



# 2015 LRT PASSENGER COUNT

## CAPITAL and METRO LINES

**Project Team:**

**ETS**  
Transit Data Management

Transportation Planning  
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## 2015 LRT PASSENGER COUNT

Edmonton Transit System (ETS) conducted the 2015 LRT Passenger Count during the SEP15 sign-up occurring between September 6, 2015 and December 5, 2015. The count was conducted with the assistance of the Strategic Monitoring and Analysis section of the Transportation Planning Branch. The purpose of the survey is to describe boarding and alighting on the Capital and Metro Lines during a time when service hours are at their highest levels and post-secondary institutions and schools are in session. The LRT Passenger Count represents the average passenger flow of a typical fall weekday on the Capital and Metro Lines.

ETS started Light Rail Transit (LRT) service in 1978 starting with the Capital Line (Route 501). The Capital Line now is a 16.1 km line from Clareview station in northeast Edmonton to Century Park station in south Edmonton. The Metro Line (Route 502) opened on Sunday, September 6, 2015 as a 3.3 km extension from Churchill LRT Station in downtown Edmonton northwest to the Northern Alberta Institute of Technology (NAIT). ETS is operating the Metro Line on a line of sight basis. This means that in the short term, Metro Line trains run every 15 minutes between Century Park Station and NAIT Station, operating with reduced speeds (25 km/h) between MacEwan station and NAIT station. In the longer term - once the new signalling system is fully operational - Metro Line trains will run at roughly 50 km/h every 10 minutes between Health Sciences/Jubilee station and NAIT station, as originally designed.

The Metro Line trains operate between NAIT and Century Park stations on weekdays until 10:00 p.m. and Saturdays until 7:00 p.m. After 10:00 p.m. on weekdays, 7:00 p.m. on Saturdays, and all day Sundays, Metro Line trains operate between NAIT and Health Sciences/Jubilee stations. This routing allows ETS to maximize the number of trains ETS can be run during peak and non-peak hours.

Today, ETS operates the service with 94 light-rail vehicles (LRV) on the Capital and Metro Lines connecting 18 LRT stations, 10 of which are connected to a Transit Centre. The Capital Line provides 134 weekday trips between Clareview and Century Park stations while the Metro Line provides 77 weekday trips between NAIT and Century Park stations.

The survey's methodology counts passengers at every LRV door for each train from the beginning of the service day and to the end. This train-level methodology provides better data accuracy while reducing counting errors and stages the data for analysis and reporting.

In addition to the regular scheduled service, ETS operates extra service on the lines for special events such as hockey or football games or other major events at venues near the LRT lines. While the project team tries to avoid doing passenger counts during these major events, not all events can be avoided. Passenger counts from these special events are sometime blended in with the regular scheduled service passenger count. The number of events from one year's counting to the next may produce a positive or negative variance on the passenger count and may have an impact on the final passenger count reported.

The 2015 LRT Passenger Count report provides statistics on boarding and alighting, information on time of day distributions of station activity, maximum load point activity, average passenger loads per LRV and passenger-kilometres. The data is presented by line, by station, by direction, by time period and by block. Three supplementary reports attached to this report providing a more detailed analysis of the LRT passenger count. Please view the following reports for additional information:

- LRT Detailed Train List
- LRT Passenger Volumes by Time Period
- LRT Passenger Volume by Rolling One Hour and Two Hours Period
- LRT Average Daily Passenger Flow Map
- LRT A.M. Peak Hour Average Daily Passenger Flow Map
- LRT P.M. Peak Hour Average Daily Passenger Flow Map

## 2015 KEY FINDINGS

### Boarding and Alighting

In 2015, an average of **108,690** weekday passengers used the LRT, **78,914** on the Capital Line and **29,776** on the Metro Line. The LRT passenger flow is now shared between the Capital and Metro Lines between Churchill and Century Park station in both directions.

The total LRT station activity for the Capital and Metro Lines is **217,380** boarding and alighting with the Capital Line having **157,828** boarding and alighting and the Metro Line having **59,552** boarding and alighting

Century Park LRT station had **26,424** or **12.2%** of the total boarding and alighting, followed by University LRT station with **25,783** or **11.9%**.

For the three new Metro line stations – NAIT, Kingsway/RAH and MacEwan - the total station activity is **12,761** boarding and alighting.

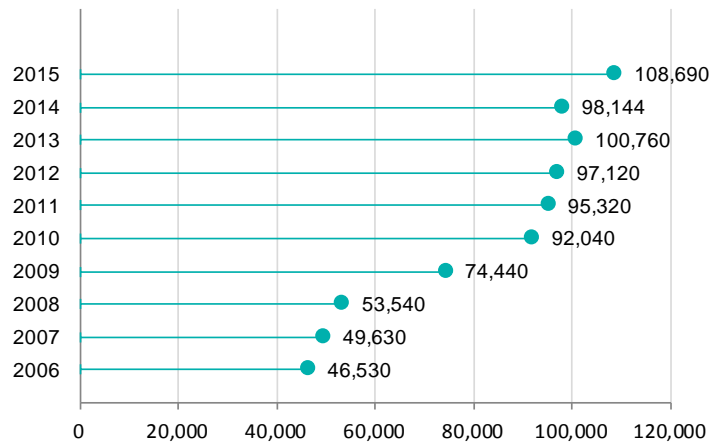
### Key Findings

LRT boarding increased to an average **108,690** weekday passengers in 2015. Capital line - **78,914** and Metro line - **29,776**

This is an increase of **10,546** passengers from 2014 providing an annual growth rate of **10.7%**.

Over the past ten years, LRT Boarding have grown by **62,160** passengers **133.6%**

### 10 Years - Average Daily LRT Passengers Weekday Service





## 2015 KEY FINDINGS

### A.M and P.M. Peak Hours

The A.M. Peak Hour is the hour between 6:00 a.m. and 9:00 a.m. with the highest passenger volume flow at the maximum load point. The P.M. Peak Hour is the hour between 3:00 p.m. and 6:00 p.m. with the highest passenger volume flow at the maximum load point.

#### Combined Lines (Capital and Metro):

For 2015, the combined lines A.M. Peak Hour boarding remained relatively the same at **13,543** in 2015 from **13,540** in 2014 while the combined lines P.M. Peak Hour boarding have increased by **14.9%** to **13,772** in 2015 from **11,980** in 2014

#### Capital Line:

In 2015, for the Capital Line southbound, the A.M. Peak Hour is the hour between **7:20 a.m.** and **8:15 a.m.** departing **Stadium** station with a maximum load of **3,930**, while for the Capital Line northbound, the A.M. Peak Hour is the hour between **7:31 a.m.** and **8:21 a.m.** departing **McKernan/Belgravia** station with a maximum load of **4,048**.

The total A.M. Peak Hour boarding for the Capital Line is **10,447**

The Capital Line southbound, the P.M. Peak Hour is the hour between **4:02 p.m.** and **4:57 p.m.** departing **Health Sciences/Jubilee** station with a maximum load of **3,761**, while for the Capital Line northbound, the P.M. Peak Hour is the hour between **4:12 p.m.** and **5:02 p.m.** departing **Churchill** station with a maximum load of **3,554**.

The total P.M. Peak Hour boarding for the Capital Line is **10,355**

#### Metro Line:

In 2015, for the Metro Line southbound, the A.M. Peak Hour is the hour between **8:32 a.m.** and **9:17 a.m.** departing **Grandin/Govt' Centre** station with a maximum load of **367**, while for the Metro Line northbound, the A.M. Peak Hour is the hour between **7:41 a.m.** and **8:26 a.m.** departing **McKernan/Belgravia** station with a maximum load of **1,789**.

The total A.M. Peak Hour boarding for the Metro Line is **3,096**

The Metro Line southbound, the P.M. Peak Hour is the hour between **4:22 p.m.** and **5:07 p.m.** departing **Health Sciences/Jubilee** station with a maximum load of **1,620**, while for the Metro Line northbound, the P.M. Peak Hour is the hour between **3:59 p.m.** and **4:44 p.m.** departing **University** station with a maximum load of **525**.

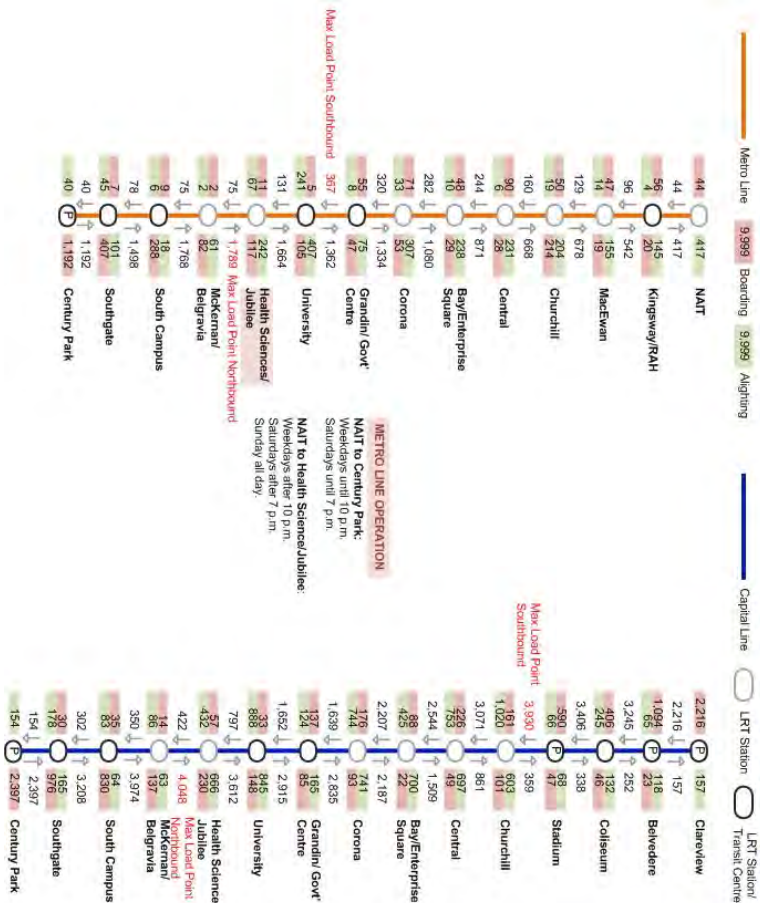
The total P.M. Peak Hour boarding for the Metro Line is **3,417**



# A.M. PEAK HOUR DAILY PASSENGER FLOW

## METRO AND CAPITAL LINES MAP – A.M. PEAK HOUR - DAILY PASSENGER FLOW

2015 - Typical Fall Weekday



**A.M. PEAK HOUR**  
 A.M. peak hour is the hour between 6:00 a.m. and 9:00 a.m. with the highest passenger volume at the Max Load Point.

**CAPITAL LINE**  
 A.M. Peak Hour Southbound is 7:20 a.m. – 8:15 a.m. departing Stadium station with a maximum depart load of 3,930  
 A.M. Peak Hour Northbound is 7:31 a.m. – 8:21 a.m. departing MckEvan/Belgravia station with a maximum depart load of 4,048

**METRO LINE**  
 Total A.M. Peak Hour Boardings – 10,447

A.M. Peak Hour Southbound is 8:32 a.m. – 9:17 a.m. departing Grandin/Govt Centre station with a maximum depart load of 387

A.M. Peak Hour Northbound is 7:41 a.m. – 8:26 a.m. departing MckEvan/Belgravia station with a maximum depart load of 1,789

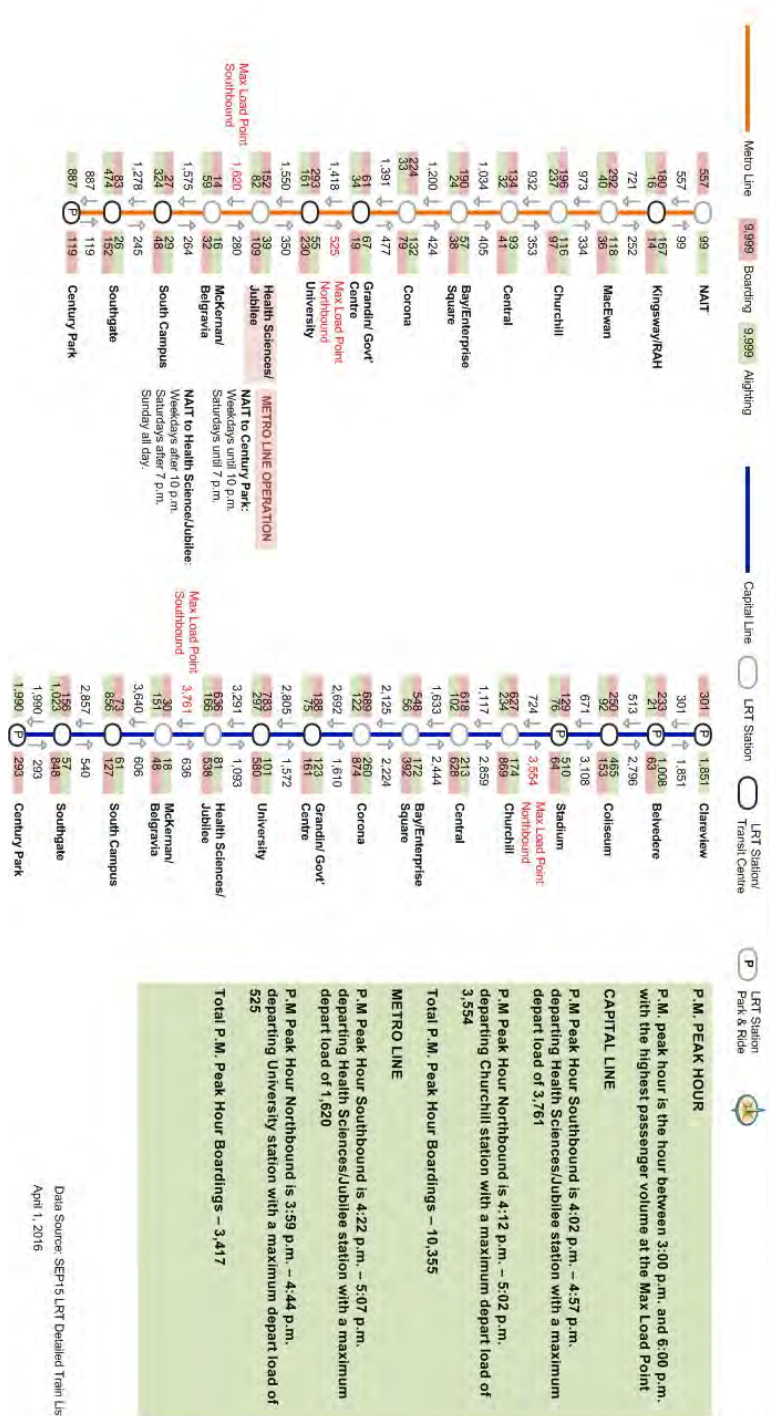
**Total A.M. Peak Hour Boardings – 3,096**

