

AT HOP Rail Travel Report – Total Monthly Network Capacity and Patronage

Recommendation(s)

That the Board:

- i. Receive the report.

Purpose

This report is to update the Board on progress with information development following the rollout of the AT HOP card.

Background

At the December Board meeting information was presented using rail HOP data to quantify the capacity and patronage of the rail network by service and by line, for:

- The peak hour;
- The peak periods;
- Inter-peak periods; and
- The whole day.

Since December the analysis has been progressed and now allows more detailed information on patronage and capacity for the rail network to be provided.

This is shown in Attachment 1.

Next steps






The same information will be available for bus services as the AT HOP card is rolled out over the bus network.

This information will be used to support marketing and service operations initiatives to improve public transport patronage growth and increase operational efficiency.

Attachments

Number	Description
1	Five PowerPoint slides detailing rail patronage and capacity analysis.

Document ownership

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	Tom Wolfenden Enterprise Information Manager	
Recommended by	Peter Clark General Manager, Strategy & Planning	
	Mark Lambert Group Manager Public Transport Operations	
Approved for submission	David Warburton Chief Executive	

Train Patronage and Capacity Reports – HOP data



Total Network by Direction Daily Average

Western Line Example

The graph illustrates the Week Day, Daily Average Patronage and Capacity by Line, Direction and Half Hour for the month of November 2013.

The example selected illustrates the Western Line, Inbound Services.

The blue columns indicate a daily average count of boardings from either a Tag-On or a Paper Ticket recorded in the Thales (AIFS) system. (Note lightings are not included in this amount)

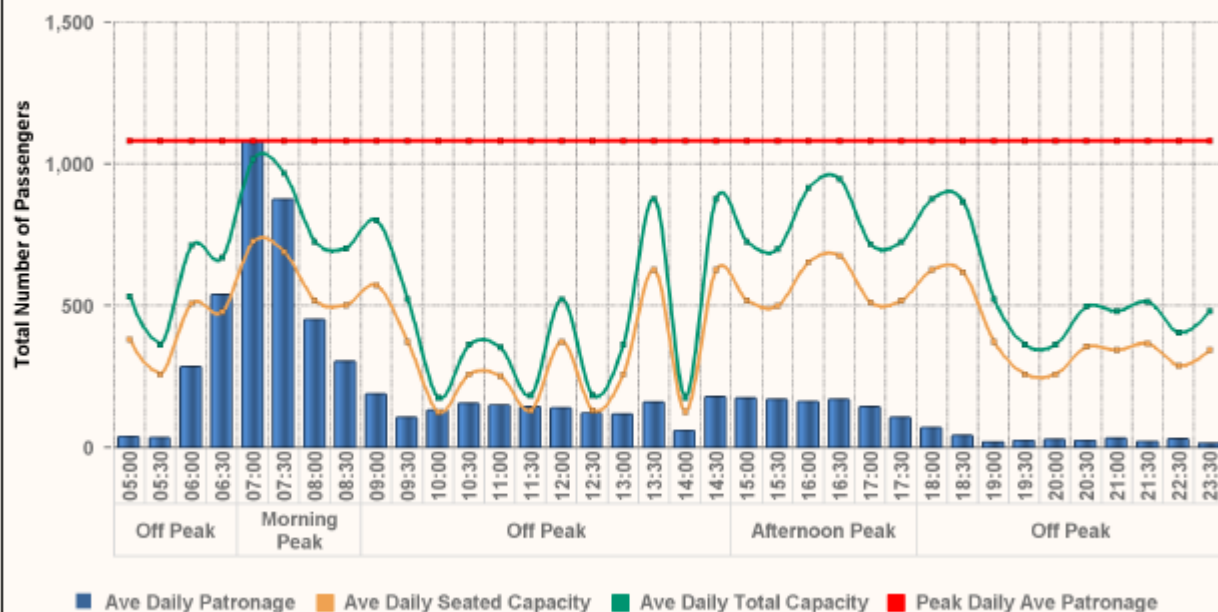
The yellow line indicates a daily average of the total seated capacity as recorded in Transdev's Compass train management system.

The green line indicates a daily average of the seated and standing capacity. (This amount is a 1.4 factor of the seated capacity.)

