



North Shore Area Transit Plan

Phase 1: Appendix 4 – Exchange Summaries

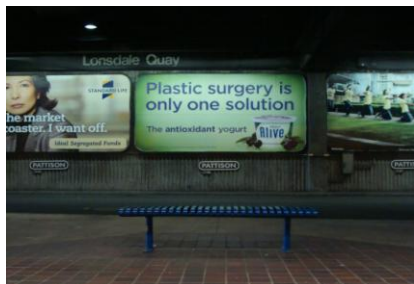
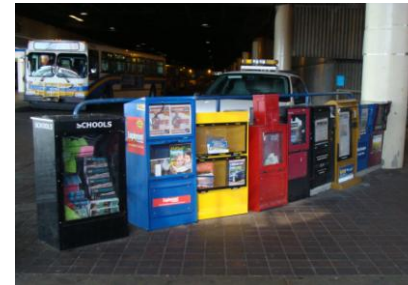
July 2011

Appendix 4: Exchange Summaries

Lonsdale Quay

Lonsdale Quay

General Info				
Location	151 Esplanade, City of North Vancouver			
Facility type	Off-Street Exchange; Loop			
Land Use				
Ownership	Leasing from ICBC. Expires August 31, 2032.			
Lease information	First lease signed in 1983 with agreed payment of \$1 per annum plus utilities, a portion of the buildings' taxes, etc. A renewal lease was made effective August 31, 2007. 25 year term with an annual rent of \$60,072.			
Facility size	40,048 sq. ft. (ICBC Renewal Lease, 2007).			
Adjacent uses	Primarily commercial with residential and professional offices located to the west and industrial on the east. ICBC Head Office located directly above the bus loop. The bus loop is located directly adjacent to the Lonsdale Quay public market and is connected to the north terminal of the SeaBus. There is also extensive redevelopment of former industrial lands to the east of Lonsdale Quay, primarily as condominium buildings, which will increase the residential population in the immediate surrounding area.			
Summary				
Known issues	Little to no space for additional buses and cannot currently accommodate articulated buses. Aesthetically unappealing. General concerns about safety and security: the loop is dark and sparsely populated especially in the evening, and therefore may be perceived as unsafe by passengers.			
Planned changes	Improvements proposed in <i>Moving Forward</i> version of 2011 Supplement. Includes improved lighting, seating, security and coordination with potential area redevelopment.			
Capacity				
	Length	Total spaces	Spaces currently used	Comments
Active	30 ft.	0	0	There is no further room to add additional bays to the loop's existing concrete pad. NB: The 65 ft. bay (Bay 1) is currently used for 40ft. buses rather than artic's.
	40 ft.	8	8	
	60 ft.	1	1	
	Total active spaces	9	9	
Layover	30 ft.	0	0	
	40 ft.	1	1	
	60 ft.	0	0	
	Total layover spaces	1	1	
TOTAL		10	10	



Appendix 4: Exchange Summaries

Lonsdale Quay

Usage					
Active Bays	Stop ID	Approx. Length (ft.)	Independent/Dependant	Routes	Comments
1	58725	65	Independent	229 230	229, 230: Overload bay.
2	58724	45	Independent	229 230	229, 230: Overload bay.
3	54196	45	Independent	229 Phibbs Exchange via Westlynn 230 Upper Lonsdale 242 Upper Lonsdale N24 Upper Lonsdale	229: Some trips operate as 229 Lynn Valley Centre. 242 & N24: When SeaBus not operating.
4	54421	45	Independent	246 Park Royal/ Vancouver via	
5	54425	55	Independent	228 Lynn Valley	
6	54165	45	Independent	239 Park Royal 242 Vancouver N24 Downtown	242 & N24 : When SeaBus not operating.
7	54516	45	Independent	239 Phibbs Exchange/ Capilano	
8	54410	45	Independent	236 Grouse Mountain	
9	54134	55	Independent	236 Harbourside	
Other Bays			Formal?	Comments	
10	50980	55	Yes	Spare bay: Layover.	
X	N/A	35	No	Unused space adjacent to security kiosk and Bay 6.	