Data Source: SEP15 LRT Detailed Train List  
 April 1, 2016

# P.M. PEAK HOUR DAILY PASSENGER FLOW

## METRO AND CAPITAL LINES MAP – P.M. PEAK HOUR - DAILY PASSENGER FLOW

2015 - Typical Fall Weekday



**P.M. PEAK HOUR**  
 P.M. peak hour is the hour between 3:00 p.m. and 6:00 p.m. with the highest passenger volume at the Max Load Point

**CAPITAL LINE**  
 P.M. Peak Hour Southbound is 4:02 p.m. – 4:57 p.m. departing Health Sciences/Jubilee station with a maximum depart load of 3,761

P.M. Peak Hour Northbound is 4:12 p.m. – 5:02 p.m. departing Churchill station with a maximum depart load of 3,554

Total P.M. Peak Hour Boardings – 10,355

**METRO LINE**  
 P.M. Peak Hour Southbound is 4:22 p.m. – 5:07 p.m. departing Health Sciences/Jubilee station with a maximum depart load of 1,620

P.M. Peak Hour Northbound is 3:59 p.m. – 4:44 p.m. departing University station with a maximum depart load of 525

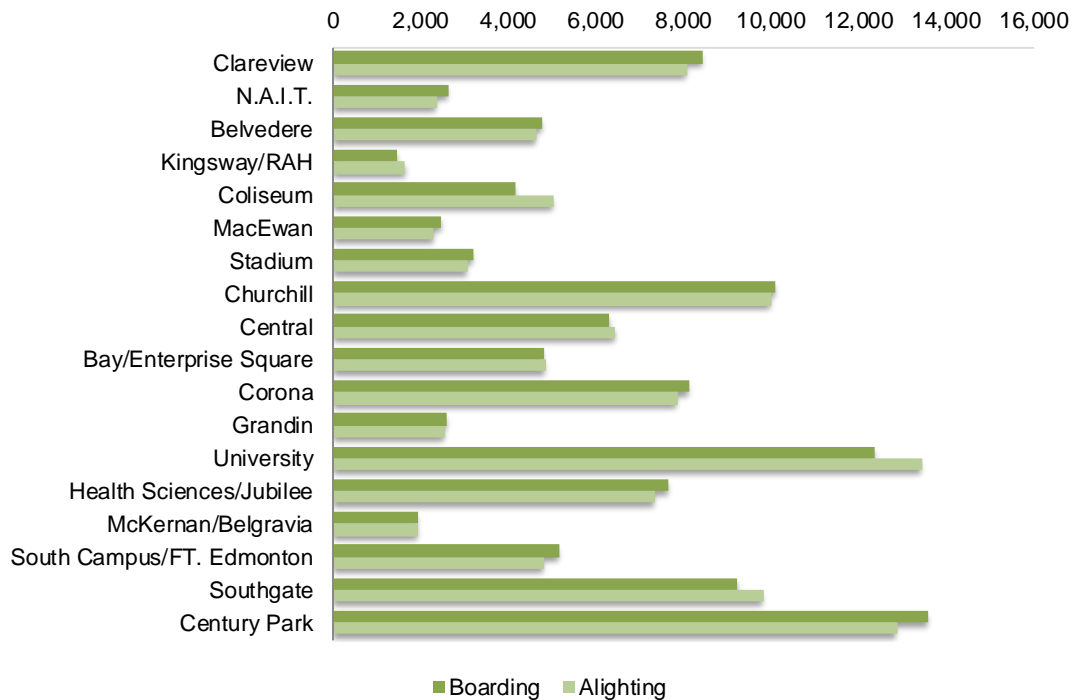
Total P.M. Peak Hour Boardings – 3,417

Data Source: SEP15 LRT Detailed Train List  
 April 1, 2016

**CAPITAL LINE AND METRO LINE  
BOARDING AND ALIGHTING BY LINE**

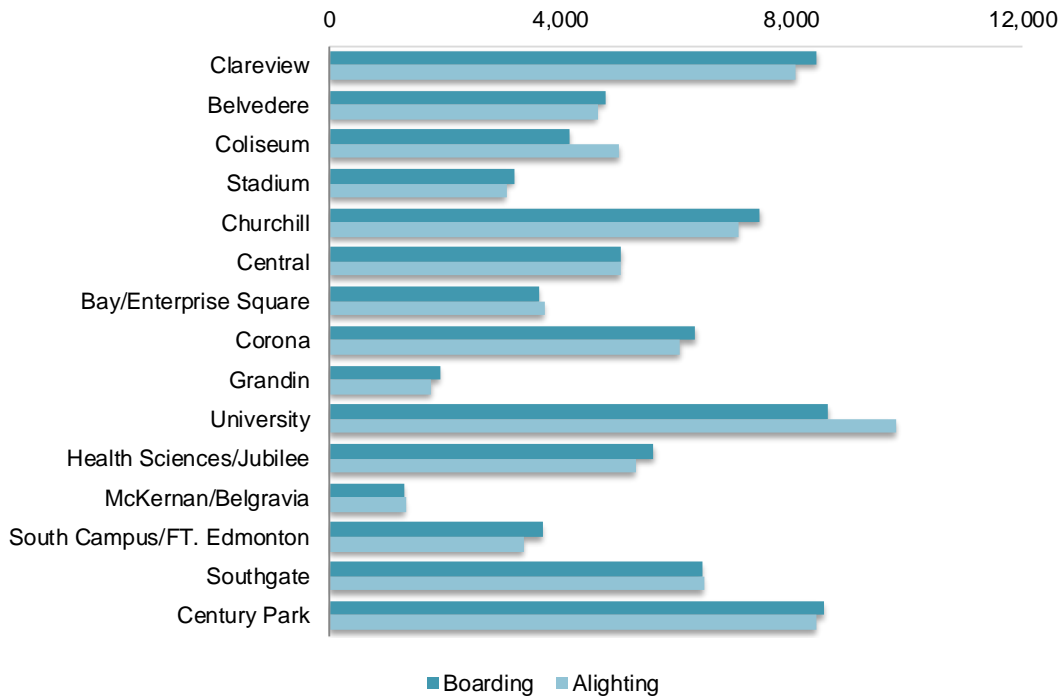


## 2015 Station Activity - Boarding and Alighting - Combined Lines Weekday Service



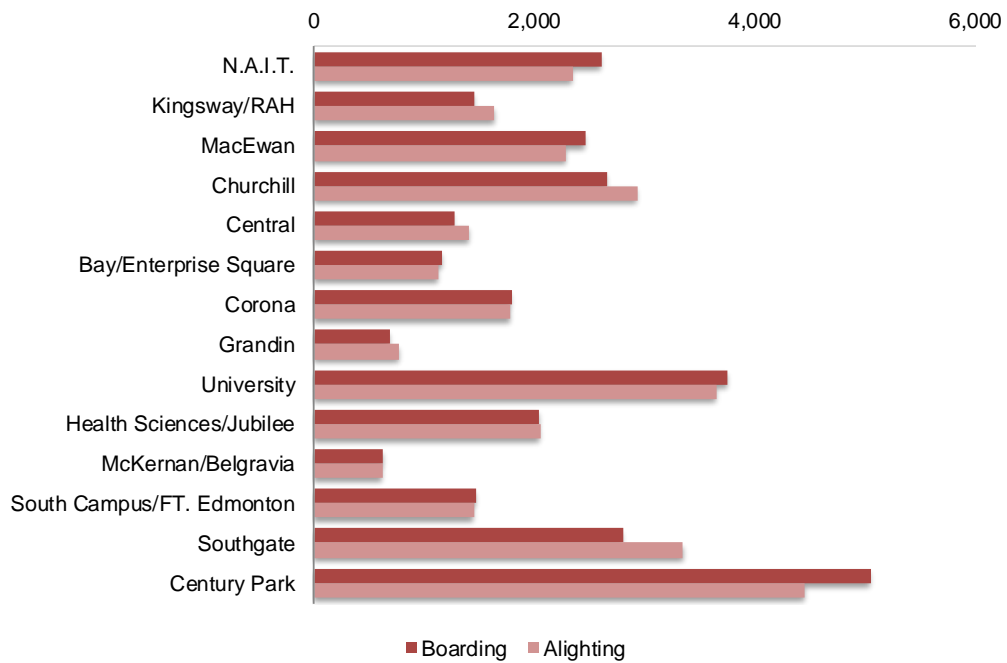
LRT Station	Boarding	Alighting	Station Total	% of Total
Clareview	8,417	8,060	16,477	7.6%
N.A.I.T.	2,601	2,336	4,937	2.3%
Belvedere	4,752	4,618	9,370	4.3%
Kingsway/RAH	1,452	1,635	3,087	1.4%
Coliseum	4,145	5,007	9,152	4.2%
MacEwan	2,456	2,281	4,737	2.2%
Stadium	3,171	3,042	6,213	2.9%
Churchill	10,087	9,981	20,068	9.2%
Central	6,299	6,430	12,729	5.9%
Bay/Enterprise Square	4,777	4,825	9,602	4.4%
Corona	8,102	7,833	15,935	7.3%
Grandin	2,584	2,527	5,111	2.4%
University	12,358	13,425	25,783	11.9%
Health Sciences/Jubilee	7,640	7,326	14,966	6.9%
McKernan/Belgravia	1,911	1,918	3,829	1.8%
South Campus/FT. Edmonton	5,140	4,792	9,932	4.6%
Southgate	9,225	9,803	19,028	8.8%
Century Park	13,573	12,851	26,424	12.2%
<b>Total ----&gt;</b>	<b>108,690</b>	<b>108,690</b>	<b>217,380</b>	<b>100%</b>

## 2015 Station Activity - Boarding and Alighting by Station - Capital Line Weekday Service



LRT Station	Boarding	Alighting	Station Total	% of Total
Clareview	8,417	8,060	16,477	10.4%
Belvedere	4,752	4,618	9,370	5.9%
Coliseum	4,145	5,007	9,152	5.8%
Stadium	3,171	3,042	6,213	3.9%
Churchill	7,435	7,059	14,494	9.2%
Central	5,037	5,026	10,063	6.4%
Bay/Enterprise Square	3,616	3,703	7,319	4.6%
Corona	6,318	6,057	12,375	7.8%
Grandin	1,898	1,757	3,655	2.3%
University	8,609	9,783	18,392	11.7%
Health Sciences/Jubilee	5,598	5,283	10,881	6.9%
McKernan/Belgravia	1,285	1,304	2,589	1.6%
South Campus/FT. Edmonton	3,674	3,350	7,024	4.5%
Southgate	6,429	6,458	12,887	8.2%
Century Park	8,530	8,407	16,937	10.7%
<b>Total ----&gt;</b>	<b>78,914</b>	<b>78,914</b>	<b>157,828</b>	<b>100%</b>

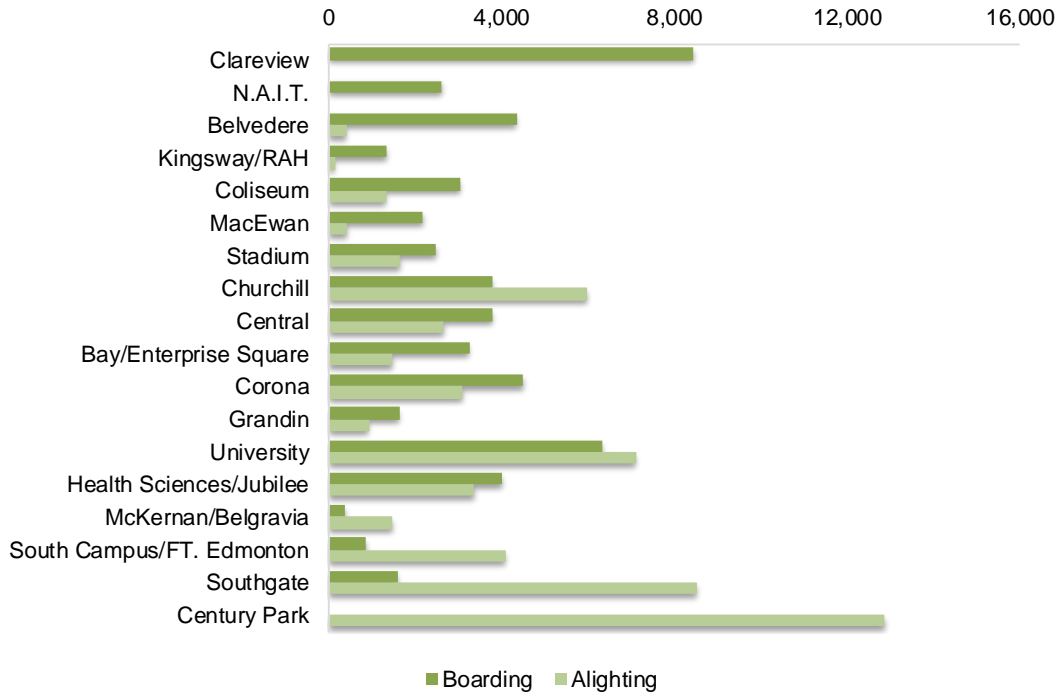
## 2015 Station Activity - Boarding and Alighting by Station - Metro Line Weekday Service



LRT Station	Boarding	Alighting	Station Total	% of Total
N.A.I.T.	2,601	2,336	4,937	8.3%
Kingsway/RAH	1,452	1,635	3,087	5.2%
MacEwan	2,456	2,281	4,737	8.0%
Churchill	2,652	2,922	5,574	9.4%
Central	1,262	1,404	2,666	4.5%
Bay/Enterprise Square	1,161	1,122	2,283	3.8%
Corona	1,784	1,776	3,560	6.0%
Grandin	686	770	1,456	2.4%
University	3,749	3,642	7,391	12.4%
Health Sciences/Jubilee	2,042	2,043	4,085	6.9%
McKernan/Belgravia	626	614	1,240	2.1%
South Campus/FT. Edmonton	1,466	1,442	2,908	4.9%
Southgate	2,796	3,345	6,141	10.3%
Century Park	5,043	4,444	9,487	15.9%
<b>Total ----&gt;</b>	<b>29,776</b>	<b>29,776</b>	<b>59,552</b>	<b>100%</b>