The red line indicates the peak patronage achieved.

Western Line Services Inbound to Britomart

Patronage and Capacity

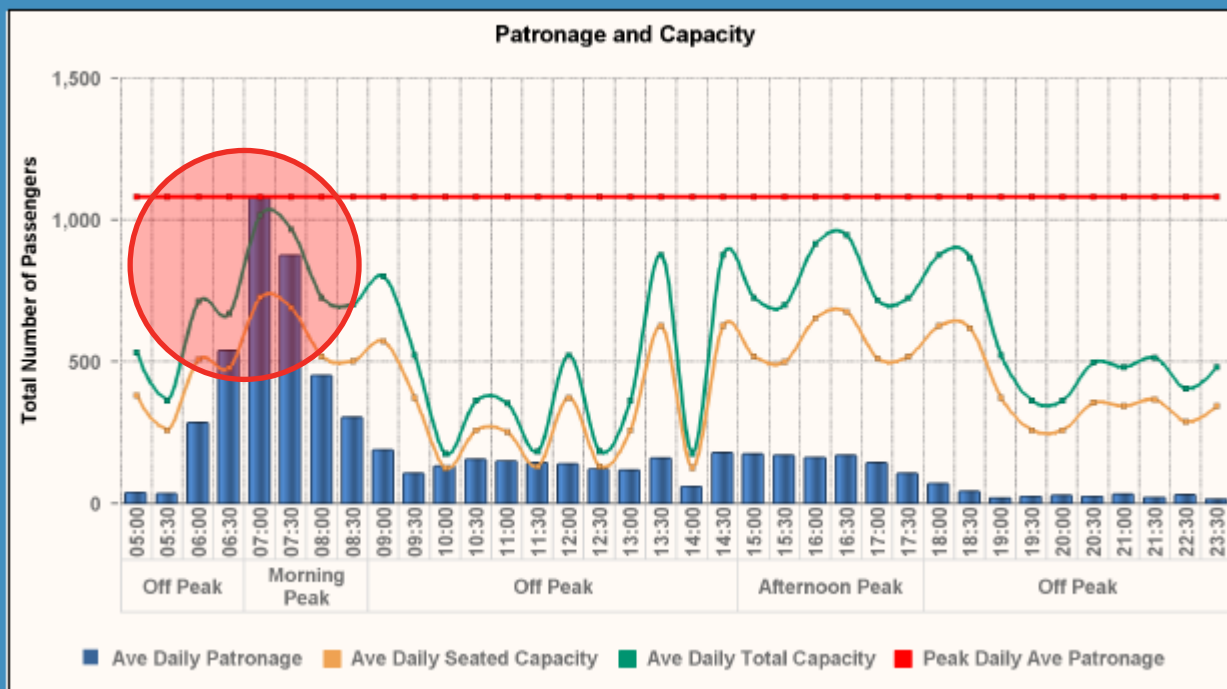


The time periods are based on the train timetable. Passenger boardings are allocated to the most likely train service they would have boarded, based on their origin and destination, and tag/ticket times.