Amenities		
General	Yes/No	Comments
Map kiosk	Yes	One adjacent to SeaBus and second one in Loop by Bay 6. Map kiosks not lit (may be difficult to read at night).
Info tube at bus stop	No	Bus stop signage hanging from ceiling, not mounted on poles; no info tube collars. However, bus schedules posted on kiosk and signs have stop ID and number to text for schedule.
Trash receptacles	Yes	Mismatched - no design standard.
Recycling receptacles	No	
Newspaper vending boxes	Yes	
Operators' washroom	Yes	Located adjacent to MacDonald's.
Public telephone in proximity	Yes	4 payphones located between SeaBus entrance and Bus Loop.
Shelters and Seating	Yes/No	Comments
Shelters	No	Bus Loop area covered by building above.
Seating	Yes	Associated with specific bays.
Lighting in shelters	Some	Dim even during the day.

Universal Accessibility (based on TransLink's Universally Accessible Bus Stop Design Guidelines, 2007)		
	Yes/No	Comments
Wheelchair pad clear of obstructions	Yes	Not specifically designated but ample space.
Stop identification (e.g. on pole)	Yes	On signs hanging from ceiling.
HandyDART drop off area	Yes	Located West of Bus Loop

Appendix 4: Exchange Summaries

Lonsdale Quay

Multimodal		
Bicycle	Yes/No	Comments
Bike racks	Yes	3 uncovered racks managed by C-Media (604.924.1076) plus one rack adjacent to Lonsdale Quay.
Bicycle lockers	No	
Nearby cycling route(s)	Multiple	Designated, on-street routes on Chesterfield, St. Andrews, Low Level Rd. Nearby alternate, on-street routes include Esplanade and 4 St.
Pedestrian	Yes/No	Comments
Direct pathways		Painted crosswalk lines between SeaBus and Loop faded, hard to see. Limited pedestrian access (e.g. guard rail on East side of Bus Loop entrance prevents crossing).
Ped-activated traffic signals	Yes	Signal at North end of Bus Loop at Carrie Cates Crt.
Signage for pedestrians		"Watch for bus from left".
Pedestrian-vehicle conflict		
Motorized	Yes/No	
Passenger drop-off	Yes	Drop-off loop West of (but separate from) Bus Loop. "No stopping" on signs.
Taxi Stand	Yes	Room for several taxis plus space for HandyDART pickup/drop-off.
Security		
	Yes/No	Comments
Natural light	Some	Skylights bring very little natural light into the Hub area.
Illumination	Some	Area is dark and unoccupied during off-peak hours.
Security cameras	Yes	Mounted on ceiling of Bus Loop.
Emergency phone	No	Public phone available.
Emergency/security contact info	No	No emergency contact or security info.
Monitored passenger waiting area	No	
Visibility to passersby		
Security patrolled/police on site	No	Vacant CMBC security kiosk in between Bus Loop and Drop-Off loop.
Traffic management measures for transit vehicles		
	Yes/No	Comments
Adjacent dedicated ROW	No	
Priority signal	Yes	Bus-activated signal at Carrie Cates Crt. And Lonsdale Quay Exch.
Special access point	Yes	Only transit vehicles allowed in Bus Loop. Entrance via Carrie Cates Crt.
Other special feature (e.g. ramp)		
Park & Ride		
Name and Location		
Total Parking Spaces	No P&R at this location. Short-term pay parking available at Lonsdale Quay (ICBC staff parking lot; also a small lot across the street @ \$1.50/hr).	
Ownership		
Maintenance		
Cost		
Hours of Operation		