**CAPITAL LINE AND METRO LINE  
BOARDING AND ALIGHTING BY DIRECTION**

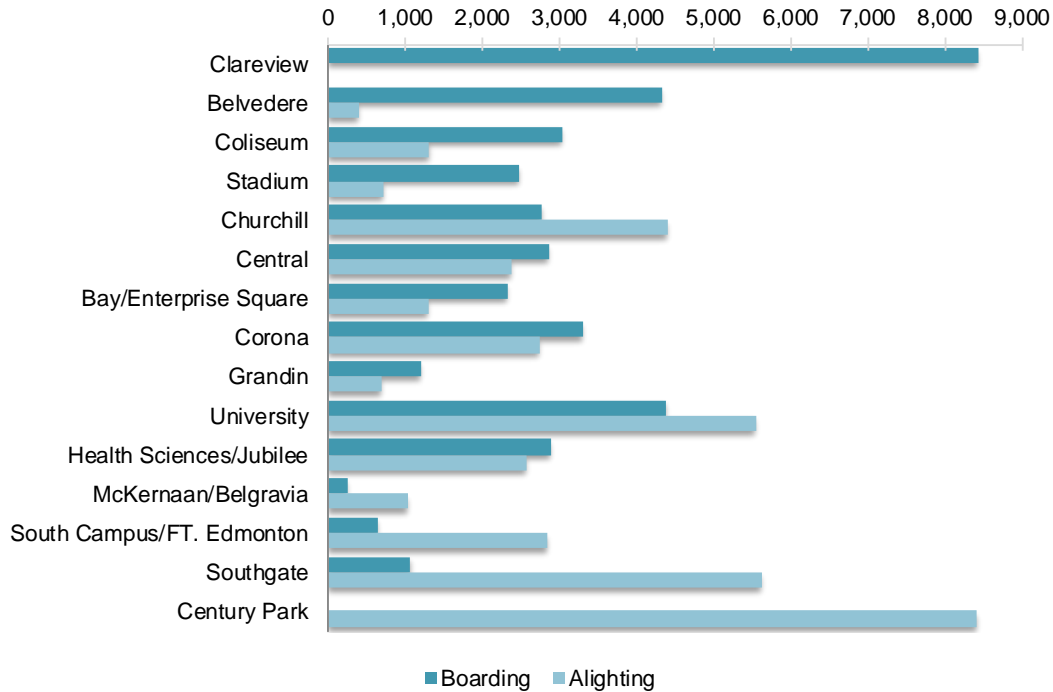
## 2015 Boarding and Alighting Southbound Combined Lines (Clareview/NAIT to Century Park) Weekday Service



LRT Station	Boarding	Alighting	Station Total	% of Total
Clareview	8,417	0	8,417	7.7%
N.A.I.T.	2,601	0	2,601	2.4%
Belvedere	4,316	385	4,701	4.3%
Kingsway/RAH	1,323	114	1,437	1.3%
Coliseum	3,023	1,303	4,326	4.0%
MacEwan	2,165	408	2,573	2.4%
Stadium	2,469	1,635	4,104	3.7%
Churchill	3,759	5,959	9,718	8.9%
Central	3,767	2,649	6,416	5.9%
Bay/Enterprise Square	3,222	1,460	4,682	4.3%
Corona	4,485	3,082	7,567	6.9%
Grandin	1,610	902	2,512	2.3%
University	6,305	7,080	13,385	12.2%
Health Sciences/Jubilee	3,993	3,349	7,342	6.7%
McKernan/Belgravia	370	1,462	1,832	1.7%
South Campus/FT. Edmonton	850	4,069	4,919	4.5%
Southgate	1,578	8,496	10,074	9.2%
Century Park	0	12,854	12,854	11.7%
<b>Total ----&gt;</b>	<b>54,253</b>	<b>55,207</b>	<b>109,460</b>	<b>100%</b>

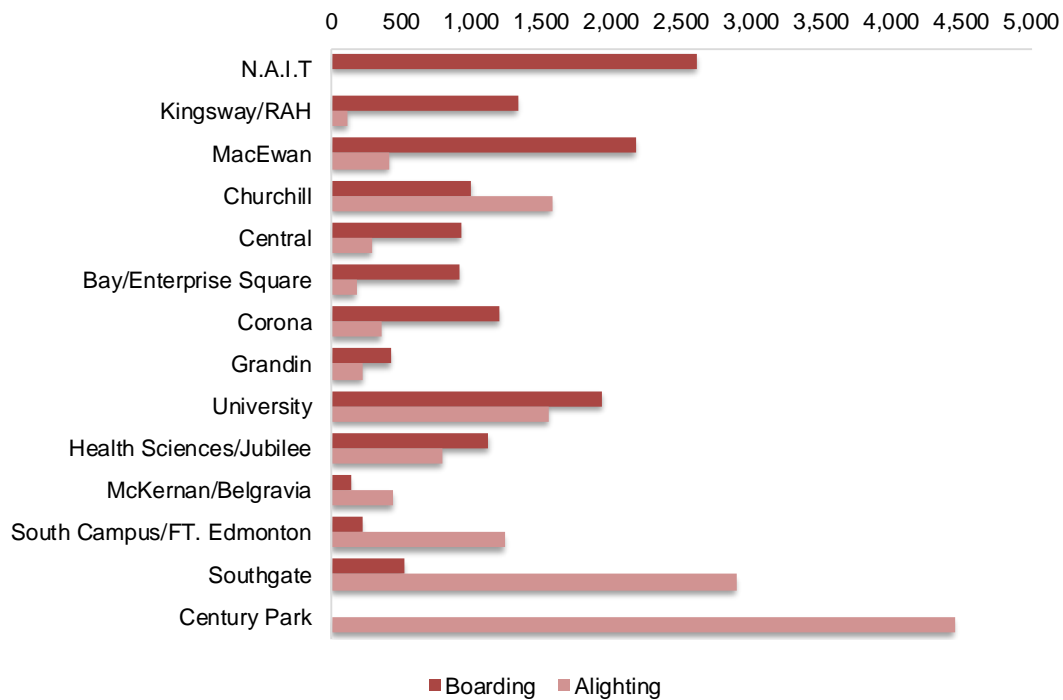


## 2015 Boarding and Alighting Southbound Capital Line (Clareview to Century Park) Weekday Service



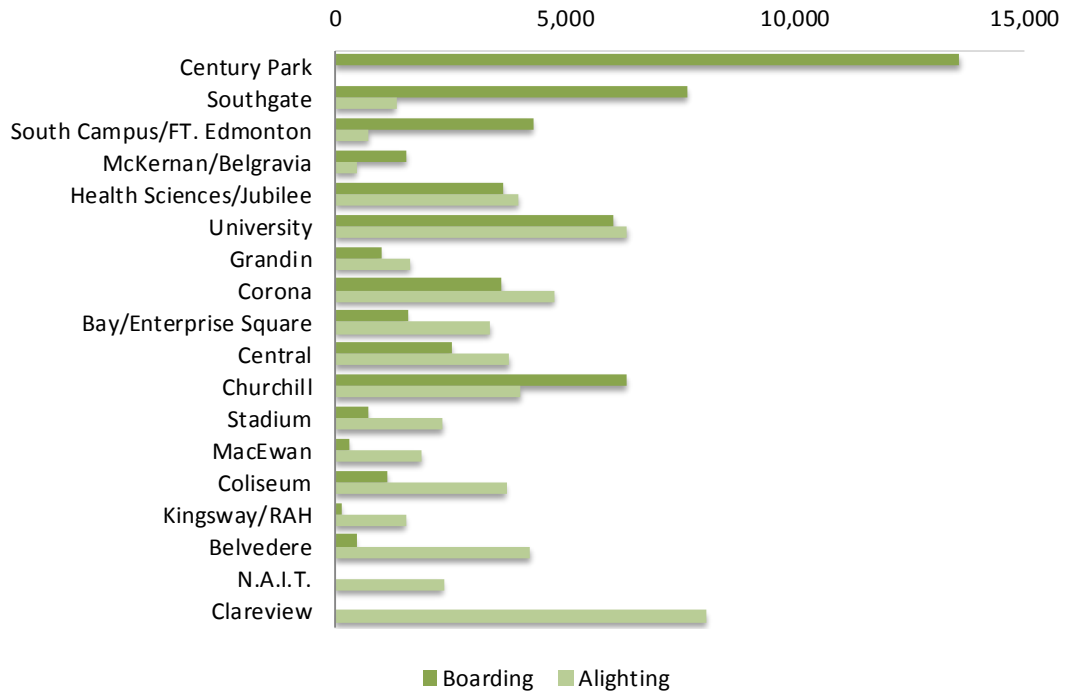
LRT Station	Boarding	Alighting	Station Total	% of Total
Clareview	8,417	0	8,417	10.6%
Belvedere	4,316	385	4,701	5.9%
Coliseum	3,023	1,303	4,326	5.4%
Stadium	2,469	707	3,176	4.0%
Churchill	2,765	4,390	7,155	9.0%
Central	2,848	2,365	5,213	6.5%
Bay/Enterprise Square	2,314	1,287	3,601	4.5%
Corona	3,290	2,729	6,019	7.6%
Grandin	1,190	679	1,869	2.3%
University	4,376	5,532	9,908	12.4%
Health Sciences/Jubilee	2,874	2,559	5,433	6.8%
McKernaan/Belgravia	237	1,024	1,261	1.6%
South Campus/FT. Edmonton	635	2,836	3,471	4.4%
Southgate	1,062	5,610	6,672	8.4%
Century Park	0	8,410	8,410	10.6%
<b>Total ----&gt;</b>	<b>39,816</b>	<b>39,816</b>	<b>79,632</b>	<b>100%</b>

## 2015 Boarding and Alighting Southbound Metro Line (NAIT to Century Park)



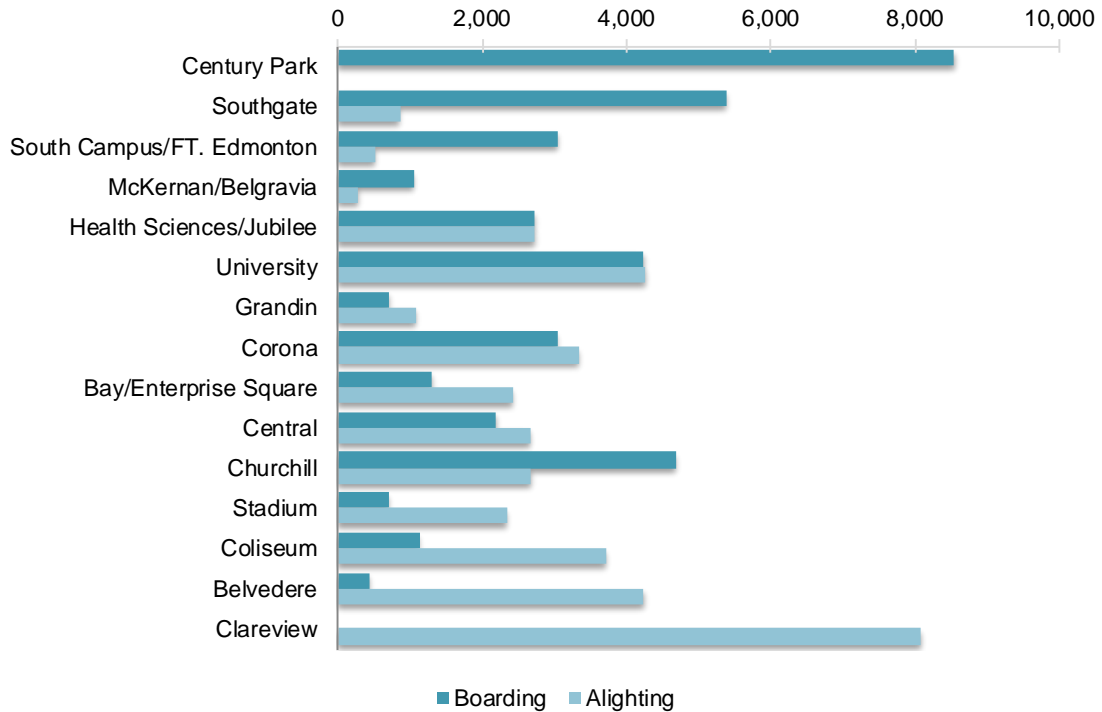
LRT Station	Boarding	Alighting	Station Total	% of Total
N.A.I.T	2,601	0	2,601	9.0%
Kingsway/RAH	1,323	114	1,437	5.0%
MacEwan	2,165	408	2,573	8.9%
Churchill	994	1,569	2,563	8.9%
Central	919	284	1,203	4.2%
Bay/Enterprise Square	908	173	1,081	3.7%
Corona	1,195	353	1,548	5.4%
Grandin	420	223	643	2.2%
University	1,929	1,548	3,477	12.0%
Health Sciences/Jubilee	1,119	790	1,909	6.6%
McKernan/Belgravia	133	438	571	2.0%
South Campus/FT. Edmonton	215	1,233	1,448	5.0%
Southgate	516	2,886	3,402	11.8%
Century Park	0	4,444	4,444	15.4%
<b>Total ----&gt;</b>	<b>14,437</b>	<b>14,463</b>	<b>28,900</b>	<b>100%</b>

## 2015 Boarding and Alighting Northbound Combined Lines (Century Park to Clareview/NAIT)



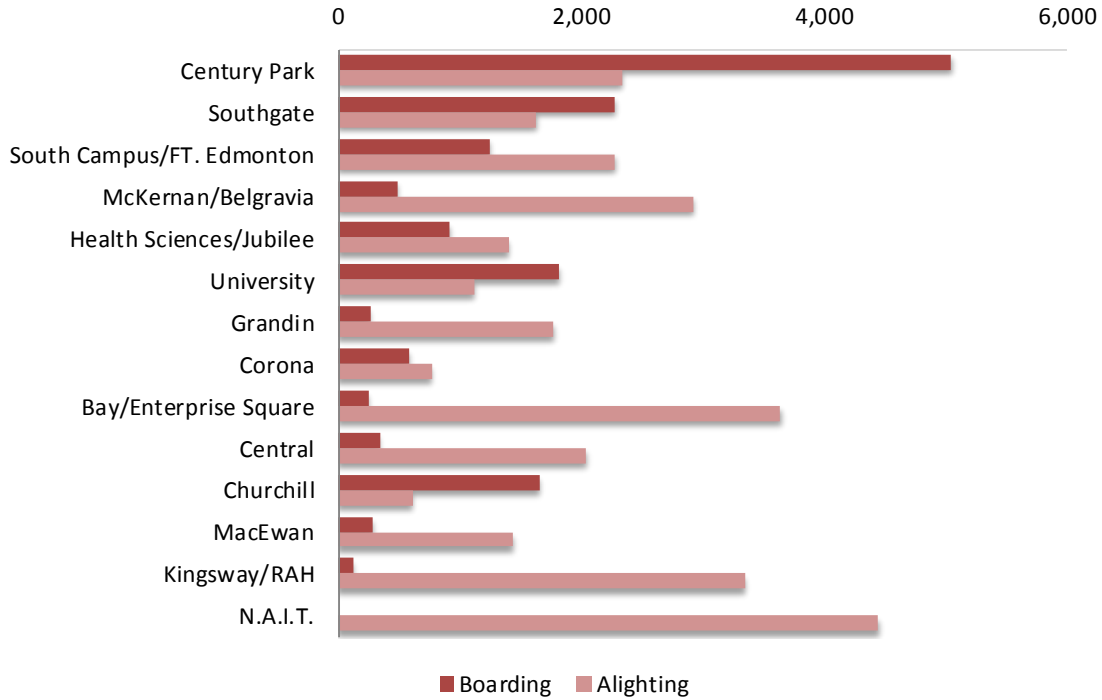
LRT Station	Boarding	Alighting	Station Total	% of Total
Century Park	13,573	0	13,573	12.5%
Southgate	7,647	1,307	8,954	8.2%
South Campus/FT. Edmonton	4,290	723	5,013	4.6%
McKernan/Belgravia	1,541	456	1,997	1.8%
Health Sciences/Jubilee	3,647	3,977	7,624	7.0%
University	6,053	6,345	12,398	11.4%
Grandin	974	1,625	2,599	2.4%
Corona	3,617	4,751	8,368	7.7%
Bay/Enterprise Square	1,555	3,365	4,920	4.5%
Central	2,532	3,781	6,313	5.8%
Churchill	6,328	4,022	10,350	9.5%
Stadium	702	2,335	3,037	2.8%
MacEwan	291	1,873	2,164	2.0%
Coliseum	1,122	3,704	4,826	4.4%
Kingsway/RAH	129	1,521	1,650	1.5%
Belvedere	436	4,233	4,669	4.3%
N.A.I.T.	0	2,336	2,336	2.1%
Clareview	0	8,060	8,060	7.4%
<b>Total ----&gt;</b>	<b>54,437</b>	<b>54,414</b>	<b>108,851</b>	<b>100%</b>