Daily Average by Line and Direction

Western Line Example

Western Line Services Inbound to Britomart

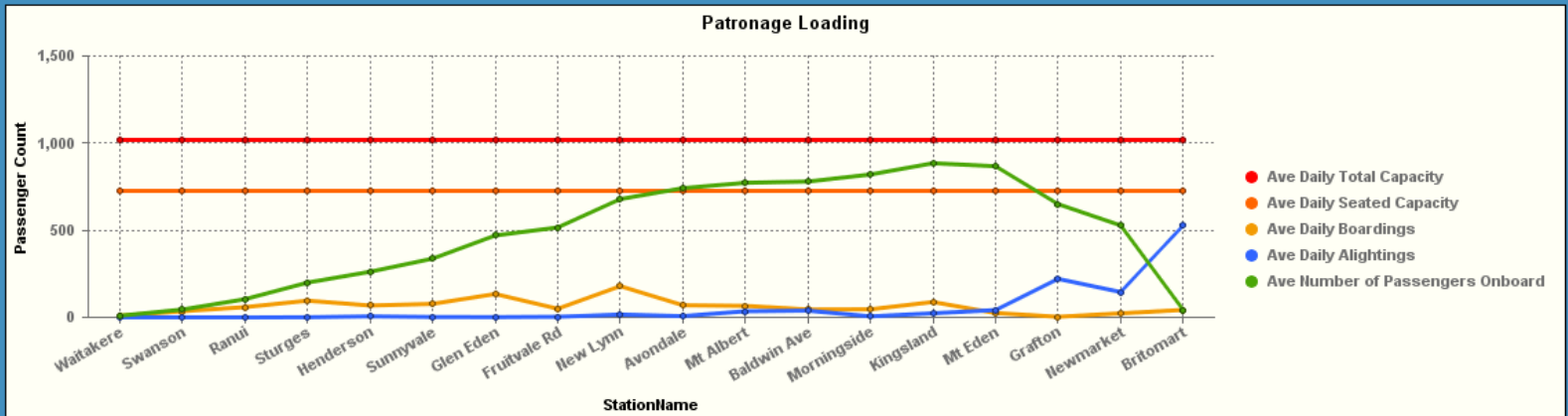


This area illustrates that the total number of boardings is exceeding the total number of seats and standing capacity available. To investigate the true loading of that service a Passenger Loading Report has been developed.

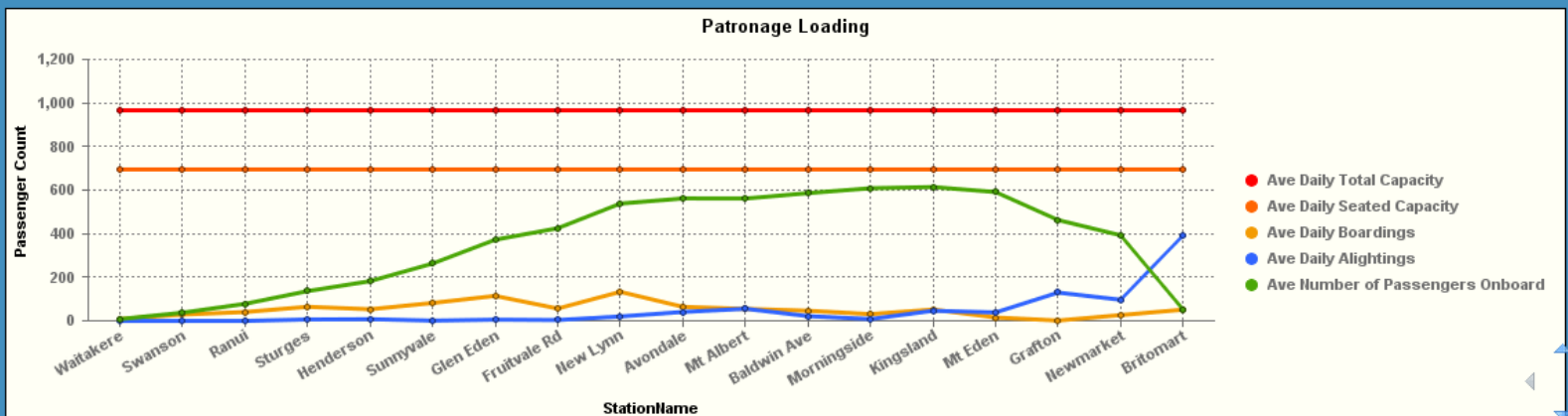
Passenger Loading Report by Line and Direction

Western Line Example

Western Line 07:00 Services Inbound to Britomart



Western Line 07:30 Services Inbound to Britomart



This graph displays the whole profile of a journey based on both boardings and alightings by half-hour period. This is the true representation of the passenger loading.

All figures are the week day daily average for the month of November 2013.

The green line indicates the number of passengers on services at any point - it is the running total of passengers boarding less passengers alighting.

The orange line indicates the seated capacity and the red line indicates the seated + standing capacity.

