

2012 Bus Service Performance Review

Appendix B – How to Read Route Summaries



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how to read... Route Summaries (1 of 2)

Number of people who live or work in the vicinity of the transit service. Population and employment density is a key contributor to ridership.

A higher number of intersections in the vicinity of a transit service generally indicates better pedestrian access to transit service and can contribute to higher ridership.

Does the given route contribute to the Frequent Transit Network?

Boardings were updated in 2012 by using an improved method and may not exactly match last year's report.

The estimated cost of service per year (Annual Revenue Hours x Average Cost per Service Hour).

Number of hours the bus is in-service (including recovery time but excluding trips to and from bus depots).

The estimated service cost per boarded passenger (Annual Service Cost / Annual Boardings).

Industry standard measure of ridership versus transit supply.

Numbers change as there are fewer services that operate on weekends.

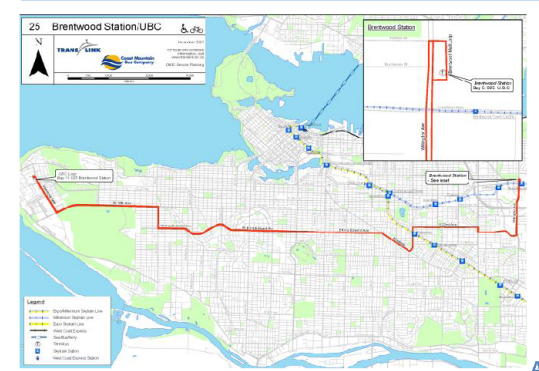
Number of people who board the service, organized by day type.

How full does the bus get on an average trip (e.g. on an average trip, route 25 carries approximately 37 passengers along the busiest segments of the route).

A measure of vehicle occupancy on an average trip (Peak Passenger Load / Vehicle Capacity), where a factor of 1.0 means a full bus. This metric does not consider passenger turnover.

Utilization of the passenger capacity provided (Boardings per Trip / Vehicle Capacity). Values higher than 100% indicate passenger turnover i.e. the same number of spaces being occupied by multiple passengers along the route.

Route 025



Key Characteristics

- Subregion of Primary Service: Vancouver/UBC
- Predominant Vehicle Type: Std. Bus
- Population (People, 400m Buffer): 69,000
- Employment (Jobs, 400m Buffer): 28,000
- Walkability (intersection density): High (0.38 int./hect.)
- Contributes to FTN (Y/N): Yes

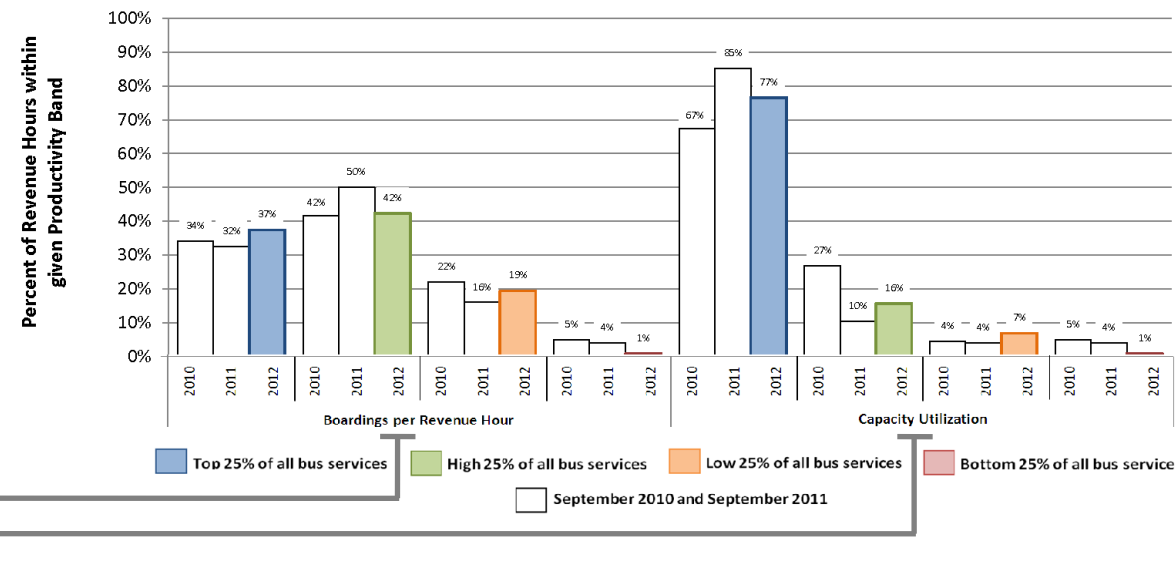
Comments about potential data anomalies

	2010	2011	2012	Rank (2012)
Annual Boardings:	5,584,000	5,984,000	6,453,000	8 of 213
Annual Service Cost:	\$7,371,000	\$7,581,000	\$7,930,000	8 of 218
Annual Revenue Hours:	73,700	75,800	79,300	8 of 218
Cost /Boarded Passenger:	\$1.32	\$1.27	\$1.23	28 of 212
Avg. Boardings / Rev. Hour:	76	79	81	27 of 212
Avg. Daily Boardings (Mon-Fri):	18,750	19,200	20,550	7 of 211
Avg. Daily Boardings (Saturdays):	8,400	11,250	11,850	14 of 179
Avg. Daily Boardings (Sun & Holidays):	6,800	9,200	10,450	11 of 171
Peak Passenger Load (Bi-directional Avg.):	32	37	37	15 of 211
Peak Load Factor (Vehicle Occupancy):			0.74	7 of 211
Average Capacity Utilization (Passenger Turnover):	170%	188%	187%	2 of 211

Service Changes Since 2010

- Fall 2011, AM peak improved from 5m to 4m btw Nanaimo Stn & UBC
- Summer 2012, Increase freq from 15 to 12m: Sat 08-19hr; & S/H 10-18hr permanent

Productivity



The chart compares route 25's performance against other bus services in the system. For Boardings per Revenue Hour, route 25 (2012) is in the top 25% of all bus services (blue bar, 37%). For Capacity Utilization, route 25 (2012) is in the high 25% of all bus services (green bar, 187%).

