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2019 LRT Passenger Count Report

by Monitoring & Geospatial Services

Urban Form and Corporate Strategic Development | City Planning City of Edmonton

April, 2020

Executive Summary

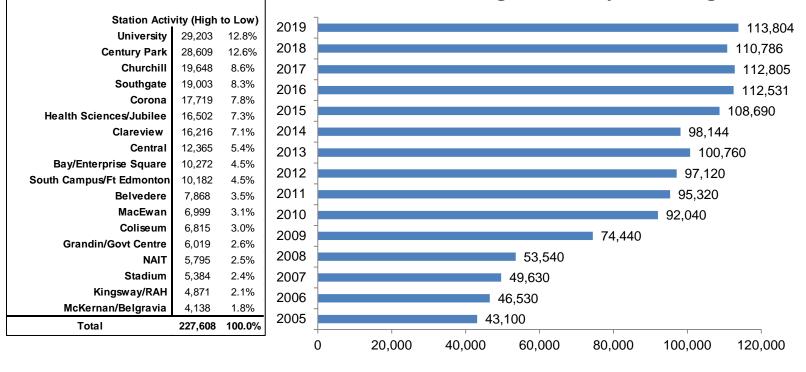
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In 2019, the average weekday boarding's on both LRT lines was 113,804. The City of Edmonton conducted the 2019 LRT Passenger Count during the SEP19 signup occurring between September 1, 2019 and November 30, 2019. The purpose of this count is to describe boarding and alighting data on the Capital Line and the Metro Line, during a time when service hours are at their highest level and post-secondary institutions and schools are in session. The LRT Passenger Count represents the average passenger flow of a typical fall weekday on each LRT line as well as describing the station activity at each LRT station.

The 2019 LRT Passenger Count found that there are approximately **113,804** average weekday boarding's and **113,804** average weekday alighting's on both the Capital and Metro lines. This represents an increase of **2.72%** from the previous year.

Other Key Findings:

- Average weekday total boarding's and alighting's: 227,608.
- **77,715** boarding's on the Capital Line, an increase of **2.18%** from the previous year.
- **36,089** boarding's on the Metro Line, an increase of **3.91%** from the previous year.
- The greatest increase in boarding's occurred at Corona Station (15.57% increase).
- The greatest increase in alighting's occurred at University Station (12.10% increase).



15 Years - Average Weekday Boarding's

Introduction

LRT was first introduced in 1978, in time for the 1978 Commonwealth Games.

Although 78 LRV's are required to operate the Metro and Capital Lines, ETS has a total of 94 LRV's in their fleet.

The project team makes every effort to avoid doing counts during special event however not all events can be avoided. Edmonton Transit Service (ETS) started Light Rail Transit (LRT) service in 1978 starting with the Capital Line which now is a 16.1 km line from Clareview station in northeast Edmonton to Century Park station in south Edmonton. The Metro Line opened on Sunday, September 6, 2015 as a 3.3 km extension from Churchill station to the Northern Alberta Institute of Technology (NAIT) station.

During the SEP19 signup, LRT service was operated with 78 light-rail vehicles (LRV) on the Capital and Metro Lines connecting 18 LRT stations (10 of which are connected to an ETS Transit Centre). The Capital Line provides 125 weekday trips between Clareview and Century Park stations while the Metro Line provides 76 weekday trips between NAIT and Century Park stations.

The LRT Passenger Count methodology manually counts passengers at every LRV door for each train from the beginning to the end of the service day. This train-level methodology provides accurate data while reducing counting errors and stages the data for analysis and reporting.

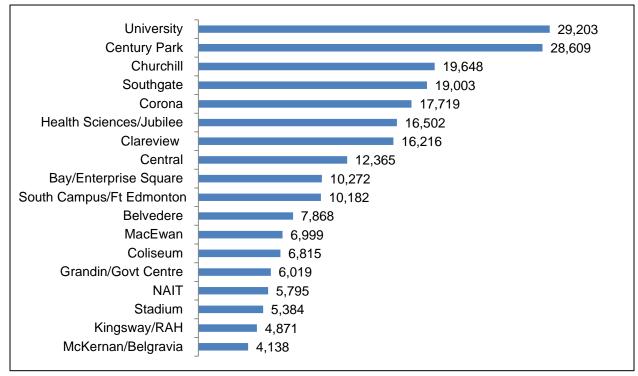
In addition to the regular scheduled service, ETS operates extra service on the lines for special events such as hockey or football games or other major events at venues near the LRT lines. While the project team tries to avoid doing passenger counts during these major events, not all events can be avoided. Passenger counts from these special events are sometimes 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.