Appendix 4: Exchange Summaries

Phibbs Exchange

Phibbs Exchange

General Info				
Location	Hwy. 1 at Main St.			
Facility type	Off-Street Exchange; Loop			
Land Use				
Ownership	MoT			
Lease information				
Facility size	4,690 sq. ft. of maintained pavement area.			
Adjacent uses	Highway 1, Dollarton Hwy./Main St., residential, and commercial.			
Summary				
Known issues	The Loop is isolated and poorly connected to surrounding neighbourhoods largely because of its location adjacent to the highway. For this reason, it is also somewhat difficult to access on foot or by bike. Security issues at Phibbs include dealing, loitering, assault, robbery, vandalism. Focal point timed transfer system creates situation where multiple buses typically arrive and leave within same window of time. No designated passenger pickup/dropoff (Kiss & Ride), resulting in unofficial use for this function on Oxford St.			
Planned changes				
Capacity				
	Length	Total bays	Bays currently used	Comments
Active	30 ft.	1	1	A lane for parking buses (layover) is located against a wall on the NW side of the Loop. The length of this lane is roughly 245 ft. Layover spaces are not designated by routes; the exact number of vehicles that use these areas for layover and precise size measurements are not known. There is space for five 40 ft. spaces based on assumption that ~8 m. (26 ft.) is needed in between buses in order for them to be parked independently (i.e. able to maneuver in and out without another bus pulling ahead). NB Number of "bays currently used" varies by time of day. There may also be space to park buses along the NW side of the loop and/or along the Oxford St. entrance where transit supervisors often park.
	40 ft.	10	10	
	60 ft.	0	0	
	Total active spaces	11	11	
Layover	30 ft.	0	0	
	40 ft.	4	?	
	60 ft.	0	0	
	Total layover spaces	4	0	
TOTAL		15	11	



Appendix 4: Exchange Summaries

Phibbs Exchange

Usage					
Active Bays	Stop ID	Approx. Length (ft.)	Independent/Dependant	Routes	Comments
1	51761	50	Independent	28 Joyce Station	214 is a Community Shuttle in off-peak.
2	54100	40	Independent	130 Metrotown Station	
				214 Blueridge	
3	50447	40	Independent	210 Upper Lynn Valley	
4	54026	42	Independent	130 Capilano University	130: Peak hours only.
				211 Seymour	
5	51747	50	Independent	28 Capilano University	28: Peak hours only.
				239 Capilano University	
6	61011	40	Independent	C15 Indian River	
7	54077	42	Independent	229 Westlynn	
8	50448	41	Independent	212 Deep Cove	210, 211, 214: Peak hours only.
				210, 211, 214 Vancouver (Overload)	
9	54119	40	Independent	210 Vancouver	210: Evening trips operate as 4 Downtown with local service. 214: Peak hours only.
				211 Vancouver	
				214 Vancouver	
10	54424	40	Independent	239 Park Royal	
11	54333	52	Independent	232 Grouse Mountain	
Other Bays			Formal?	Comments	
		245 ft.	No	See comment under "Capacity".	

Amenities		
General	Yes/No	Comments
Map kiosk	Yes	2 kiosks at either end of the loop, one of which is lit at night.
Info tube at bus stop	Yes	
Trash receptacles	Yes	
Recycling receptacles	No	
Newspaper vending boxes	Yes	
Operators' washroom	Yes	Located adjacent to Bays 1 and 11.
Public telephone in proximity	Yes	Located adjacent to Operators' washroom.
Shelters and Seating	Yes/No	Comments
Shelters	Yes	6 large wooden shelters with seating facing both sides of the loop.
Seating	Yes	Seating in shelter at each bay.
Lighting in shelters	Yes	

Universal Accessibility (based on TransLink <i>Universally Accessible Bus Stop Design Guidelines</i> , 2007)		
	Yes/No	Comments
Wheelchair pad clear of obstructions	Yes	Not specifically designated but ample space.
Stop identification (e.g. on pole)	Yes	
HandyDART drop off area	No	Park and Ride or empty bay used?