## 2015 Boarding and Alighting Northbound Capital Line (Century Park to Clareview)



LRT Station	Boarding	Alighting	Station Total	% of Total
Century Park	8,530	0	8,530	10.9%
Southgate	5,367	848	6,215	7.9%
South Campus/FT. Edmonton	3,039	514	3,553	4.5%
McKernan/Belgravia	1,048	280	1,328	1.7%
Health Sciences/Jubilee	2,724	2,724	5,448	7.0%
University	4,233	4,251	8,484	10.8%
Grandin	708	1,078	1,786	2.3%
Corona	3,028	3,328	6,356	8.1%
Bay/Enterprise Square	1,302	2,416	3,718	4.8%
Central	2,189	2,661	4,850	6.2%
Churchill	4,670	2,669	7,339	9.4%
Stadium	702	2,335	3,037	3.9%
Coliseum	1,122	3,704	4,826	6.2%
Belvedere	436	4,233	4,669	6.0%
Clareview	0	8,060	8,060	10.3%
<b>Total ----&gt;</b>	<b>39,098</b>	<b>39,101</b>	<b>78,199</b>	<b>100%</b>

## 2015 Boarding and Alighting Northbound Metro Line (Century Park to NAIT)



LRT Station	Boarding	Alighting	Station Total	% of Total
Century Park	5,043	0	5,043	16.5%
Southgate	2,280	459	2,739	8.9%
South Campus/FT. Edmonton	1,251	209	1,460	4.8%
McKernan/Belgravia	493	176	669	2.2%
Health Sciences/Jubilee	923	1,253	2,176	7.1%
University	1,820	2,094	3,914	12.8%
Grandin	266	547	813	2.7%
Corona	589	1,423	2,012	6.6%
Bay/Enterprise Square	253	949	1,202	3.9%
Central	343	1,120	1,463	4.8%
Churchill	1,658	1,353	3,011	9.8%
MacEwan	291	1,873	2,164	7.1%
Kingsway/RAH	129	1,521	1,650	5.4%
N.A.I.T.	0	2,336	2,336	7.6%
<b>Total ----&gt;</b>	<b>15,339</b>	<b>15,313</b>	<b>30,652</b>	<b>100%</b>



**CAPITAL LINE AND METRO LINE  
BOARDING AND ALIGHTING BY TOP N PERCENT CHANGE  
THREE YEAR COMPARISON  
BOARDING BY BLOCK**

## Comparison of 2015 | 2014 | 2013 Boarding – Sorted by Top N Percent Change Weekday Service

LRT Station	2015 Boarding	2014 Boarding	2013 Boarding	2015/2014 Gain(loss)	2015/2014 %Change	2014/2013 Gain(loss)	2014/2013 % Change
Stadium	3,171	3,110	3,037	61	1.96%	73	2.40%
Belvedere	4,752	4,726	4,782	26	0.55%	(56)	-1.17%
Clareview	8,417	8,572	8,121	(155)	-1.81%	451	5.55%
Coliseum	4,145	4,398	4,411	(253)	-5.75%	(13)	-0.29%
Churchill	7,435	8,030	8,351	(595)	-7.41%	(321)	-3.84%
Central	5,037	6,070	5,850	(1,033)	-17.02%	220	3.76%
Health Sciences/Jubilee	5,598	7,066	7,387	(1,468)	-20.78%	(321)	-4.35%
Bay/Enterprise Square	3,616	4,611	5,409	(995)	-21.58%	(798)	-14.75%
Grandin	1,898	2,532	2,651	(634)	-25.04%	(119)	-4.49%
Corona	6,318	8,551	8,672	(2,233)	-26.11%	(121)	-1.40%
Southgate	6,429	8,739	8,895	(2,310)	-26.43%	(156)	-1.75%
Century Park	8,530	11,760	11,712	(3,230)	-27.47%	48	0.41%
University	8,609	12,548	14,358	(3,939)	-31.39%	(1,810)	-12.61%
South Campus/FT. Edmonton	3,674	5,473	5,033	(1,799)	-32.87%	440	8.74%
McKernan/Belgravia	1,285	1,958	2,094	(673)	-34.37%	(136)	-6.49%
<b>Total ----&gt;</b>	<b>78,914</b>	<b>98,144</b>	<b>100,763</b>	<b>(19,230)</b>	<b>-24.37%</b>	<b>(2,619)</b>	<b>13.62%</b>

## Comparison of 2015 | 2014 | 2013 Alighting – Sorted by Top n % Change Weekday Service

LRT Station	2015 Alighting	2014 Alighting	2013 Alighting	2015/2014 Gain(loss)	2015/2014 %Change	2014/2013 Gain(loss)	2014/2013 % Change
Clareview	8,060	7,978	8,211	82	1.03%	(233)	-2.84%
Stadium	3,042	3,135	2,974	(93)	-2.97%	161	5.41%
Belvedere	4,618	4,781	4,730	(163)	-3.41%	51	1.08%
Churchill	7,059	7,554	7,584	(495)	-6.55%	(30)	-0.40%
Coliseum	5,007	5,732	5,423	(725)	-12.65%	309	5.70%
Central	5,026	5,911	5,676	(885)	-14.97%	235	4.14%
Health Sciences/Jubilee	5,283	6,888	6,720	(1,605)	-23.30%	168	2.50%
Century Park	8,407	11,101	11,807	(2,694)	-24.27%	(706)	-5.98%
Bay/Enterprise Square	3,703	4,975	5,292	(1,272)	-25.57%	(317)	-5.99%
Grandin	1,757	2,381	2,573	(624)	-26.21%	(192)	-7.46%
University	9,783	13,354	14,466	(3,571)	-26.74%	(1,112)	-7.69%
McKernan/Belgravia	1,304	1,838	1,921	(534)	-29.05%	(83)	-4.32%
Corona	6,057	8,555	8,387	(2,498)	-29.20%	168	2.00%
South Campus/FT. Edmonton	3,350	4,756	5,281	(1,406)	-29.56%	(525)	-9.94%
Southgate	6,458	9,205	9,718	(2,747)	-29.8%	(513)	-5.28%
<b>Total ----&gt;</b>	<b>78,914</b>	<b>98,144</b>	<b>100,763</b>	<b>(19,230)</b>	<b>-24.37%</b>	<b>(2,619)</b>	<b>13.6%</b>

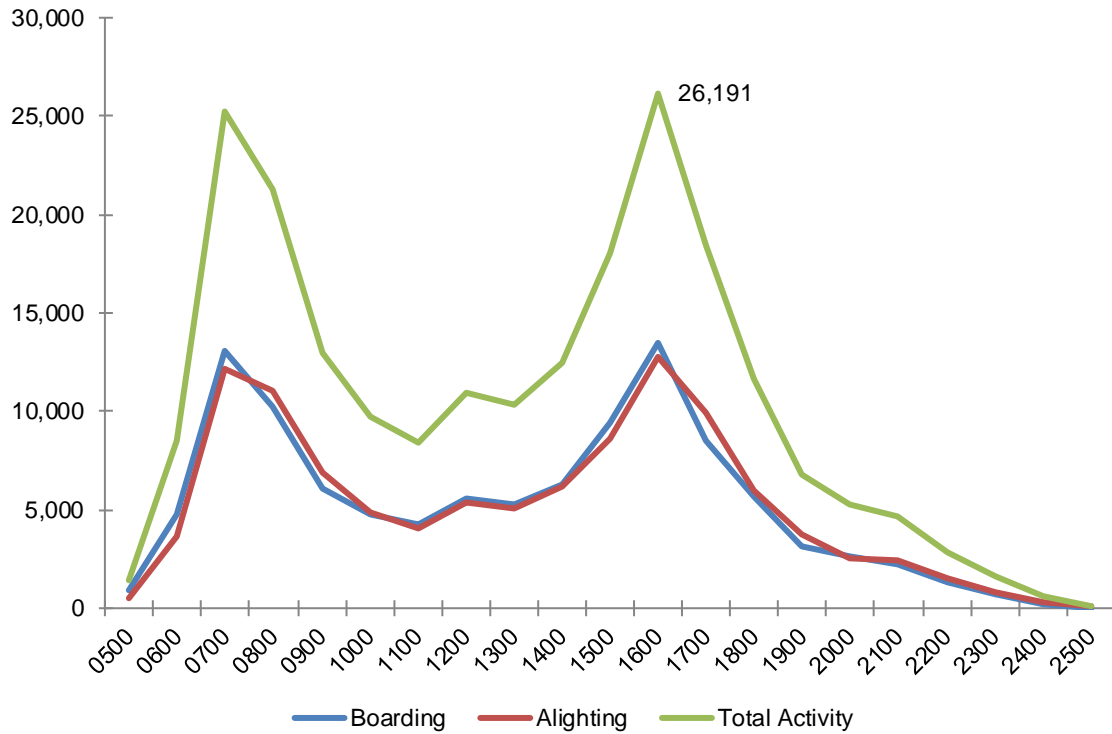
## 2015 Boarding by Block – Ordered by Top n % of Total Weekday Service

Route	Block	Boarding	% of Total	LRV's	Route	Block	Ons	% of Total	LRV's
501	50104	8,421	10.7%	5	502	50232	5,465	18.4%	3
501	50103	8,311	10.5%	5	502	50234	5,270	17.7%	3
501	50101	8,307	10.5%	5	502	50233	4,996	16.8%	3
501	50105	8,192	10.4%	5	502	50231	4,908	16.5%	3
501	50106	7,854	10.0%	5	502	50236	4,638	15.6%	3
501	50102	7,097	9.0%	5	502	50235	4,499	15.1%	3
501	50123	3,283	4.2%	5					
501	50125	3,017	3.8%	5					
501	50121	2,948	3.7%	5					
501	50113	2,820	3.6%	5					
501	50115	2,776	3.5%	5					
501	50122	2,706	3.4%	5					
501	50124	2,609	3.3%	5					
501	50112	2,263	2.9%	5					
501	50114	2,185	2.8%	5					
501	50111	2,098	2.7%	5					
501	50126	2,006	2.5%	5					
501	50116	1,885	2.4%	5					
501	50234	54	0.1%	3					
501	50236	49	0.1%	3					
501	50235	33	0.0%	3					
Total --->		78,914	100%				29,776	100%	

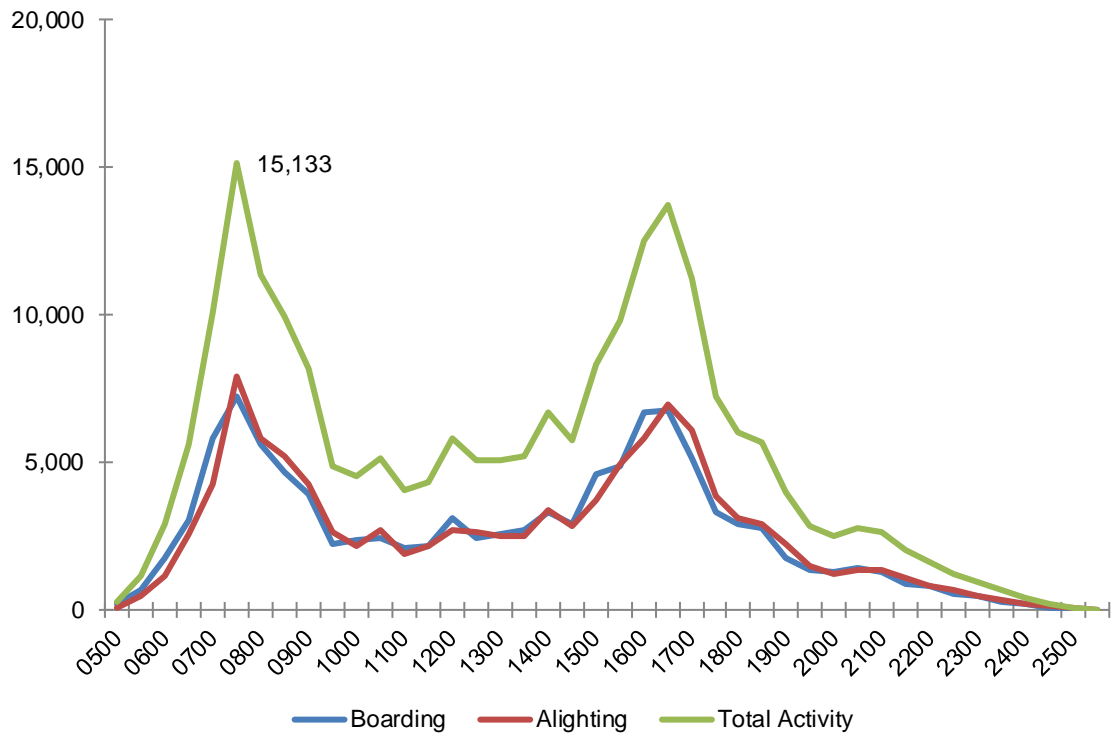
**2015 HOURLY TIME OF DAY DISTRIBUTION - STATION ACTIVITY**

**2015 HALF- HOUR TIME OF DAY DISTRIBUTION - STATION ACTIVITY**

**2015 Hourly Time of Day Distribution of Station Activity (Boarding and Alighting)  
Combined Lines (Capital and Metro) Weekday Service**

