List of annexes

Annex	Description	Date
Annex 1	Queensland Rail Operations Resource Plan 2015-2016	July 2015
Annex 2	Indec Train Service Delivery Review	February 2016
Annex 3	Correspondence between GIRO and Queensland Rail (March 2016)	17 March 2016
Annex 4	Correspondence between GIRO and Queensland Rail (October 2016)	21 October 2016
Annex 5	Ministerial briefing titled 'Traincrew resourcing and cancelled services – Friday 30 September 2016'	7 October 2016
Annex 6	Letter from Queensland Rail to the Responsible Ministers titled 'Service disruptions in October 2016'	23 October 2016
Annex 7	Extract of Queensland Rail's corporate risk system	1 December 2016
Annex 8	Report on service disruptions on 25 December 2016	3 January 2017

The names of private persons, except Government Ministers, have been redacted to preserve anonymity.

Annex 1 Queensland Rail Operations Resource Plan 2015-2016

Operations Resource Plan

March 2015 – December 2016

Queensland Rail

July 2015

QueenslandRail

Contents

Introduction and document purpose

The Citytrain Resource Plan identifies critical workforce risks and challenges over the medium term. This document is a key tool for assisting leaders across the Citytrain business with understanding capability and capacity gaps and challenges and undertaking detailed operational and tactical planning activities.

This document is a 22 month Resource Plan for the Citytrain Above Rail workforce. It covers appropriately 2,300 staff and provides forecasts of workforce demand, supply and available supply over the period March 2015 to December 2016. This information is critical to understanding the risks and challenges the workforce faces into the future including identifying expected workforce shortages.

The workforce analysis included in the Resource Plan is organised by job family or capability group (the Capability Lens) as well as the business organisational structure (the Organisational Lens). These two lenses provide visibility of workforce gaps and issues across like professions as well as within specific organisational units. Due to the historical data available these lenses draw form different historical data, with the Organisational Lens drawing from 6 months of historical information and the Organisational Lens drawing form 17 months of historical information due to the quality and availability of information. This has been done to provide maximum utility for this document for Citytrain managers, human resources and other key stakeholders.

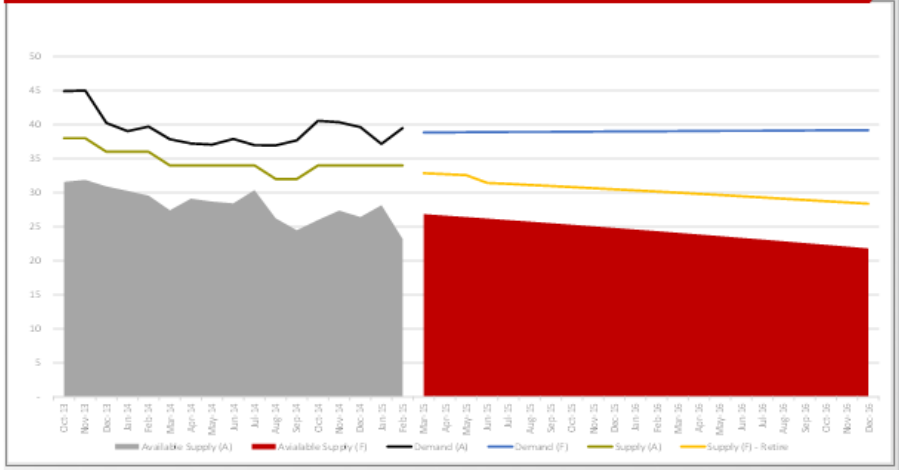
Limitations and Considerations

It is noted that this ability to forecast workforce shortages and surpluses is still at a low level of maturity for Queensland Rail. With this in mind, there are a number of key assumptions and limitations regarding the information presented in this Resource Plan:

- No warranty of completeness, accuracy or reliability is given in relation to the information and documentation provided by Queensland Rail to inform the workforce demand, supply and available supply forecasts –no independent verification of the data has been done prior to its use in the forecasting tool;
- Information used in the forecasting tool is based on a maximum of only 17 months of historical data. Best practice workforce planning would rely on 5-10 years of historical workforce information to improve the accuracy of the forecasting. The accuracy of the forecasting is therefore based on best *available* data, noting its limitations;
- As forecast capability is at a low maturity, it is important to note that proxy measures have been used in the modelling (especially for workforce demand). This is because a complete data set of predicted work effort for the Citytrain workforce is currently not available;
- The modelling approach and key decisions made in the development of the workforce forecasting tool and for this Resource Plan are included at Appendix A. The analysis in this Resource Plan notes where these decisions are likely to have caused some anomalies in the data (for example, recruitment has not been modelled with the exception of approved training schools which will tend to show increasing workforce gaps especially where there are predicted retirements);
- The forecasting undertaken is based on the current decisions that are known and do not take into account workforce reforms that may be developed and undertaken by the business as a result of the findings in this Resource Plan, or as a result of the accompanying Queensland Rail Strategic Workforce Plan;
- The requirement for annual reaccreditation, in terms of training requirements, has not been taken into consideration while drafting the March 2015 to December 2016 forecast. The expected reaccreditation should be considered for Train Driver and Guards (every 18 months, for 2 days), Shunters (every 36 months, for 4 hours) and Train Controller (every 6 weeks, for 1 day); and
- The five Capability groups, considered in this forecast, have been created in consideration of Queensland Rail's activities and areas with linked career pathways, skills and capabilities and education and training. For further information on these groupings, please refer to the Strategic Workforce Plan.

