

# Memorandum

Our ref 135/04776  
Date 21 April 2017

**To** Paul Eagles

**Subject** Time Series Heavy Rail Data

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An Excel workbook has been developed collating the information requested in your Right to Information Request Application Number 135/04776. This Excel workbook contains six worksheets as follows:

- AM Peak Hour (7:30 to 8:29) Inbound
- AM Peak 2 Hour (07:30 to 09:29) Inbound
- AM Peak Hour (7:30 to 8:29) Outbound
- AM Peak 2 Hour (07:30 to 09:29) Outbound
  
- AM Peak 2 Hour (07:00 to 08:59) Inbound – This was not included in your application but has been provided assuming that the requested time range of 07:30 to 09:29 was in error
- AM Peak 2 Hour (07:00 to 08:59) Outbound – As previous

The information requested has been collated using a number of inputs. The following notes should be read with the provided information as they include key definitions, assumptions and limitations:

- Time definition - Services have been allocated to time periods based on the time at Brisbane Central station
- Line definition
  - Services have been allocated to lines based on the current network structure. New lines have opened in the last five years and there have been two major network restructures
  - Services commencing at Petrie have been allocated to the Redcliffe Peninsula line as these services were generally extended to form Kippa-Ring services in October 2016

- Similarly, services commencing at Darra have been allocated to the Springfield line as these services were generally extended to form Richlands in January 2011 and then Springfield Central services in December 2013
- The Sector 1 timetable change in June 2011 and the Sector 2 timetable change in January 2014 simplified the sectorisation of the rail network. Prior to this, there were some unusual services eg Corinda to Doomben via Tennyson. Services such as these have been allocated to lines based on the majority of their alignment eg Corinda to Doomben via Tennyson has been allocated to the Beenleigh line even though it starts on the Springfield/Ipswich/Rosewood line and ends on the Doomben line
- Passenger data
  - 2005 to 2013
    - Passenger data for 2005 to 2013 is from Queensland Rail Passenger Load Surveys. These surveys were an on board count of passenger boardings and alightings at each station along a service. They were usually completed on Tuesdays to Thursdays in the first four weeks following the start of university in late February/early March each year. Each service was only surveyed once in each survey period
    - The 2013 Passenger Load Survey data has been included but is considered less reliable as some services were surveyed in the week that included Good Friday. Patronage is usually lower in weeks that include a public holiday
  - 2011 to 2016
    - Passenger data for 2011 to 2016 is derived from go card transaction data and paper ticket sales data. As ticket validation for rail is at stations, rather than on board like bus and ferry, passengers have been assigned to individual train services based on their origin and destination stations and station entry/ticket sale times. For consistency with the previous Queensland Rail Passenger Load Surveys, go card transaction data and paper ticket sales data is an average of Tuesdays to Thursdays in the first four weeks following the start of university in late February/early March each year. This relies on recorded origin and destination stations and time of travel. It is not possible to apply this prior to 2011. Before 2011, a significant proportion of Queensland Rail passengers used periodic paper tickets (dailies, weeklies, monthlies etc) where the actual origin and destination stations and time of travel on any day was not recorded
    - As Airtrain sells some tickets that are not part of the TransLink integrated ticketing system, some Airport line data is not included. The data not included is usually higher from the airport than to the airport

- As there has been a change in data source, there is a discontinuity in series from 2013 with some overlap between 2011 and 2013. The passenger data derived from go card transaction and paper ticket sales data is generally lower. This is due to number of reasons including incomplete go card data (including return journeys), fare evasion as well as other non-ticketed travel including children, police and Queensland Rail and Aurizon staff travel. It is expected that the difference should have reduced due to additional stations being gated and employee go cards for Queensland Rail and Aurizon staff to record their travel
- Timetable data
  - 2005 to 2012 - Service data is from TransLink's Integrated Public Transport Information System (IPTIS). This data was previously used for the TransLink Journey Planner. Service capacity information was derived by linking to the Passenger Load Survey data
  - 2013 to 2016 – Service data is from TransLink's General Transit Feed Specification (GTFS) timetable data. This data is exported from HASTUS which is currently being used for the TransLink journey planner
- Capacity
  - Seated and design capacities have been included
  - Please note that the general guideline is that no passenger should be standing for more than 20 minutes. Alternatively, seated capacity should be used more than 20 minutes from Brisbane Central.

Encl (1) - Time\_Series\_Heavy\_Rail\_Data.xlsx

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