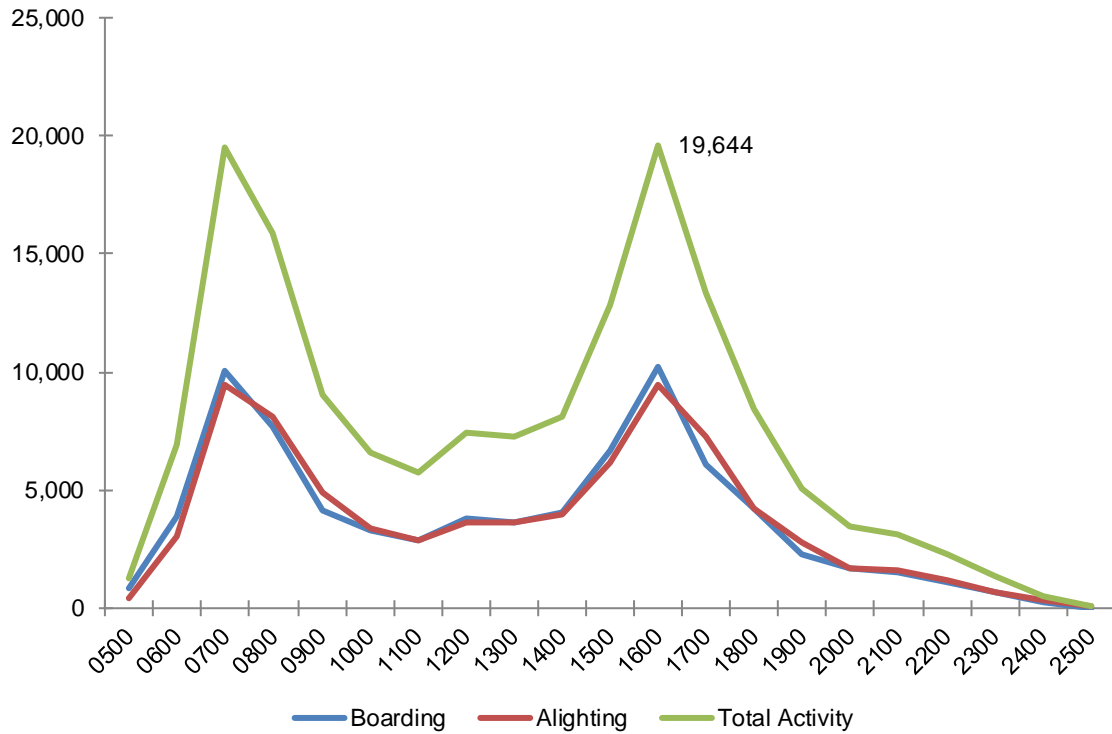


**2015 Half-Hour Time of Day Distribution of Station Activity (Boarding and Alighting)  
Combined Lines (Capital and Metro) Weekday Service**

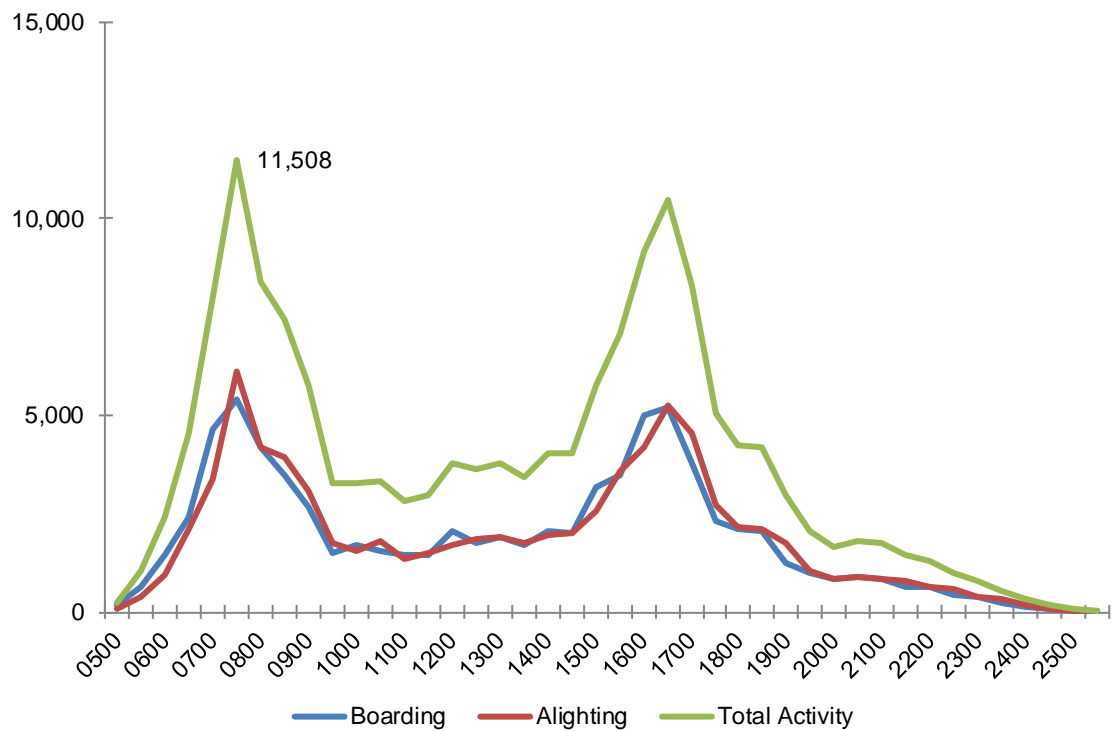




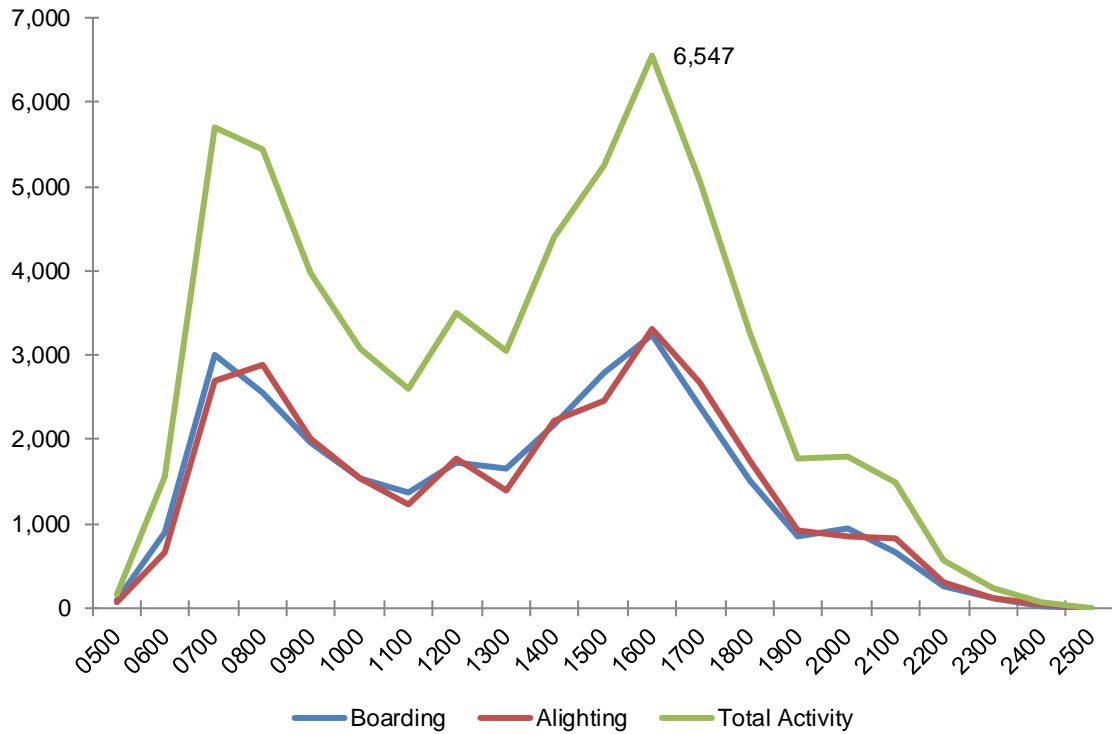
**2015 Hourly Time of Day Distribution of Station Activity (Boarding and Alighting)  
Capital Line - Weekday Service**



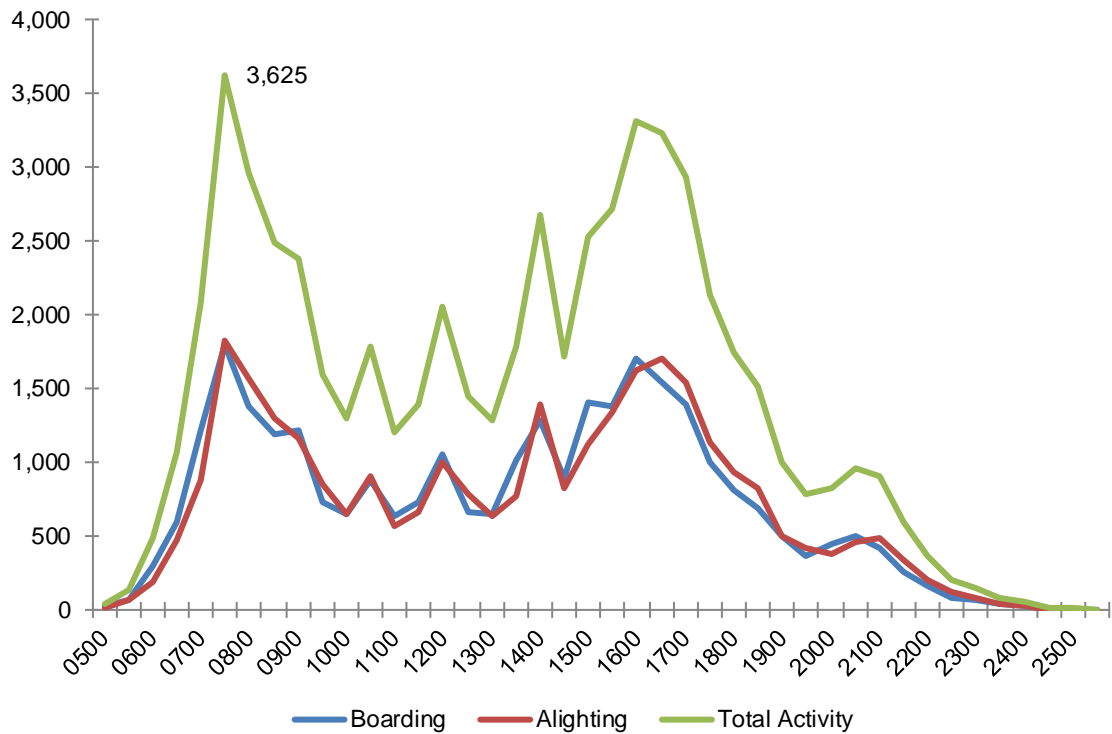
**2015 Half-Hour Time of Day Distribution of Station Activity (Boarding and Alighting)  
Capital Line - Weekday Service**



**2015 Hourly Time of Day Distribution of Station Activity (Boarding and Alighting)  
Metro Line - Weekday Service**



**2015 Half-Hour Time of Day Distribution of Station Activity (Boarding and Alighting)  
Capital Line - Weekday Service**

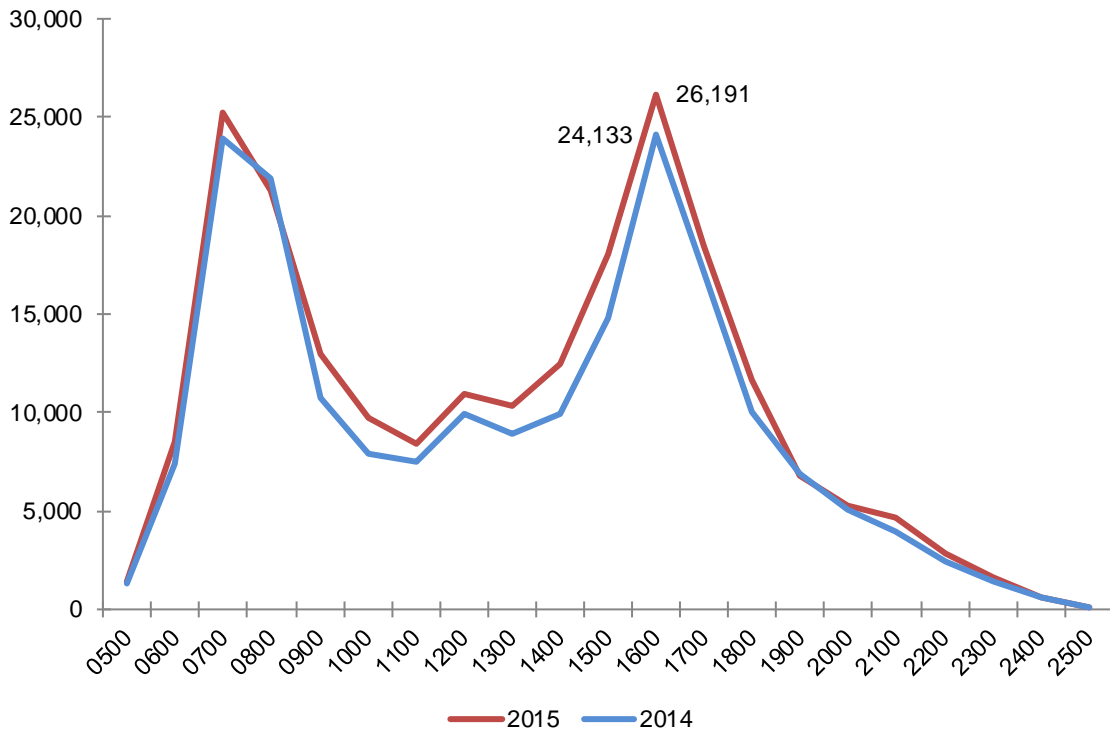


**COMPARISON OF 2015 AND 2014**

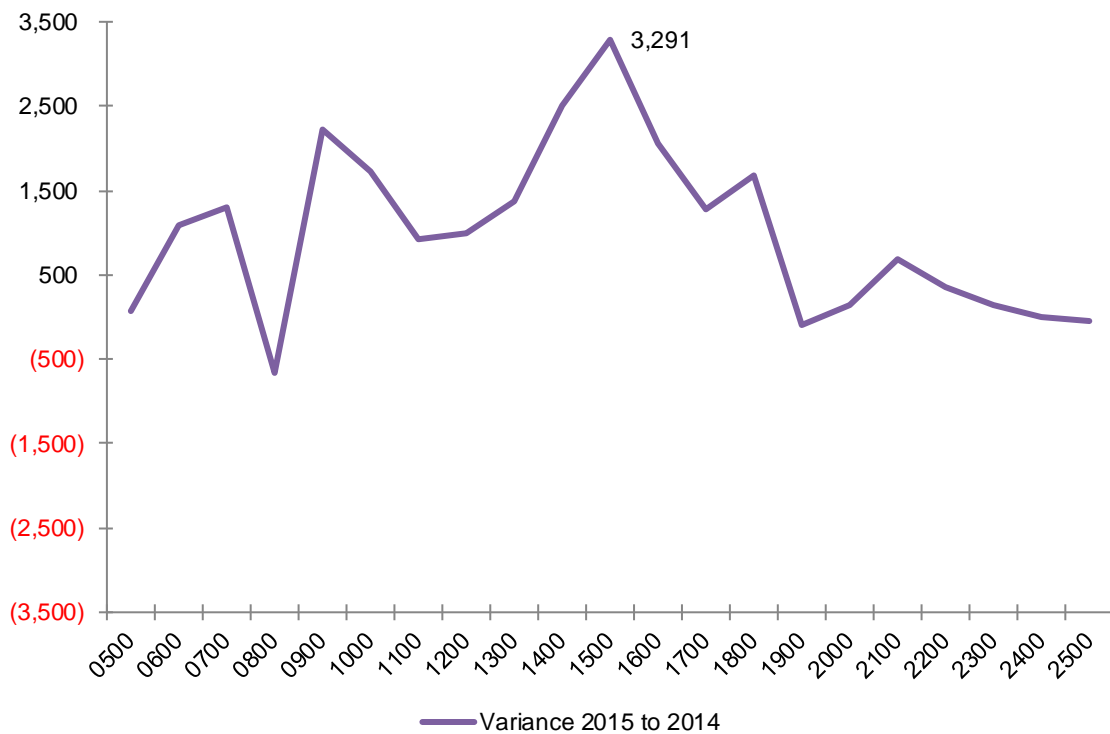
**HOURLY TIME OF DAY DISTRIBUTION - STATION ACTIVITY**

