	Getting to the Platform <i>Is the platform easily accessible? (e.g., escalator, ramp)</i>	Waiting on the Platform <i>Is train arrival information provided while waiting on the platform?</i>	Getting on / off the Train <i>Is a welcome / goodbye message announced on the train?</i>
Heathrow Express (London)	✓ Attendant checks	✓	✓	✓
Gautrain (Johannesburg)	✗ Turnstile tickets	✓	✓	✓
Rhôneexpress (Lyon)	✓ Access and boarding	✓	✓	✗
Airport Express (Hong Kong)	✓ Attendant checks	✓	✓	✗
Narita Express (Tokyo)	✓ Turnstile tickets	✓	✓	✗
Arlanda Express (Stockholm)	✓ Access and boarding	✓	✓	✓
KLIA Ekspres (Kuala Lumpur)	✓ Attendant checks	✓	✓	✓

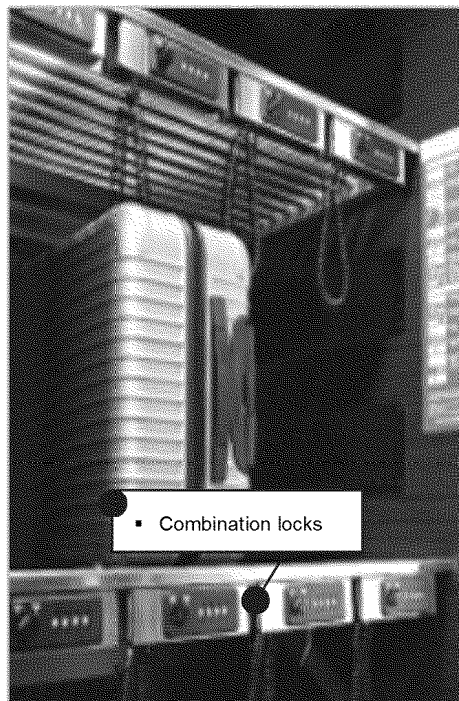
Air Rail Link Landscape Analysis – Boarding / Deboarding the Train (2 of 2)

 Boarding / Deboarding the Train		
Air Rail Link	Stowing / De-Stowing Baggage <i>Is onboard luggage storage available for customers? (e.g., overhead space, luggage racks)</i>	Seating <i>Is seating assigned?</i>
Heathrow Express (London)	✓	✗
Gautrain (Johannesburg)	✓	✗
Rhôneexpress (Lyon)	✓	✗
Airport Express (Hong Kong)	✓	✗
Narita Express (Tokyo)	✓	✓
Arlanda Express (Stockholm)	✓	✗
KLIA Ekspres (Kuala Lumpur)	✓	✗

Examples of Luggage Racks Onboard the Leading Air Rail Links



Heathrow Express – London



Combination locks

Narita Express –



Rhônexpress – Lyon



KLIA Ekspres –



Arlanda Express –



Airport Express – Hong Kong



Gautrain – Johannesburg

Air Rail Link Landscape Analysis – Onboard the Train (1 of 2)

 Onboard the Train				
Air Rail Link	Train Comfort* <i>Do train seats provide superior comfort?</i>	Train Amenities <i>Is Wi-Fi available onboard the train?</i>	Retail and Services <i>Can customers make purchases onboard the train?</i>	Food and Beverage <i>Is food and beverage offered onboard the train?</i>
Heathrow Express (London)	✓	✓	✗	✗
Gautrain (Johannesburg)	✗	✗	✗	✗
Rhôneexpress (Lyon)	✓	✗	✗	✗
Airport Express (Hong Kong)	✓	✓	✗	✗
Narita Express (Tokyo)	✓	✓	✗	✓
Arlanda Express (Stockholm)	✓	✓	✗	✓
KLIA Ekspres (Kuala Lumpur)	✓	✓	✗	✗

Hot coffee for surprise complimentary buns / coffee

* Superior comfort was assessed by comparing seating on existing modes of public transportation (e.g., subway to the airport) to seating comfort on the ARL.