Further in-depth analysis of this survey can be found on the Monitoring and Geospatial Services Tableau <u>link</u>.

This site will allow the end user to view historically data, customize the data and conduct analysis based on personal requirements.

Total Station Activity

Station activity refers to the total number of boarding's and alighting's at each LRT station on both the Metro and Capital Lines. Figure 1 is a breakdown of total station activity. Table 1 is a breakdown of total station activity compared to 2018.



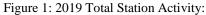


Table 1: Percent Change In Total Station Activity:

LRT Station	2019 Boarding	2018 Boarding	% Change Boarding	2019 Alighting	2018 Alighting	% Change Alighting	2019 Station Total	2018 Station Total	% Change Total
University	13,672	13,065	4.65%	15,531	13,854	12.10%	29,203	26,919	8.48%
Century Park	14,607	14,072	3.80%	14,002	13,070	7.13%	28,609	27,142	5.40%
Churchill	9,834	9,987	-1.53%	9,814	9,865	-0.52%	19,648	19,852	-1.03%
Southgate	9,250	9,093	1.73%	9,753	9,852	-1.00%	19,003	18,945	0.31%
Corona	9,049	7,830	15.57%	8,670	7,914	9.55%	17,719	15,744	12.54%
Health Sciences/Jubilee	8,446	7,752	8.95%	8,056	7,547	6.74%	16,502	15,299	7.86%
Clareview	8,040	8,056	-0.20%	8,176	8,218	-0.51%	16,216	16,274	-0.36%
Central	6,241	6,322	-1.28%	6,124	6,373	-3.91%	12,365	12,695	-2.60%
Bay/Enterprise Square	5,231	4,659	12.28%	5,041	4,712	6.98%	10,272	9,371	9.61%
South Campus/Ft Edmonton	5,140	5,304	-3.09%	5,042	4,842	4.13%	10,182	10,146	0.35%
Belvedere	4,029	3,975	1.36%	3,839	4,218	-8.99%	7,868	8,193	-3.97%
MacEwan	3,609	3,938	-8.35%	3,390	4,126	-17.84%	6,999	8,064	-13.21%
Coliseum	3,444	3,629	-5.10%	3,371	3,502	-3.74%	6,815	7,131	-4.43%
Grandin/Govt Centre	3,105	2,934	5.83%	2,914	2,815	3.52%	6,019	5,749	4.70%
NAIT	2,931	3,181	-7.86%	2,864	2,894	-1.04%	5,795	6,075	-4.61%
Stadium	2,715	2,651	2.41%	2,669	2,623	1.75%	5,384	5,274	2.09%
Kingsway/RAH	2,357	2,372	-0.63%	2,514	2,389	5.23%	4,871	4,761	2.31%
McKernan/Belgravia	2,104	1,966	7.02%	2,034	1,972	3.14%	4,138	3,938	5.08%
LRT TOTAL	113,804	110,786	2.72%	113,804	110,786	2.72%	227,608	221,572	2.72%

Total Boarding's and Alighting's

Total boarding's and alighting's refers to the total number of passenger entries and exits from both the Metro and Capital Lines.

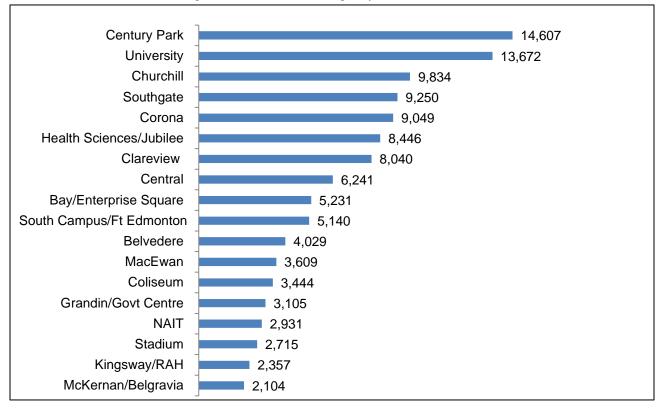
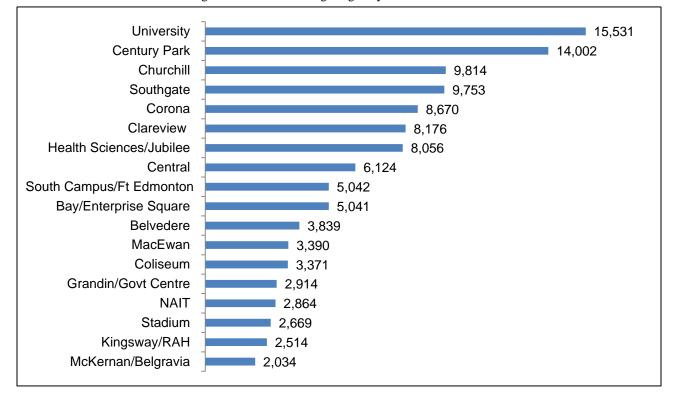