**HALF- HOUR TIME OF DAY DISTRIBUTION - STATION ACTIVITY**

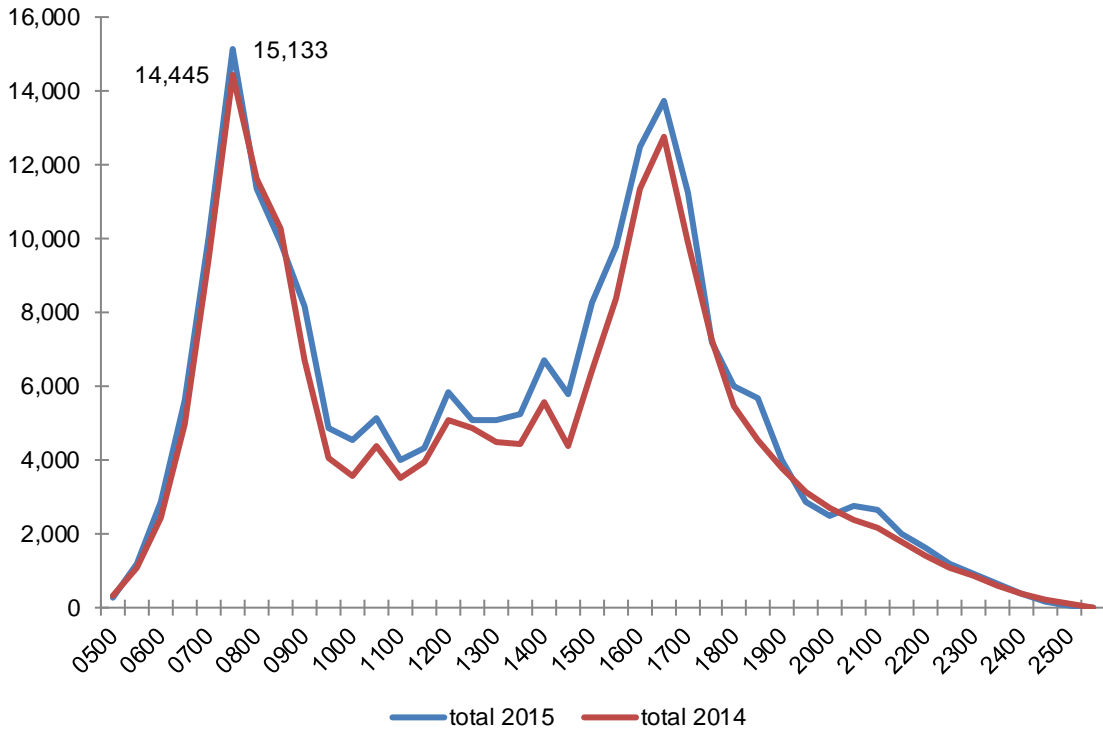
**Comparison of 2015 to 2014 Hourly Time of Day Distribution of Station Activity Combined Lines (Capital and Metro) - Boarding and Alighting Weekday Service**



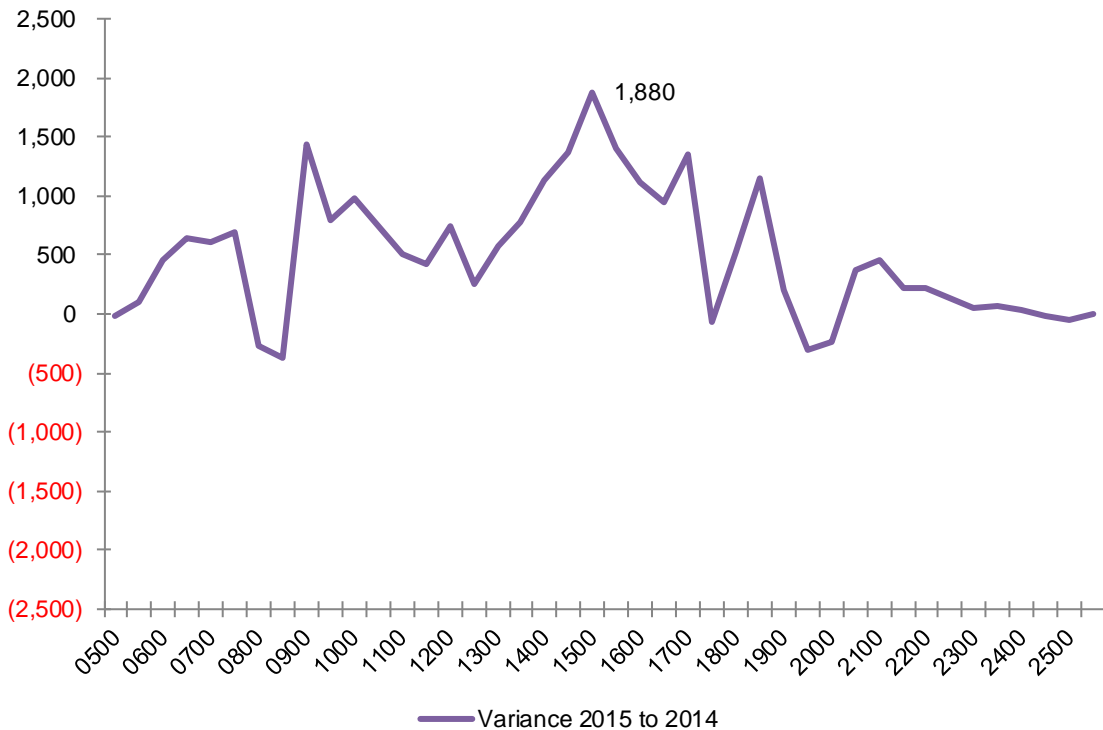
**Variance of 2015 to 2014 -Hourly Time of Day Distribution of Station Activity Combined Lines (Capital and Metro) - Boarding and Alighting Weekday Service**



**Comparison of 2015 to 2014 Half-Hour Time of Day Distribution of Station Activity  
Combined Lines (Capital and Metro) - Boarding and Alighting  
Weekday Service**



**Variance of 2015 to 2014 -Half-Hour Time of Day Distribution of Station Activity  
Combined Lines (Capital and Metro) - Boarding and Alighting  
Weekday Service**





## 2015|2014|2013 MAXIMUM LOAD POINT ACTIVITY

### CAPITAL AND METRO LINES

The Maximum Load Point for the Capital Line southbound during the A.M. peak hour is the link between **Stadium and Churchill** stations with a maximum load of **3,930**, while for the Capital Line northbound it is the link between **McKernan/Belgravia and Health Sciences/Jubilee** stations with a maximum load of **4,048**.

The Maximum Load Point for the Capital Line southbound during the P.M. peak hour is the link between **McKernan/Belgravia and Health Sciences/Jubilee** stations with a maximum load of **3,761**, while for the Capital Line northbound it is the link between **Stadium and Churchill** stations with a maximum load of **3,554**.

The Maximum Load Point for the Metro Line southbound during the A.M. peak hour is the link between **Grandin/Govt' Centre and University** stations with a maximum load of **367**, while for the Metro Line northbound it is the link between **McKernan/Belgravia and Health Sciences/Jubilee** stations with a maximum load of **1,789**.

The Maximum Load Point for the Metro Line southbound during the P.M. peak hour is the link between **Health Sciences/Jubilee and McKernan/Belgravia** stations with a maximum load of **1,620**, while for the Metro Line northbound it is the link between **University and Grandin/Govt' Centre** stations with a maximum load of **525**.

**2015|2014|2013 Maximum Load Point Activity  
Capital Line Weekday Service**

**At Maximum Load Point**

<b>Capital Line - A.M. Peak Hour Departing Stadium Southbound</b>					<b>Capital Line - A.M. Peak Hour Departing McKernan/Belgravia Northbound</b>				
<b>Year</b>	<b>Passengers</b>	<b>Number of Trips</b>	<b>Number of LRV</b>	<b>Average Passenger Loads per LRV</b>	<b>Year</b>	<b>Passengers</b>	<b>Number of Trips</b>	<b>Number of LRV</b>	<b>Average Passenger Loads per LRV</b>
2015	3,930	8	40	98	2015	4,048	8	40	101
2014	4,420	12	48	92	2014	5,423	12	48	113
2013	4,012	12	48	84	2013	5,852	12	47	125
<b>2015-2014 % Change</b>	<b>-11.1%</b>	<b>-33.3%</b>	<b>-16.7%</b>	<b>6.7%</b>	<b>2015-2014 % Change</b>	<b>-25.4%</b>	<b>-33.3%</b>	<b>-16.7%</b>	<b>-10.4%</b>
<b>2014-2013 % Change</b>	<b>10.2%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>10.2%</b>	<b>2014-2013 % Change</b>	<b>-7.3%</b>	<b>0.0%</b>	<b>2.1%</b>	<b>-9.3%</b>

In 2015 there are 5 LRV's per train on the Capital Line. The LRV design capacity is 165 passengers.

**2015|2014|2013 Maximum Load Point Activity  
Capital Line Weekday Service**

**At Maximum Load Point**

<b>Capital Line - P.M. Peak Hour Departing Health Sciences/Jubilee Southbound</b>					<b>Capital Line Northbound - P.M. Peak Hour Departing Churchill Northbound</b>				
<b>Year</b>	<b>Passengers</b>	<b>Number of Trips</b>	<b>Number of LRV</b>	<b>Average Passenger Loads per LRV</b>	<b>Year</b>	<b>Passengers</b>	<b>Number of Trips</b>	<b>Number of LRV</b>	<b>Average Passenger Loads per LRV</b>
2015	3,761	8	40	94	2015	3,554	8	40	89
2014	4,845	12	48	101	2014	3,575	12	48	74
2013	5,872	12	48	122	2013	3,552	12	48	74
<b>2015-2014 % Change</b>	<b>-22.4%</b>	<b>-33.3%</b>	<b>-16.7%</b>	<b>-6.8%</b>	<b>2015-2014 % Change</b>	<b>-0.6%</b>	<b>-33.3%</b>	<b>-16.7%</b>	<b>19.3%</b>
<b>2014-2013 % Change</b>	<b>-17.5%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>-17.5%</b>	<b>2014-2013 % Change</b>	<b>0.6%</b>	<b>0.0%</b>	<b>0.0%</b>	<b>0.6%</b>

In 2015 there are 5 LRV's per train on the Capital Line. The LRV design capacity is 165 passengers.

**2015|2014|2013 Maximum Load Point Activity  
Metro Line Weekday Service**

**At Maximum Load Point**

**Metro Line Southbound - A.M. Peak Hour  
Departing Grandin Southbound**

**Metro Line Northbound - A.M. Peak Hour  
Departing McKernan/Belgravia Northbound**

Year	Passengers	Number of Trips	Number of LRV	Average Passenger Loads per LRV
2015	367	4	12	31
2014				
2013				

Year	Passengers	Number of Trips	Number of LRV	Average Passenger Loads per LRV
2015	1,789	4	12	149
2014				
2013				

In 2015 there are 3 LRV's per train on the Metro Line. The LRV design capacity is 165 passengers.

**2015|2014|2013 Maximum Load Point Activity  
Metro Line Weekday Service**

**At Maximum Load Point**

**Metro Line Southbound - P.M. Peak Hour  
Departing Health Sciences/Jubilee Southbound**

**Metro Line Northbound - P.M. Peak Hour  
Departing University Northbound**

Year	Passengers	Number of Trips	Number of LRV	Average Passenger Loads per LRV
2015	1,620	4	12	135
2014				
2013				

Year	Passengers	Number of Trips	Number of LRV	Average Passenger Loads per LRV
2015	525	4	12	44
2014				
2013				

In 2015 there are 3 LRV's per train on the Metro Line. The LRV design capacity is 165 passengers.

# 2015 AVERAGE PASSENGERS PER LRV

## A.M. AND P.M. PEAK HOUR

### CAPITAL AND METRO LINES

#### Capital Line:

For the Capital Line southbound, the peak average passenger load per LRV occurs at **Stadium** station at **7:30 a.m.** with **140** passengers per LRV. For the Capital Line northbound, the peak average passenger load per LRV occurs at **McKernan/Belgravia** station at **7:46 a.m.** with **182** passengers per LRV.

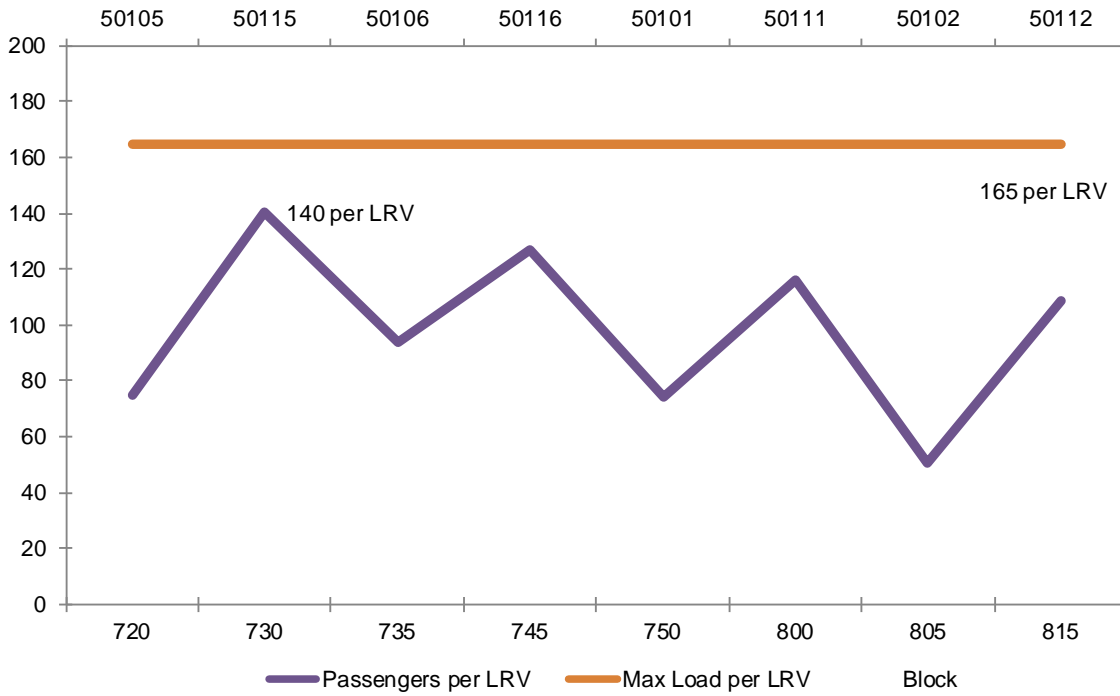
For the Capital Line southbound, the peak average passenger load per LRV occurs at **Health Sciences/Jubilee** station at **4:17 p.m.** with **125** passengers per LRV. For the Capital Line northbound, the peak average passenger load per LRV occurs at **Churchill** station at **4:42 p.m.** with **137** passengers per LRV.