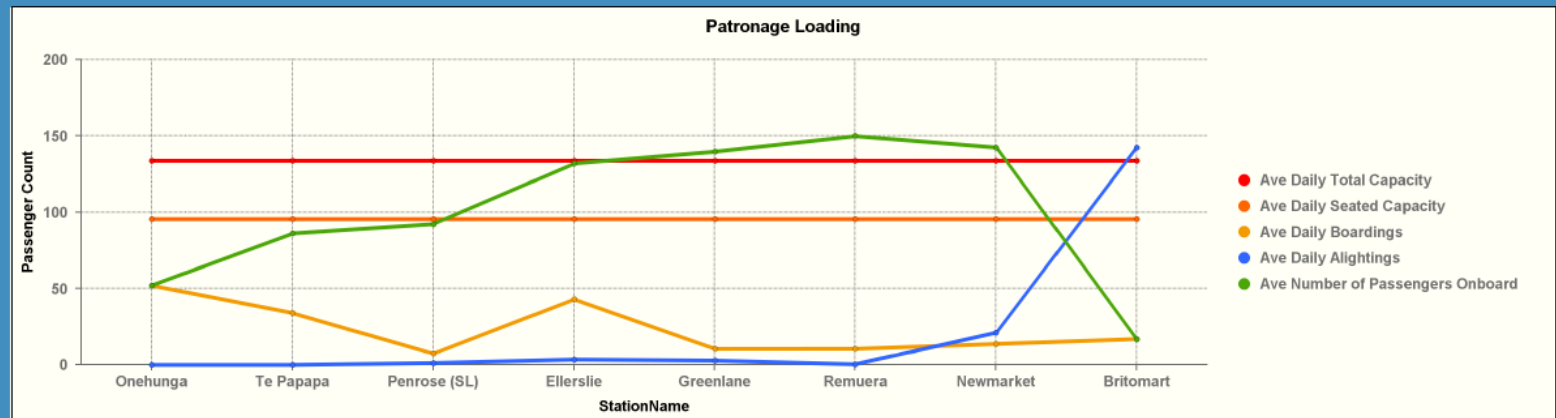
The yellow line indicates the number of boardings and the blue indicates the number of alightings at each station.