Appendix 4: Exchange Summaries

Phibbs Exchange

Multimodal		
Bicycle	Yes/No	Comments
Bike racks	Yes	4 C-media bike racks located adjacent to bus stops.
Bicycle lockers	Yes	Yes, but no signage explaining purpose or where to go for information.
Nearby cycling route(s)	Multiple	Designated, off-street route on Hwy. 1 and near designated, on-street route along Mountain Hwy.
Pedestrian	Yes/No	Comments
Direct pathways		Painted crosswalk to Oxford St but otherwise limited in terms of pedestrian access. Area surrounding bus loop not very pedestrian-friendly.
Ped-activated traffic signals	No	
Signage for pedestrians	Yes	"Watch for bus from left".
Pedestrian-vehicle conflict		
Motorized	Yes/No	
Passenger drop-off	No	
Taxi Stand	No	

Security		
	Yes/No	Comments
Natural light	Yes	
Illumination	Yes	
Security cameras	No	
Emergency phone	No	Public phone available.
Emergency/security contact info posted	No	
Monitored passenger waiting area	No	
Visibility to passersby		
Security patrolled/police on site	Yes	No set times. North shore car rotates on random patrols unless dispatched.

Traffic management measures for transit vehicles		
	Yes/No	Comments
Adjacent dedicated ROW	Yes	Mountain Hwy. Bus lane and bus-only ramp(s).
Priority signal	No	
Special access point	Yes	Main St., Main St. Offramp, and Oxford St.
Other special feature (e.g. ramp)	Yes	Connected to Dollarton Hwy. Onramp and Main St. Offramp.

Park & Ride	
Name and Location	
Total Parking Spaces	40
Ownership	MoT
Maintenance	TransLink
Cost	Free
Hours of Operation	Available all week.

Appendix 4: Exchange Summaries

Park Royal

Park Royal

General Info				
Location	Marine Dr. at Taylor Way, West Vancouver			
Facility type	On-Street Exchange			
Land Use				
Ownership	Capilano Indian Reserve (all of South Park Royal and part of North Park Royal).			
Lease information				
Facility size	On-street			
Adjacent uses	Park Royal Mall, nearby residential.			
Summary				
	General lack of layover space. Currently, some of the buses are taking layover in the South Park Royal parking lot. There is no formal agreement with Park Royal regarding layover.			
Known issues				
Planned changes	Marine Dr Transit Priority and Revised Exchange - Revised Exchange to come on stream in 2011.			
Capacity				
	Length	Total spaces	Spaces currently used	Comments
Active	30 ft.	0	0	While there are two community shuttle routes, none of the bays are specifically designed for the shuttles; the CS bays are shared with 40 ft. buses serving other routes. The 257 is the only articulated bus serving West Vancouver. Bus stop #s 54441 or #54442 could accommodate a combination of 40 ft. and 60 ft. buses or several 40 ft. buses (3 and 2, respectively). See comments under "Usage" section regarding layover.
	40 ft.	8	8	
	60 ft.	2	2	
	Total active spaces	10	10	
Layover	30 ft.	1	1	
	40 ft.	2	2	
	60 ft.	0	0	
	Total layover spaces	3	3	
TOTAL		13	13	