Source: Metrolinx, CGA, Tripadvisor, Yelp Customer Reviews, Virtual Tourist, Customer Service Call Centres

Air Rail Link Landscape Analysis – Onboard the Train (2 of 2)

 Onboard the Train				
Air Rail Link	Travel Information <i>Are FIDS available onboard the train?</i>	Tourism Information <i>Is tourism information available onboard the train? (e.g., brochures)</i>	Entertainment <i>Is entertainment available onboard the train? (e.g., seat-back televisions, magazines)</i>	Media for Information and Entertainment <i>Is there a PA or other announcement system onboard the train?</i>
Heathrow Express (London)	✓	✗	✓ Onboard TV with news, weather, entertainment clips	✓
Gautrain (Johannesburg)	✗	✓	✗ Seatback TVs	✓
Rhôneexpress (Lyon)	✓	✓	✗ Xpress Magazine	✓
Airport Express (Hong Kong)	✗	✓	✓ Onboard TV	✓
Narita Express (Tokyo)	✓	✗	✓	✓
Arlanda Express (Stockholm)	✓	✓	✓	✓
KLIA Ekspres (Kuala Lumpur)	✗	✓	✓	✓

Examples of Train Seating Onboard the Leading Air Rail Links



Narita Express



Gautrain –
Johannesburg



Airport Express – Hong Kong



KLIA Ekspres – Kuala Lumpur

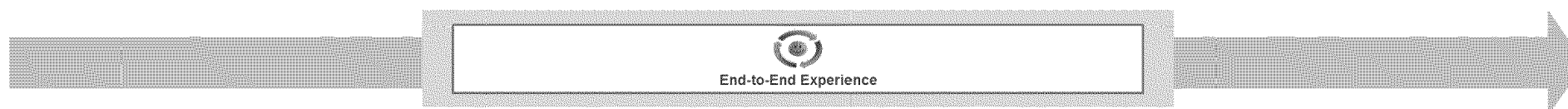


Arlanda Express – Stockholm



Rhôneexpress – Lyon

Air Rail Link Landscape Analysis – End-to-End Experience (1 of 2)



Air Rail Link	Customer Service Staff <i>Is there a dedicated customer service staff for the train?</i>	Customer Service Channels <i>Are there multiple customer service channels?</i>	Customer Service Policies <i>Are customer service call centres available to customers 24/7?</i>	Languages <i>Is information available in multiple languages?</i>
Heathrow Express (London)	✓	✓ Call centre,	✗	✓ For 2012
Gautrain (Johannesburg)	✓	✓ Call, email,	✗ 7:00 am -	✓ Ticket
Rhôneexpress (Lyon)	✓	✓ Call centre,	✗ 7:00 pm	✓ vending
Airport Express (Hong Kong)	✓	✓ Call, email,	✗ 8:00 am -	✓ Website,
Narita Express (Tokyo)	✓	✓ Call centre,	✗ 6:30 pm	✓ machines
Arlanda Express (Stockholm)	✓	✓ Call, email,	✗ 8:30 am -	✓ call
KLIA Ekspres (Kuala Lumpur)	✓	✓ Call centre,	✗ 6:00 pm	✓ Website,
		✓ Call, email,	✗ 10:00 am -	✓ centre,
		✓ Call centre,	✗ 6:00 pm	✓ calls
		✓ Call, email,	✗ 8:00 am -	✓ Website,
		✓ Call centre,	✗ 6:00 pm	✓ call
		✓ Call, email,	✗ 8:30 am -	✓ signs
		✓ Call centre,	✗ 6:00 pm	✓ centre,
		✓ Call, email,	✗ 8:00 am -	✓ signs
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		✓ Call, email,	✗ 8:00 am -	✓ signs
		✓ Call centre,	✗ 6:00 pm	✓ centre,
		✓ Call, email,	✗ 8:30 am -	✓ signs
		✓ Call centre,	✗ 6:00 pm	✓ centre,
		✓ Call, email,	✗ 8:00 am -	✓ signs
		✓ Call centre,	✗ 6:00 pm	✓ centre,

Air Rail Link Landscape Analysis – End-to-End Experience (2 of 2)