Figure 2: 2019 Total Boarding's By Station:

Figure 3: 2019 Total Alighting's By Station:



Capital Line Analysis

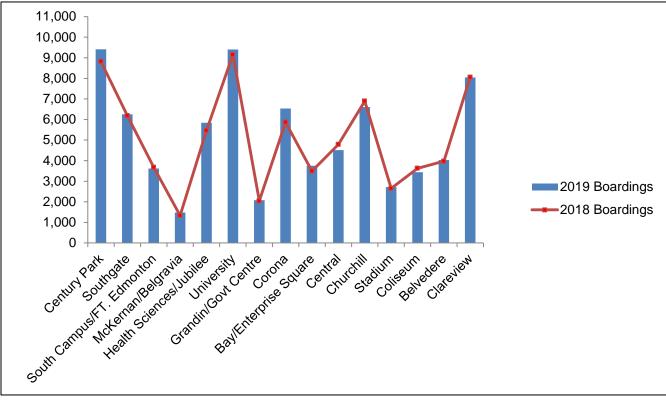
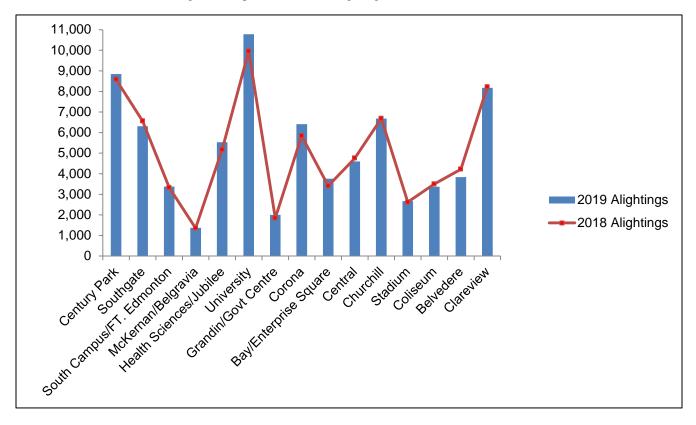


Figure 4: Capital Line Total Boarding's:





Metro Line Analysis

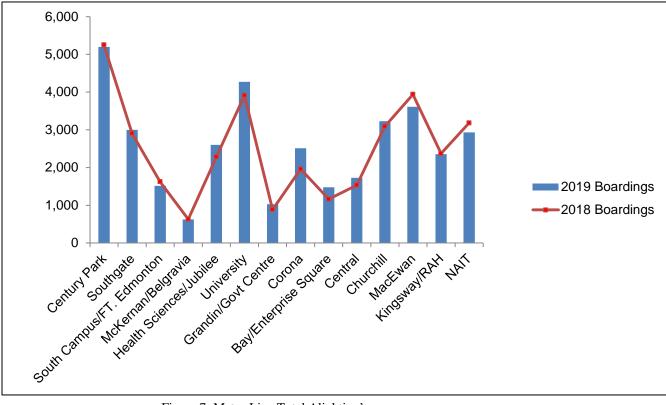
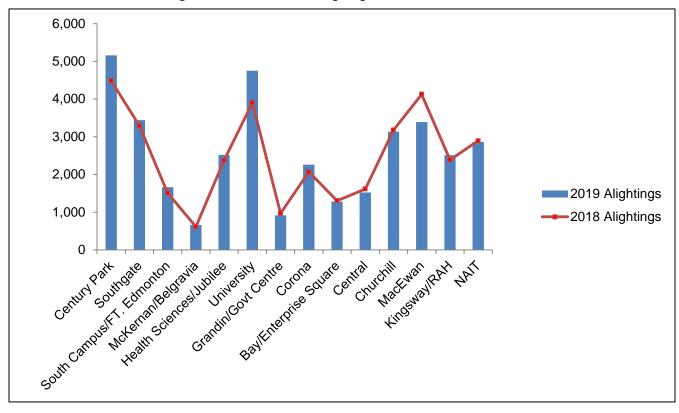


Figure 6: Metro Line Total Boarding's:

Figure 7: Metro Line Total Alighting's:



DISCLAIMER

The Monitoring & Geospatial Services team makes an extensive effort to assure the quality of information contained in this report is correct. Transit data, including LRT ridership can vary by 10 percent or more from one day to the other 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.