Appendix 4: Exchange Summaries

Park Royal

Usage					
Active Bays	Stop ID	Approx. Length (ft.)	Independent/Dependant	Routes	Comments
n/a	54441	100 (60ft.+40ft. OR 2x40ft.)	Independent	239 Park Royal 246 Park Royal 250 Horseshoe Bay 250A Dundarave 251 Queens 252 Inglewood 256 Whitby Estates 257 Horseshoe Bay Express	Located on EB 800 Block Marine Drive (MB), adjacent to Park Royal North. Routes headed west other than the 256, which travels northbound. Could fit an 60 ft. artic. Plus a 40ft. Bus at the same time or alternatively, two 40 ft. buses.
n/a	54608	65	Independent	253 Caulfeild 254 British Properties 255 Dundarave	
n/a	54442	40	Independent	239 Park Royal 246 Park Royal	Unloading only. Located on WB 1000 Block Marine Drive (MB), adjacent to Park Royal South.
n/a	58426	80 (2x40ft.)	Independent	239 Park Royal 246 Park Royal	Unloading only and Layover for CMBC services. Located at NB mall exit (Park Royal South) at Marine Drive.
n/a	54411	140 (60ft.+40ft. OR 3x40ft.)	Independent	239 Capilano University 246 Highland 250 Vancouver 251 Vancouver 252 Vancouver 253 Vancouver 254 Vancouver 255 Capilano University via Lynn Valley Centre 256 Spuraway 257 Vancouver	WB 1000 Block Marine Drive (MB), adjacent to Park Royal South. Between 7:00 a.m. and 9:30 a.m. weekdays, all routes board at stop # 60835
n/a	60835			239 Capilano University 246 Highland 250 Vancouver 251 Vancouver 252 Vancouver 253 Vancouver 254 Vancouver 255 Capilano University via Lynn Valley Centre 256 Spuraway 257 Vancouver	Located on WB Mall Rd. in Park Royal South at Kin's Market. Picks up Monday to Friday, 7:30am to 9:00pm but no routes listed on bus stop sign. Not wheelchair accessible (no space because of fruit displays on sidewalk). Stop has been cancelled due to construction. Buses now use 54411 during AM Peak
Layover			Independent/Dependant	Routes	Comments
n/a		Layover			Some layover "bays" are informal, e.g. located in the parking lot at S. Park Royal Mall. For example, one bus was resting next to the loading dock at Extra Foods, while the Community Shuttles appear to regularly take layover in the parking lot next to the operators' washroom and overramp. CMBC uses 58426 as layover space.

Appendix 4: Exchange Summaries

Park Royal

Amenities		
General	Yes/No	Comments
Map kiosk	Yes	
Info tube at bus stop	No	Schedules posted on shelters.
Trash receptacles	Yes	
Recycling receptacles	No	
Newspaper vending boxes	Yes	
Operators' washroom	Yes	Located in S. Park Royal adjacent to overramp.
Public telephone in proximity	Yes	On both sides of Marine Drive near bus shelters.
Shelters and Seating	Yes/No	Comments
Shelters	Yes	Shelters shared by bus stops on either side of Marine Dr. 2 Shelters total, maintained by City of West Vancouver.
Seating	Yes	Adjacent to each stop.
Lighting in shelters	Yes	

Universal Accessibility (based on TransLink's <i>Universally Accessible Bus Stop Design Guidelines</i> , 2007)		
	Yes/No	Comments
Wheelchair pad clear of	No	Shelters, especially when crowded, form a potential obstruction.
Stop identification (e.g. on pole)	Some	Not at West Van-only bus stops.
HandyDART drop off area	No	

Multimodal		
Bicycle	Yes/No	Comments
Bike racks	No	
Bicycle lockers	No	
Nearby cycling route(s)	Multiple	Alternate, on-street routes along Marine Dr. and Taylor Way.
Pedestrian	Yes/No	Comments
Direct pathways		Sidewalks along road but parking lot in between bus stop and mall resulting in potential conflict between pedestrians and cars.
Ped-activated traffic signals	Yes	Push-button activated crosswalk
Signage for pedestrians	Yes	
Pedestrian-vehicle conflict		
Motorized	Yes/No	
Passenger drop-off	No	Not on Marine Drive or Taylor Way, however space in parking lot.
Taxi Stand	No	

Security		
	Yes/No	Comments
Natural light	Yes	
Illumination	Some	
Security cameras	No	
Emergency phone	No	
Emergency/security contact info	No	
Monitored passenger waiting area	No	
Visibility to passersby	Yes	
Security patrolled/police on site	Yes	Mall security

Traffic management measures for transit vehicles		
	Yes/No	Comments
Adjacent dedicated ROW	No	
Priority signal	No	
Special access point	No	
Other special feature (e.g. ramp)	No	

Park & Ride		
Name and Location		
Total Parking Spaces	166	
Ownership	Private	
Maintenance	Private	
Cost	Free	
Hours of Operation	Monday to Friday (except holidays) from 6am to 6pm.	