End-to-End Experience			
Air Rail Link	Loyalty <i>Is there a loyalty / rewards program available to customers?</i>	Partnerships and Sponsorships <i>Are there advertisements in the station or onboard the train?</i>	Security <i>Are there security mechanisms in place on the train / in the stations? (e.g., security guards, surveillance cameras)</i>
Heathrow Express (London)	✓ For 2012	✓	✓
Gautrain (Johannesburg)	✗	✓	✓ Highly trained personnel
Rhôneexpress (Lyon)	✗	✗	✓ CCTV and satellite monitoring
Airport Express (Hong Kong)	✓ “Ride to Rewards” Program	✓	✓ Stations regularly patrolled by
Narita Express (Tokyo)	✗	✓	✓ MTR staff and police
Arlanda Express (Stockholm)	✗	✗	✓ KL Sentral station regularly patrolled by police
KLIA Ekspres (Kuala Lumpur)	✓ 10% discount at participating station retail outlets	✓	✓ 24/7 CCTV

Examples of Information in Multiple Languages Across the Leading Air Rail Links



Arlanda Express – Stockholm



Airport Express – Hong Kong



Gautrain –
Johannesburg



Narita Express – Tokyo

Appendix:

Air Rail Link Customer Demand Analysis

Transportation Market Assessment Key Findings – Current State

Traveller Profile		Travel Behaviour	
Demographics	- Average traveller age is 40 years - Average age of a Pearson employee is 43 years - Male to Female Ratio is 46/57 for GTHA residents, 59/41 for visitors¹, and 73/27 for Pearson employees 53% of GTHA residents are married 23% of GTHA residents have kids	Travel Frequency	Average of 3 times / year
		Luggage	69% of GTHA residents check in 1 bag, 75% of them carry on 1 piece of luggage - Visitors generally check fewer bags
Business vs. Non-Business Travellers	- Survey was designed to match GTAA segments, where the business travellers segment was selected to be ~30% of the total sample size of 4,150 - More likely to be male - More likely to be married and have children - More likely to have higher incomes - Have flown out of Pearson an average of 5-6 times per year (2 times for a non-business traveller)	Destination	For GTHA residents, business travellers travel within Canada and to / from the US, while 75% of non-business travellers travel to international locations (including US)
		Travel Companions	- For GTHA residents, 59% of business travellers and 24% of non-business travellers travel on their own - For visitors, 73% of business travellers and 47% of non-business travellers travel on their own

Transportation Preferences to / from Toronto Pearson Airport

GTHA Residents	Visitors	Pearson Employees
- Travel to / and from their home - Tend to get to and from the airport via limo / taxi / someone else driving - Spend slightly more than \$40 on average for a one way trip to / from the airport - Most dislike traffic jams	- Non-business travellers tend to have someone pick them up / drop them off at the airport - Business travellers are most likely to take a taxi (29%) and / or limo service (24%)	68% drive themselves to / from the airport – the majority of the remaining employees use the TTC (20%) 94% use the same method of transportation to get to and from the airport

Source: Northstar Consulting Market Assessment Study, n=4,150. Survey conducted in August 2011.

¹Visitors are all non-Ontario residents

Transportation Market Assessment Key Findings – Future State

Category	Key Findings	Implications
ARL Awareness / Perception	- Awareness is very high, with 65% of GTHA residents and 85% of Pearson employees aware of the ARL project 65% of GTHA travellers and 62% of visitors would probably / definitely take the ARL - Most interested GTHA residents are younger and/or live in the downtown area - Seen as modern, comfortable, able to improve the image of Pearson and Toronto	Metrolinx needs to keep up the positive momentum that has been built around the high awareness and appeal of the ARL as a service that will benefit the individual, the city, and the airport
Exclusion per Committee Direction		
Amenities	- Most popular amenities were: onboard washrooms, free Wi-Fi, large luggage racks, onboard flight information display screens, and loyalty programs - Amenities have potential to increase ridership significantly (i.e., not just “nice to have”) - Self service ticketing is more important than staff facilities	The most important amenities have the potential to increase ARL ridership, and it will be important to communicate their availability to travellers
ARL vs. Competition	- Only 28% of GTHA residents (particularly business travellers), and 32% of visitors would prefer their current method of transportation to the ARL 39% of Pearson employees prefer their current method of transportation to the ARL	Speed and convenience are important attributes to communicate and promote, to encourage riders to switch from their current methods

There is a ready appetite for a Toronto ARL service that provides the desired amenities at a price point that is accessible to the majority of potential riders

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