Summary of service changes implemented between 2010 and 2012. Service changes are typically made to assess issues related to route performance.

In order to compare the productivity of all bus services, all revenue hours have been classified into four different productivity bands where the percentage of hours that fall within the highest performing productivity band are highlighted in blue and the lowest performers are highlighted in red.

The left half of the productivity graph shows the distribution of revenue hours among the four productivity bands in terms of boardings per revenue hour. The graph also shows changes in productivity, contrasting 2012 versus 2011 and 2010 data.

The right half of the productivity graph shows the distribution of revenue hours by capacity utilization. For instance, route 25 has excellent capacity utilization since more than 75 per cent of its revenue hours fall within the top 25% of performers in the system.

how to read...

Route Summaries

(2 of 2)

Current Performance by Day of Week, Route 025

Time	Annual Revenue Hours		Average Trips per Hour		Average Boardings per Hour		Average Boardings per Trip		Average Capacity Utilization		Average Peak Passenger Load (EB / WB)		Vehicle Type		
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	
Mon-Fri	01:00-06:00	1317	1775	4	5	48	46	39	41	79%	82%	22 / 30	25 / 26	Std. Bus	Std. Bus
	06:00-09:00	15646	16046	11	12	78	74	91	85	183%	174%	44 / 42	39 / 43	Std. Bus	Std. Bus
	09:00-15:00	20508	20801	7	7	80	81	101	101	203%	205%	32 / 40	34 / 41	Std. Bus	Std. Bus
	15:00-18:00	13647	13787	8	8	83	87	113	117	227%	234%	49 / 38	50 / 38	Std. Bus	Std. Bus
	18:00-21:00	7383	7467	5	5	76	70	83	77	167%	155%	36 / 26	36 / 26	Std. Bus	Std. Bus
	21:00-01:00	2938	2921	2	2	71	71	60	64	119%	130%	31 / 21	38 / 20	Std. Bus	Std. Bus

Time	Annual Revenue Hours		Average Trips per Hour		Average Boardings per Hour		Average Boardings per Trip		Average Capacity Utilization		Average Peak Passenger Load (EB / WB)		Vehicle Type		
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	
Saturday	01:00-06:00	36	36	1	1	54	55	50	49	100%	98%	/ 37	/ 42	Std. Bus	Std. Bus
	06:00-09:00	1052	1218	4	5	54	51	55	51	111%	105%	18 / 35	17 / 32	Std. Bus	Std. Bus
	09:00-15:00	2577	3217	4	5	97	76	119	88	241%	177%	40 / 46	30 / 33	Std. Bus	Std. Bus
	15:00-18:00	1326	1659	4	5	115	96	137	111	274%	222%	56 / 46	39 / 41	Std. Bus	Std. Bus
	18:00-21:00	1111	1165	4	4	79	87	80	88	158%	177%	35 / 24	34 / 24	Std. Bus	Std. Bus
	21:00-01:00	630	632	2	2	78	63	65	57	132%	118%	32 / 20	16 / 10	Std. Bus	Std. Bus

Time	Annual Revenue Hours		Average Trips per Hour		Average Boardings per Hour		Average Boardings per Trip		Average Capacity Utilization		Average Peak Passenger Load (EB / WB)		Vehicle Type		
	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	
Sunday/Holiday	01:00-06:00	44	44	1	1									Std. Bus	Std. Bus
	06:00-09:00	1067	1067	3	3	46	46	47	45	95%	90%	12 / 24	15 / 30	Std. Bus	Std. Bus
	09:00-15:00	2919	3604	4	5	75	73	87	85	176%	169%	29 / 35	27 / 36	Std. Bus	Std. Bus
	15:00-18:00	1480	1788	4	5	85	83	104	95	209%	190%	40 / 37	37 / 30	Std. Bus	Std. Bus
	18:00-21:00	1351	1291	4	4	63	69	67	69	134%	137%	32 / 26	29 / 22	Std. Bus	Std. Bus
	21:00-01:00	784	784	2	2	35	47	30	38	61%	79%	22 / 14	14 / 19	Std. Bus	Std. Bus

■ Top 25% of all bus services
 ■ High 25% of all bus services
 ■ Low 25% of all bus services
 ■ Bottom 25% of all bus services
 # Above Guidelines

These columns describe the service levels offered during each time period in terms of revenue hours and the average number of trips per hour for the given time period.

These columns utilize the same data, metrics, and color coding from the previous page. The tables illustrate productivity by day type and time period. Color coding helps to track changes in performance over time.

The bold red numbers represent a period of time where passenger loads are above TransLink's Transit Service Guidelines for maximum number of passengers by bus type, time period and direction (eastbound / westbound or northbound / southbound), indicating potential overcrowding.

If a vehicle type change is made, it will be shown in these columns.

New vehicle allocation tables allowed for a more accurate depiction of vehicle types in the 2012 performance review.

When there is a value for annual revenue hours and a blank space in the corresponding performance metrics, this means that there were no samples or data available for that period of time.

In contrast, when there are no values for annual revenue hours, a blank space means that service along the given route was not provided during this time of day.