#### Metro Line:

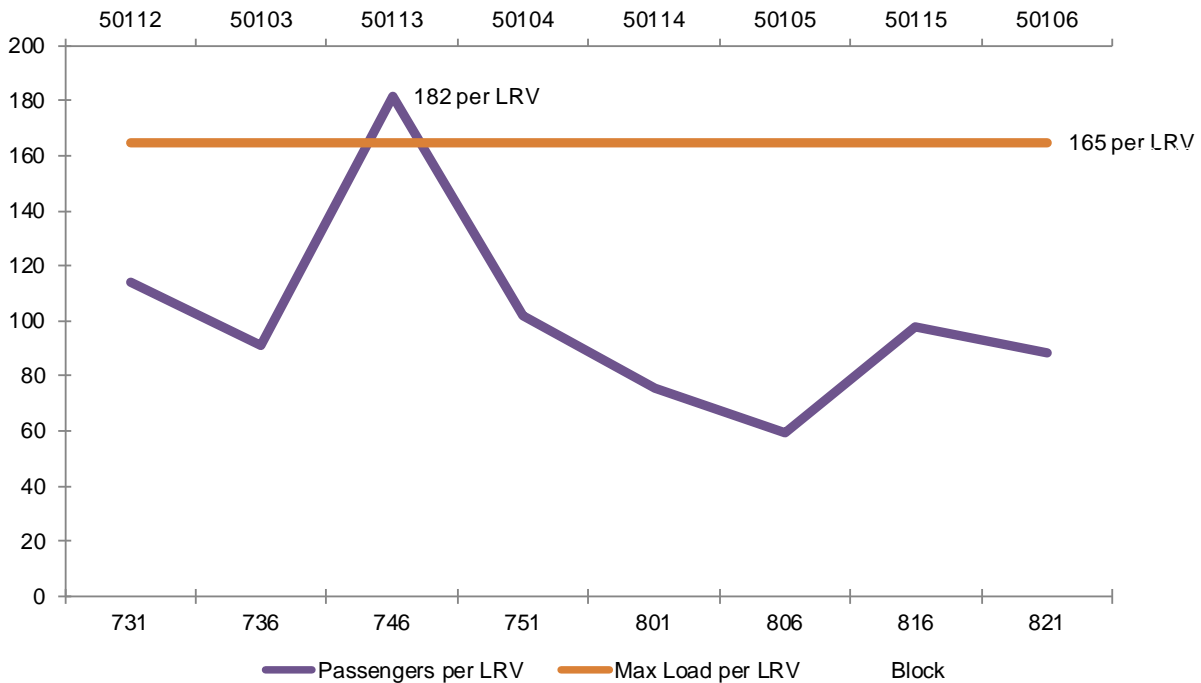
For the Metro Line southbound, the peak average passenger load per LRV occurs at **Grandin/Govt' Centre** station at **8:47 a.m.** with **39** passengers per LRV. For the Metro Line northbound, the peak average passenger load per LRV occurs at **McKernan/Belgravia** station at **7:41 a.m.** with **189** passengers per LRV.

For the Metro Line southbound, the peak average passenger load per LRV occurs at **Health Sciences/Jubilee** station at **4:37 p.m.** with **148** passengers per LRV. For the Metro Line northbound, the peak average passenger load per LRV occurs at **University** station at **3:59 p.m.** with **59** passengers per LRV.

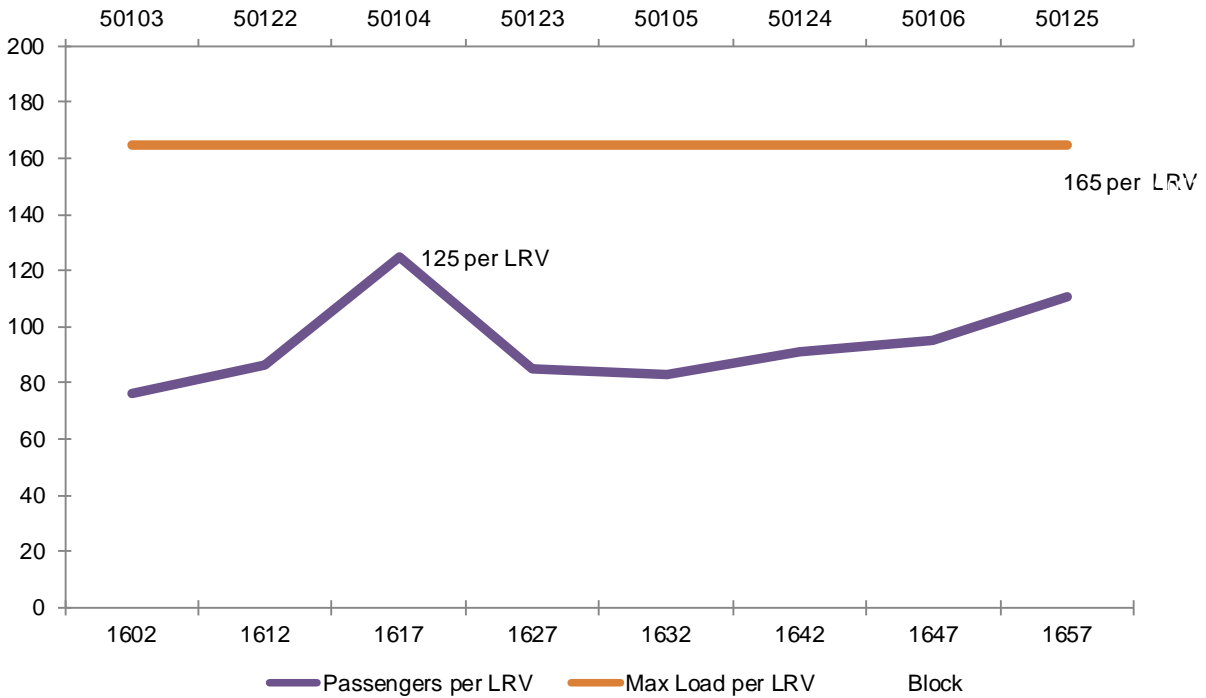
**Capital Line**  
**2015 Average Passengers per LRV at Stadium Station, Departing Southbound**  
**A.M. Peak Hour**  
**Maximum LRV Load = 165, 5 LRV's per Block**



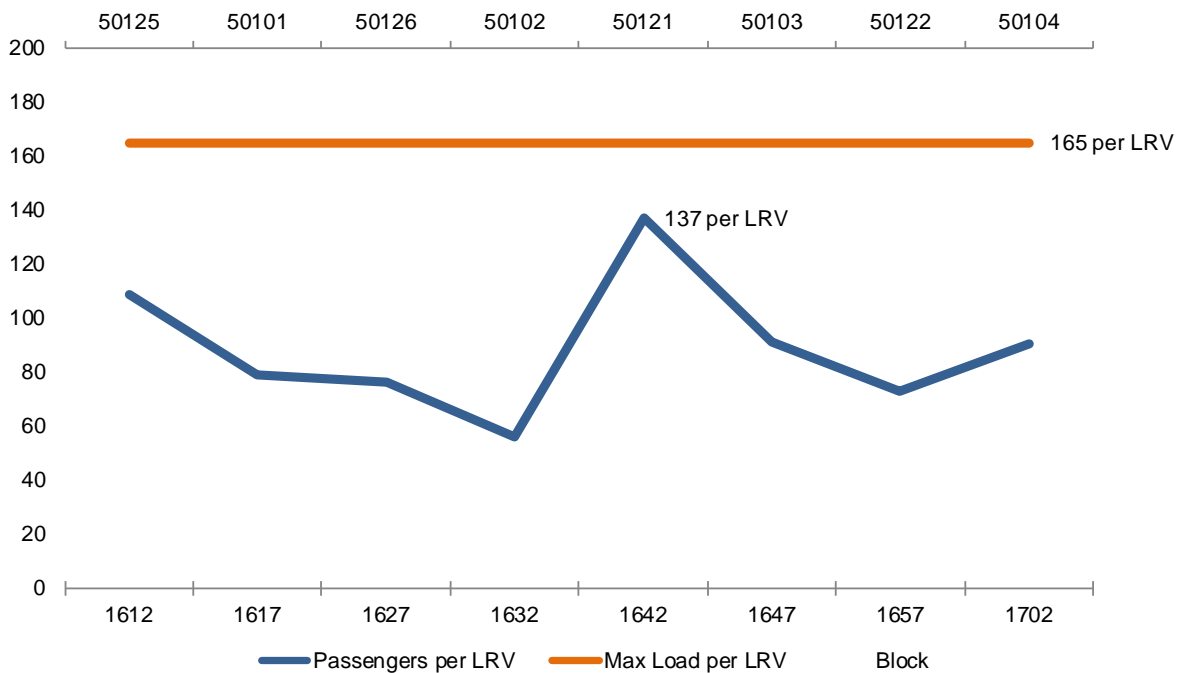
**Capital Line**  
**2015 Average Passengers per LRV at McKernan/Belgravia Station, Departing Northbound**  
**A.M. Peak Hour**  
**Maximum LRV Load = 165, 5 LRV's per Block**



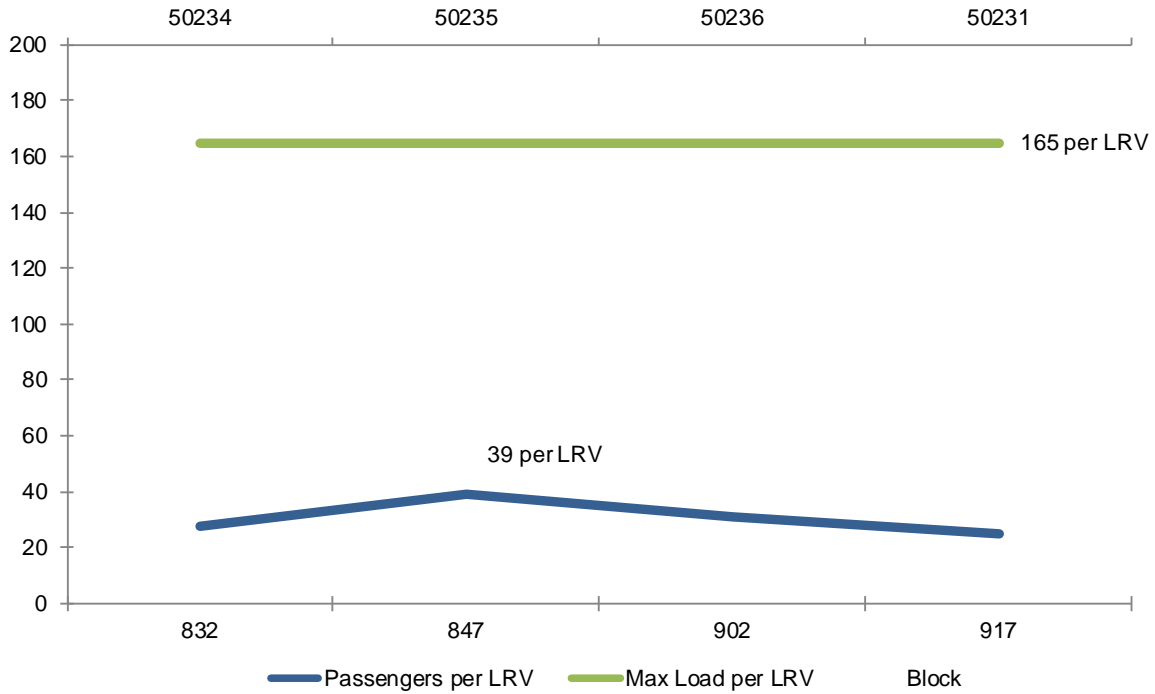
**Capital Line**  
**2015 Average Passengers per LRV at Health Science/Jubilee Station, Departing Southbound**  
**P.M. Peak Hour**  
**Maximum LRV Load = 165, 5 LRV's per Block**



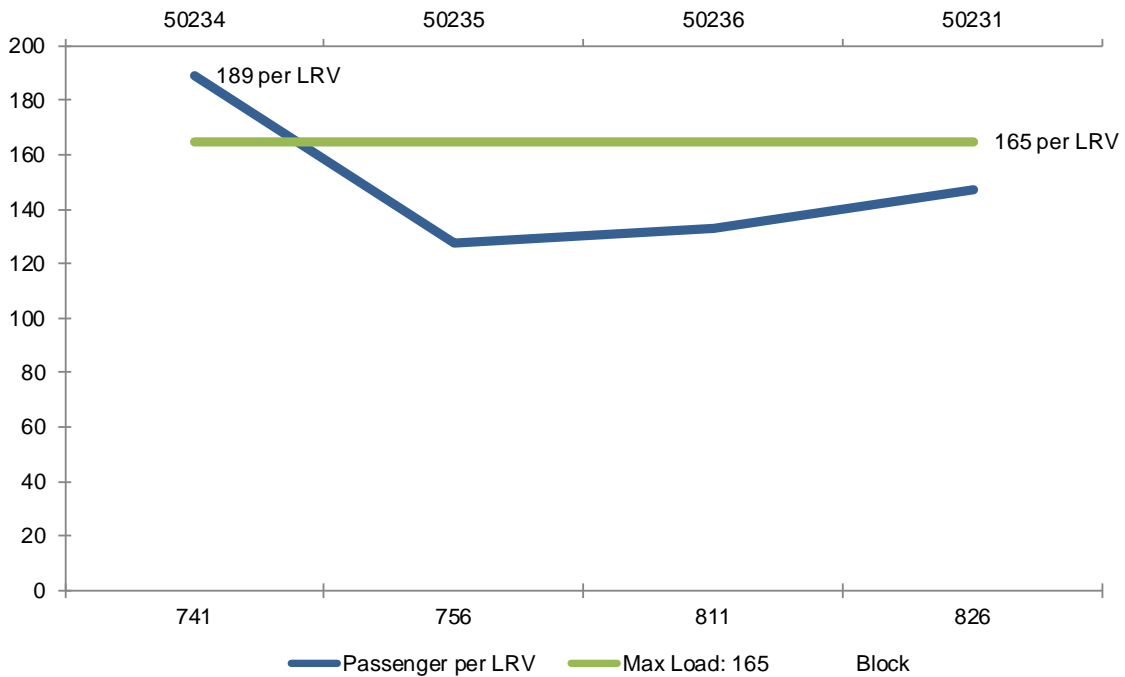
**Capital Line**  
**2015 Average Passengers per LRV at Churchill Station, Departing Northbound**  
**P.M. Peak Hour**  
**Maximum LRV Load = 165, 5 LRV's per Block**