Passenger Loading Report by Line and Direction

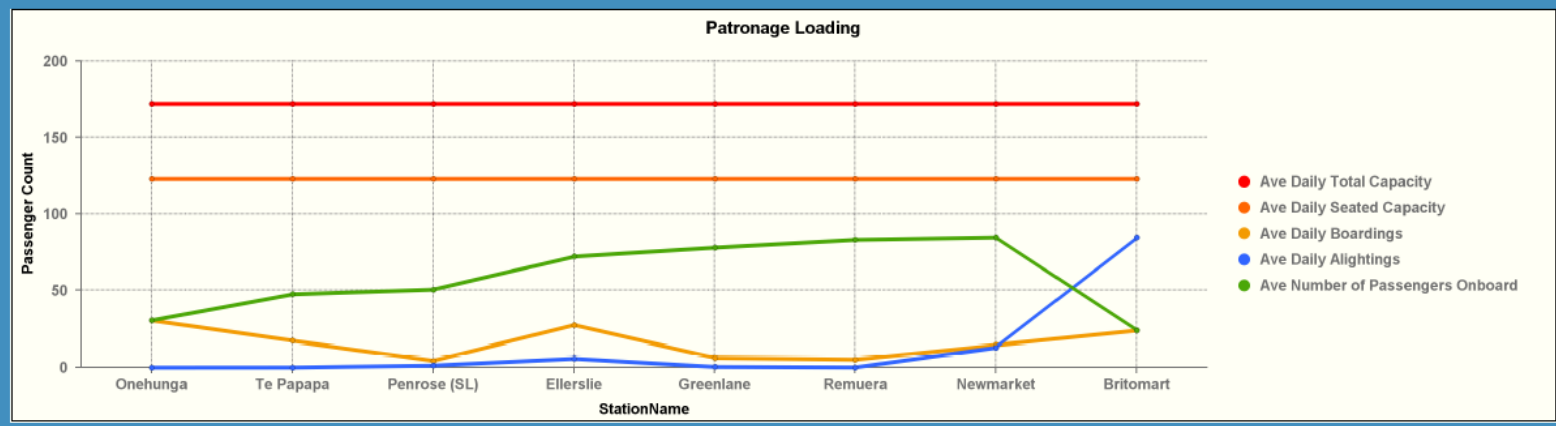
Onehunga Line Example

Onehunga Line 07:30 Services Inbound to Britomart



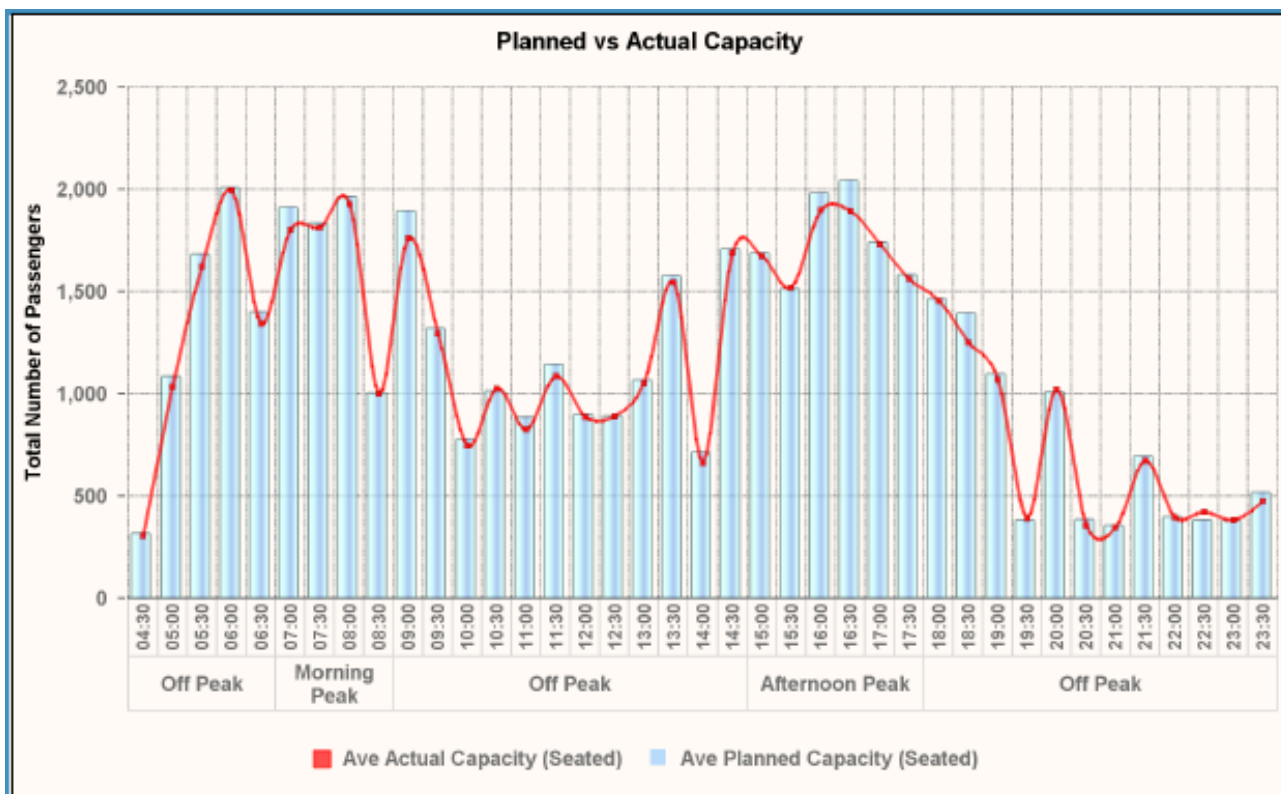
This chart illustrates an example where the total number of passengers exceeds the seated and standing capacity.

Onehunga Line 08:00 Services Inbound to Britomart



Planned and Actual Capacity by Direction Daily Average

Western Line Example



The graph illustrates the week day, daily average planned capacity and actual capacity by line, direction and half hour.

The example selected illustrates the Western Line, inbound services.

The light blue columns indicate the (daily average) Planned seated capacity as recorded in Transdev's Compass system.

The Red line indicates the (daily average) actual seated capacity as recorded in Transdev's Compass system. This line indicates all services which ran and excludes all fully cancelled services, but includes adjustments for incorrect supply against the Plan (e.g. smaller capacity train supplied than planned).