

TransLink has reviewed the methodology used for measuring historic train patronage.

This has been made possible by the transition to *go* card and single-trip tickets – moving from a system which included patronage multiplier assumptions to a system that uses actual travel only. With more than four out of five trips on Queensland Rail made using *go* card, TransLink is able correct historic patronage assumptions.

The result is a set of improved patronage figures which maintain historical trends and is more consistent with other network data.

This paper provides information about the areas which required adjustment and the methodology applied to correct historic train patronage.

Background

Before January 2011, train patronage data consisted of actual trips and assumed trips.

Actual trips were calculated with *go* card and single trip paper tickets. Assumed trips required a formula applied to the available multi-trip paper tickets – such as daily, off-peak daily, weekly and monthly.

Following the integration of train, bus and ferry services across South East Queensland in 2004, multi-trip tickets sold at Queensland Rail stations and off-station retailers became available for use on other modes.

Prior to January 2011, multi-trip tickets sold at Queensland Rail stations and off-station retailers were allocated as train trips based on the type of ticket and formulas applied.

The formulas and assumptions applied prior to 2011 have led to an overstated historic train patronage.

TransLink began monitoring the volume gap between actual and assumed trips in mid-2009. Recalculation is now possible as patronage has now moved to actual-trip methodology from January 2011.

Three areas of patronage calculation which required correction were:

- 1. The multiplier used for periodical tickets**
- 2. Duplication of reseller patronage data**
- 3. Special event data counts.**

Key corrections

- 1. The multiplier used for periodical tickets**

Historic Queensland Rail patronage for multi-trip tickets was calculated trip multipliers, for example:

Product	Trip Multiplier
Weekly ticket	11
Daily/off peak ticket	2.1
Single ticket	1

The multiplier assumptions are based on research undertaken by Queensland Rail prior to 2004. The multipliers do not take into account changes to travel pattern, illness, public holidays, annual leave, other means or modes of travel.

Research conducted on *go* card users who moved from weekly tickets in 2009,

2010 and 2011 showed the 11-trip multiplier was overstated.

However, this overstatement is partially off-set by station transfers – a transfer between train services without exiting a station. This transfer rate was consistent when measured in 2009, 2010 and 2011.

Since July 1, 2011, the multiplier has been replaced by a measuring system that records only actual trips and actual station transfers.

Correction:

Weekly trip users were travelling an average of 10 trips per week.

Station transfers were occurring at a rate of 5.45%.

- 2. Duplication of reseller patronage data**

Prior to 1 July 2004, train multi-trip paper tickets were only used on Queensland Rail services. From 1 July 2004, most paper tickets were integrated and used on any TransLink mode. This led to trips being allocated to Queensland Rail when customers were using bus or ferry.

This was particularly the case at two major off-station ticket retailers which sold multi-trip tickets.



Research conducted at the two major off-station retailers showed 87% of multi-trip tickets and go card top-ups were used on bus or ferry.

Correction:

Reduce the Queensland Rail trip allocation from periodical tickets sold at the two off-station retailers by 87%.

3. Special events data counts

TransLink operators, including Queensland Rail, carry an estimated 2 million people a year to events on additional services using an integrated special event ticket.

Queensland Rail patronage on additional

services arranged for special events has historically been allocated to the operator as trips. In contrast, customers carried by additional services provided by bus operators are not allocated to these operators' patronage.

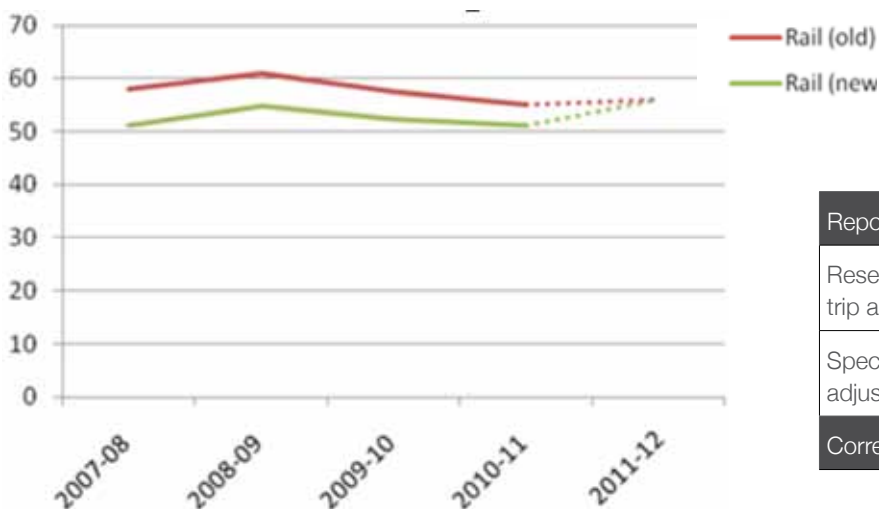
TransLink does not currently consider trips taken on additional services provided for special events as part of overall patronage as these services are not directly funded by TransLink.

Correction: Remove the trips allocated to Queensland Rail as part of additional event services from overall train patronage, bringing the method into line with other operators.

Changes

The graph below shows that the correction does not materially change historical patronage trends.

	Rail (reported)	Rail (adjusted)
2007-08	57.9	51.0
2008-09	60.9	54.7
2009-10	57.6	52.3
2010-11	55	51.0



	2007/ 2008	2008/ 2009	2009/ 2010	2010/ 2011
Reported trips	57.9m	60.9m	57.6m	55.1m
Reseller/multi-trip adjustment	-5.8m	-5.0m	-4.1m	-2.8m
Special event adjustment	-1.1m	-1.2m	-1.2m	-1.3m
Corrected trips	51.0m	54.7m	52.3m	51.0m