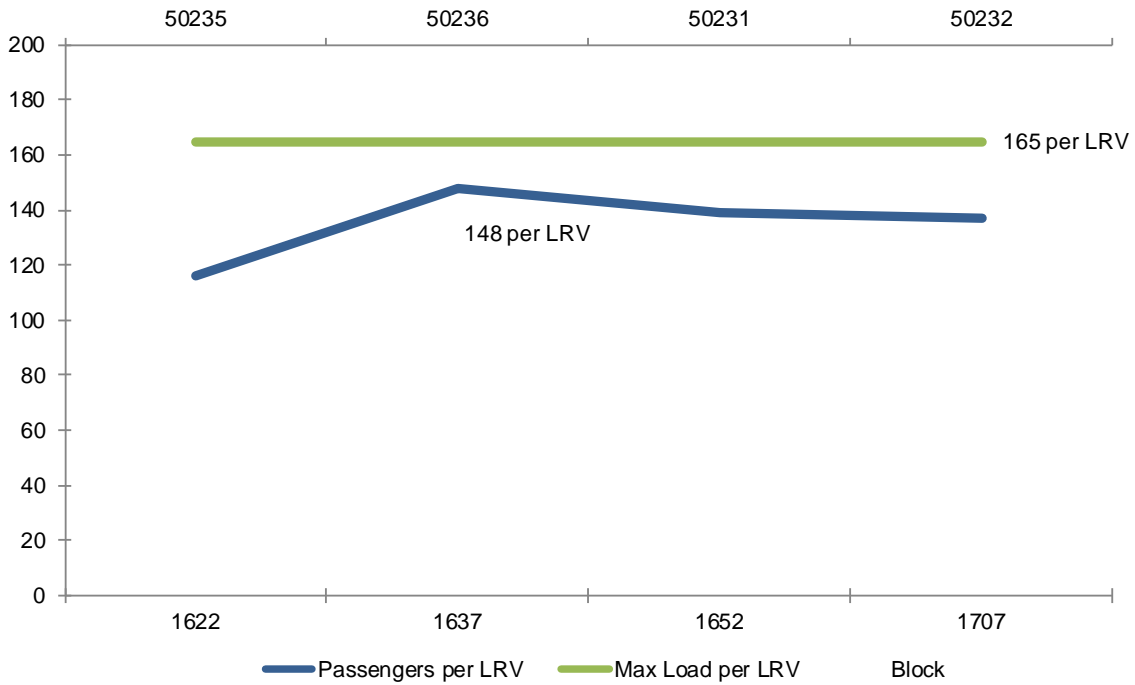
**Metro Line**  
**2015 Average Passengers per LRV at Grandin Station, Departing Southbound**  
**A.M. Peak Hour**  
**Maximum LRV Load = 165, 3 LRV's per Block**



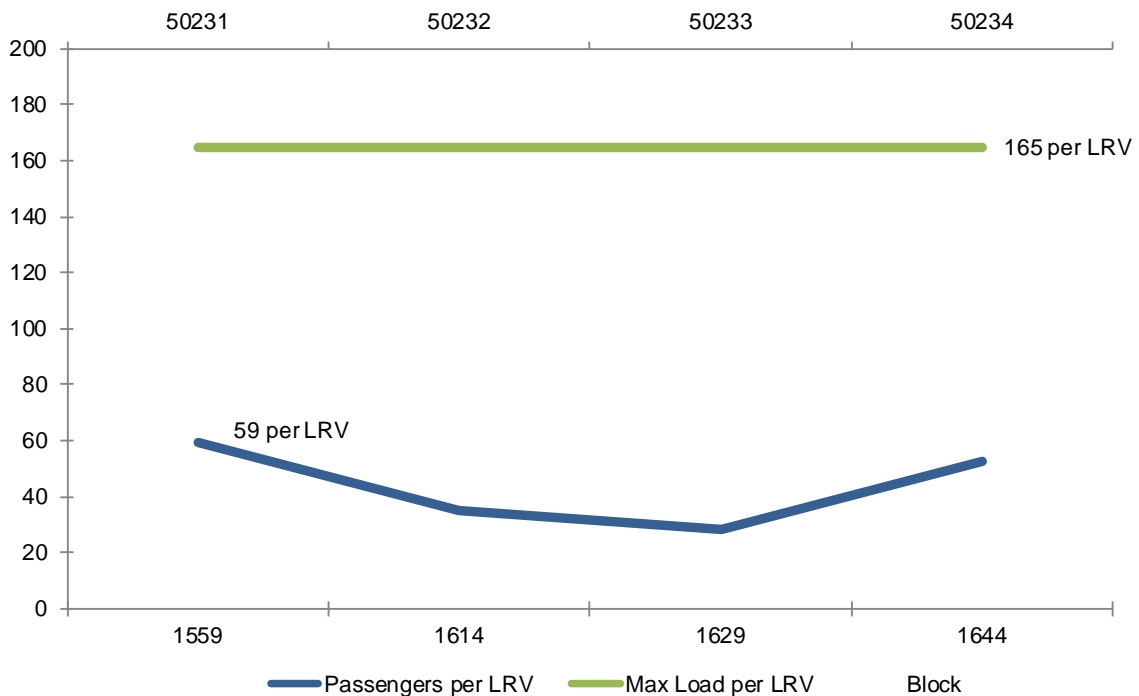
**Metro Line**  
**2015 Average Passengers per LRV at McKernan/Belgravia Station, Departing Northbound**  
**A.M. Peak Hour**  
**Maximum LRV Load = 165, 3 LRV's per Block**



**Metro Line**  
**2015 Average Passengers per LRV at Health Science/Jubilee Station, Departing Southbound**  
**P.M. Peak Hour**  
**Maximum LRV Load = 165, 3 LRV's per Block**



**Metro Line**  
**2015 Average Passengers per LRV at University Station, Departing Northbound**  
**P.M. Peak Hour**  
**Maximum LRV Load = 165, 3 LRV's per Block**





## **2015 PASSENGER KILOMETRE CAPITAL AND METRO LINES**

**Passenger Kilometre (pkm) is a unit of measure representing the transport of one LRT passenger over the distance of one kilometer.**

## 2015 Capital and Metro Lines Passenger Kilometer

LRT SYSTEM - CAPITAL AND METRO LINES			
LRT Station	Departing Passenger	Kilometre	Passenger Kilometre (pkm)
NAIT and Clareview to Century Park			
Clareview to Belvedere	8,417	2.051	17,263.3
NAIT to Kingsway	2,601	1.960	5,098.0
Belvedere to Coliseum	12,348	2.626	32,425.8
Kingsway to MacEwan	3,810	1.305	4,972.1
Coliseum to Stadium	14,068	1.435	20,187.6
MacEwan to Churchill	5,567	0.918	5,110.5
Stadium to Churchill	15,830	2.176	34,446.1
Churchill to Central	19,197	0.526	10,097.6
Central to Bay	20,315	0.402	8,166.6
Bay to Corona	22,077	0.418	9,228.2
Corona to Grandin	23,480	0.770	18,079.6
Grandin to University	24,188	1.618	39,136.2
University to Health Sciences	23,413	0.628	14,703.4
Health Sciences to McKernan	24,139	0.782	18,876.7
McKernan to South Campus	22,964	1.217	27,947.2
South Campus to Southgate	19,745	2.477	48,908.4
Southgate to Century Park	12,827	3.139	40,264.0
	274,986	24.448	354,911.1
Century Park to Clareview and NAIT			
Century Park to Southgate	13,573	3.139	42,605.6
Southgate to South Campus	19,913	2.477	49,324.5
South Campus to McKernan	23,480	1.217	28,575.2
McKernan to Health Sciences	24,565	0.782	19,209.8
Health Sciences to University	24,235	0.628	15,219.6
University to Grandin	23,943	1.618	38,739.8
Grandin to Corona	23,292	0.770	17,934.8
Corona to Bay	22,158	0.418	9,262.0
Bay to Central	20,348	0.402	8,179.9
Central to Churchill	19,099	0.526	10,046.1
Churchill to Stadium	16,069	2.176	34,966.1
Churchill to MacEwan	5,336	0.918	14,751.3
Stadium to Coliseum	14,436	1.435	20,715.7
MacEwan to Kingsway	3,754	1.305	4,899.0
Coliseum to Belvedere	11,854	2.626	31,128.6
Kingsway to NAIT	2,362	1.960	4,629.5
Belvedere to Clareview	8,057	2.051	16,524.9
	276,474	24.448	366,712.5

## 2015 Capital Line Passenger Kilometer

## 2015 Metro Line Passenger Kilometer

CAPITAL LINE			Passenger Kilometre (pkm)
LRT Station	Departing Passenger	Kilometre	
Clareview to Century Park			
Clareview to Belvedere	8,417	2.051	17,263.3
Belvedere to Coliseum	12,348	2.626	32,425.8
Coliseum to Stadium	14,068	1.435	20,187.6
Stadium to Churchill	15,830	2.176	34,446.1
Churchill to Central	14,205	0.526	7,471.8
Central to Bay	14,688	0.402	5,904.6
Bay to Corona	15,715	0.418	6,568.9
Corona to Grandin	16,276	0.770	12,532.5
Grandin to University	16,787	1.618	27,161.4
University to Health Sciences	15,631	0.628	9,816.3
Health Sciences to McKernan	15,946	0.782	12,469.8
McKernan to South Campus	15,159	1.217	18,448.5
South Campus to Southgate	12,958	2.477	32,097.0
Southgate to Century Park	8,410	3.139	26,399.0
	196,438	20.265	263,192.4
Century Park to Clareview			
Century Park to Southgate	8,530	3.139	26,775.7
Southgate to South Campus	13,049	2.477	32,322.4
South Campus to McKernan	15,574	1.217	18,953.6
McKernan to Health Sciences	16,342	0.782	12,779.4
Health Sciences to University	16,342	0.628	10,262.8
University to Grandin	16,324	1.618	26,412.2
Grandin to Corona	15,954	0.770	12,284.6
Corona to Bay	15,654	0.418	6,543.4
Bay to Central	14,540	0.402	5,845.1
Central to Churchill	14,068	0.526	7,399.8
Churchill to Stadium	16,069	2.176	34,966.1
Stadium to Coliseum	14,436	1.435	20,715.7
Coliseum to Belvedere	11,854	2.626	31,128.6
Belvedere to Clareview	8,057	2.051	16,524.9
	196,793	20.265	262,914.2

METRO LINE			Passenger Kilometre (pkm)
LRT Station	Departing Passenger	Kilometre	
NAIT to Century Park			
NAIT to Kingsway	2,601	1.960	5,098.0
Kingsway to MacEwan	3,810	1.305	4,972.1
MacEwan to Churchill	5,567	0.918	5,110.5
Churchill to Central	4,992	0.526	2,625.8
Central to Bay	5,627	0.402	5,098.0
Bay to Corona	6,362	0.418	2,659.3
Corona to Grandin	7,204	0.770	5,547.1
Grandin to University	7,401	1.618	11,974.8
University to Health Sciences	7,782	0.628	4,887.1
Health Sciences to McKernan	8,193	0.782	6,406.9
McKernan to South Campus	7,805	1.217	9,498.7
South Campus to Southgate	6,787	2.477	16,811.4
Southgate to Century Park	4,417	3.139	13,865.0
Totals	78,548	16.160	94,554.6
Century Park to NAIT			
Century Park to Southgate	5,043	3.139	15,830.0
Southgate to South Campus	6,864	2.477	17,002.1
South Campus to McKernan	7,906	1.217	9,621.6
McKernan to Health Sciences	8,223	0.782	6,430.4
Health Sciences to University	7,893	0.628	4,956.8
University to Grandin	7,619	1.618	12,327.5
Grandin to Corona	7,338	0.770	5,650.3
Corona to Bay	6,504	0.418	2,718.7
Bay to Central	5,808	0.402	2,334.8
Central to Churchill	5,031	0.526	2,646.3
Churchill to MacEwan	5,336	0.918	4,898.4
MacEwan to Kingsway	3,754	1.305	4,899.0
Kingsway to NAIT	2,362	1.960	4,629.5
	79,681	16.160	93,945.4

## *A Note on Ridership and Boarding*

Daily ridership figures refer to the total number of Boarding on a transit vehicle (bus or LRT). Annual or monthly ridership figures refer to the total number of linked trips. This report describes the Boarding and alighting on the LRT.

### *What is ridership?*

Ridership is the total number of linked passenger trips.

- Trips: one-way trips from origin to destination
- Linked Trips: a trip connected by more than one public transit vehicle entry

### *Linked Trips:*

A linked trip is the complete ride from an origin to a destination, no matter how many transfers between buses (or between LRT and buses) it takes to complete the trip. Traveling from home to work would be one linked trip, even if it meant taking a bus to an LRT station and then transferring to the LRT to get Downtown. Returning from work to home would count as a second linked trip.

The number of linked trips is obtained through an analysis of the monthly sales of the various fare media (e.g. monthly passes, ticket books, electronic fare boxes and cash).

### *What are Boardings?*

Boardings are the number of passenger entries onto a public transit vehicle.

Boarding is counted each time a passenger boards a bus or LRT vehicle even though the boarding may be the result of a transfer from another route to complete the same one-way journey.

The number of boardings is obtained by counting passengers (manually or with a machine) as they board each transit vehicle.

### *Example of Ridership and Boarding*

Jaime is trying to get to class. She leaves home and boards an ETS bus that takes her to an LRT Station/Transit Centre. Jamie transfers onto the LRT to reach her destination.

#### **Ridership:**

Jaime's trip counts as 1 for ridership. Her trip is a single linked trip, using one transit system.

#### **Boarding:**

Jaime's trip counts as 2 Boarding. One entry onto a vehicle was made on a bus and another on the LRT.

### *Disclaimer*

The project team makes an extensive effort to assure the quality of information contained in this report is correct. Transit usage can vary by 10 percent or more from one day to the next or by season to season. Our team tries to minimize the variations by conducting surveys around the same time of the year. Year to Year variation may be due to random events such as weather, accidents or unforeseen events affecting service delivery. It is impossible to achieve complete accuracy and consistency in the reported data.

We recommend looking at trends, since variation that is consistent over a longer period is more likely to be real and not just the result of random events. Consideration and appropriate weighting of other sources is to be encouraged before making decisions.