Appendix 4: Exchange Summaries
Capilano University

Capilano University

General Info				
Location	Capilano University, District of West Vancouver			
Facility type	Off-Street Exchange (with one route using an on-street stop)			
Land Use				
Ownership				
Lease information				
Facility size	On-street			
Adjacent uses	Capilano University, residential to west			
Summary				
	Routes are split between two separate locations (#239 on Purcell Way, other routes in Exchange on Monashee). Exchange currently closed (Summer/Fall 2010) due to construction of new film school. Negative reaction from nearby residents to increasing the amount of buses on Purcell Way.			
Known issues				
Planned changes	Redesign of Exchange planned for Fall 2010, design still under development. Postponed. Will be restored to original layout once work is completed in March 2011.			
Capacity				
	Length	Total spaces	Spaces currently used	Comments
Active	30 ft.	0	0	Capacity listed for exchange only; Route #239 stops on-street on Purcell Way.
	40 ft.	4	4	
	60 ft.	0	0	
	Total active spaces	4	4	
Layover	30 ft.	0	0	
	40 ft.	0	0	
	60 ft.	0	0	
	Total layover spaces	0	0	
TOTAL		4	4	

Appendix 4: Exchange Summaries
Capilano University

Usage					
Active Bays	Stop ID	Approx. Length (ft.)	Independent/Dependant	Routes	Comments
1	61068	40	Independent	28 Joyce Station	
2	61069	40	Dependant	Unloading Only	
3	61070	90	Dependant	130 Metrotown Station	
4	61071	90	Dependant	255 Dundarave	
5	54423	60	Dependant	239 Park Royal	
Layover			Independent/Dependant		Comments
n/a		Layover			Most layover taken in Bays. Some excess in loop and on-street Purcell Way.

Amenities		
General	Yes/No	Comments
Map kiosk		
Info tube at bus stop		
Trash receptacles	Yes	
Recycling receptacles		
Newspaper vending boxes	Yes	
Operators' washroom		
Public telephone in proximity		
Shelters and Seating	Yes/No	Comments
Shelters	Yes	
Seating	Yes	
Lighting in shelters	Yes	

Universal Accessibility (based on TransLink's <i>Universally Accessible Bus Stop Design Guidelines</i> , 2007)		
	Yes/No	Comments
Wheelchair pad clear of obstructions		
Stop identification (e.g. on pole)		
HandyDART drop off area		

Appendix 4: Exchange Summaries
Capilano University

Multimodal		
Bicycle	Yes/No	Comments
Bike racks		
Bicycle lockers		
Nearby cycling route(s)		
Pedestrian	Yes/No	Comments
Direct pathways		
Ped-activated traffic signals		
Signage for pedestrians		
Pedestrian-vehicle conflict		
Motorized	Yes/No	
Passenger drop-off		
Taxi Stand		

Security		
	Yes/No	Comments
Natural light		
Illumination		
Security cameras		
Emergency phone		
Emergency/security contact info		
Monitored passenger waiting area		
Visibility to passersby		
Security patrolled/police on site		

Traffic management measures for transit vehicles		
	Yes/No	Comments
Adjacent dedicated ROW		
Priority signal		
Special access point		
Other special feature (e.g. ramp)		

Park & Ride	
Name and Location	
Total Parking Spaces	
Ownership	
Maintenance	
Cost	
Hours of Operation	