UNDERSTANDING THIS RESOURCE PLAN

PART 1: Workforce Forecasting Graph



Key Findings - Highlights the key reasons for peaks, troughs and gaps in the forecasting analysis. Each of these points is discussed further on the following page.

Workforce Gaps - Discusses the gaps between the demand for the workforce and the supply of the workforce, both in terms of overall FTE, and based on the available supply of the workforce. It is noted that, historical gaps have been largely managed through overtime.

Workforce Demand - Comprised of workforce demand for projects, business as usual functions and demand for overtime.

- Historical Demand
- Forecast Demand

Workforce Supply - Comprised of the current workforce (baseline), recruitment, retirements and cessations (due to turnover and redundancy).

- Historical Supply
- Forecast Supply

Available Supply - Shows the workforce that is available to work (not counting those who are unavailable due to training, scheduled leave (e.g. annual leave) or unscheduled leave (e.g. sick leave)).

- Historical Supply
- Forecast Supply

PART 2: Capability Lens v Organisatonal Lens

Organisational Lens- Analysis of the demand, supply and available supply of the workforce by five capability areas and job families. This is based on **6 months** of historical data due to organisational restructures. It should not be compared to the forecast findings from the Organisational Lens.

Citytrain Group

Job Families: Administration and Support; Business Professionals; Civil Engineering; Cleaners; Contracts and Projects; Customer Service; Guards; Human Resources; Maintenance Planner; Paint and Trim Trade; Public Relations, Sales and Marketing; Security; Station Manager and Officer; Drivers; Train Operations Inspectors.

Rail Management Centre and Operation Group

Job Families: Shunters; Train Controllers.

Operating Assets Group

Job Families: Administration and Support; Building Manager and Technician; Business Professionals; Cleaners; Electrical Engineering; Electrical Trade; Human Resources; Labourer; Maintenance Planner; Mechanical Engineering; Mechanical Trade; Metal Fabrications Trade; Paint and Trim Trade; Plant Operator; Plumbing Trade; Station Manager and Officer; Drivers; Warehousing and Distribution

Operational Coordination, Risk and Assurance Group

Job Families: Administration and Support; Business Professionals; Contracts and Projects.

Capability Lens- Analysis of the demand, supply and available supply of the workforce by five capability areas and job families. This is based on **17 months** of historical data and should not be compared to the forecast findings from the Organisational Lens.

Machinery Operators, Drivers and Shunters Capability

Job Families: Train Drivers; Guards; Train Operations Inspectors; Shunters; Train Controllers.

Customer Service Capability

Job Families: Cleaners; Security; Station Manager and Officer; Customer Service.

Administration and Support Capability

Job Families: Administration and Support; Business Professionals; Contracts and Projects; Human Resources; Public Relations, Sales and Marketing; Warehousing and Distribution.

Engineering Capability

Job Families: Civil Engineering, Mechanical Engineering, Electrical Engineering.

Technicians, Trades and Maintenance Capability

Job Families: Building Manager and Technician, Electrical Trade, Maintenance Planner, Labourer, Mechanical Trade, Metal Fabrication Trade, Paint and Trim Trade, Plumbing Trade.

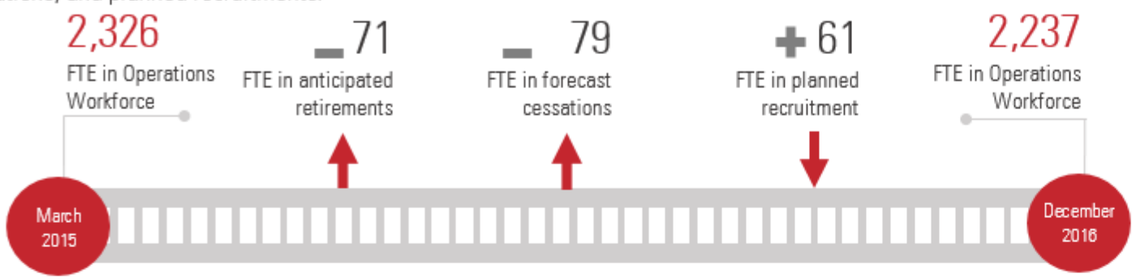
KEY NOTES: Assumptions around the forecasting need to be considered when making business decisions, for example this assumes the forecast period will continue the trends from the historical data, and assumes a retirement age of 63 years. This analysis relies on two different data sets for the capability and organisational lens and the findings from each should not be compared. This model is built on a range of trend and actual data depending on the variable –detail of this is provided in the Appendix. Proxy measures have been used, particularly for the demand modelling.

OPERATIONS WORKFORCE FORECAST SUMMARY

Overview of key findings from the Operations Resource Plan

HOW ARE WE CHANGING?

The overall supply of the Operations workforce will be impacted by a range of factors including planned retirements, cessations, and planned recruitments.



CHALLENGES

- Responding to changes in workforce demand as generated by new projects and other key business drivers and strategies
- Workforce flexibility and ability to effectively manage peaks and troughs in demand through mechanisms such as flexible labour, overtime, use of third parties etc.
- Ageing of the workforce
- Lead times for some rail-specific capability groups
- Managing unscheduled and scheduled leave to minimise disruption to business operations and optimise workforce utilisation

OPPORTUNITIES

- Having the right capabilities and skills available at the right time - effective and proactive management of workforce demand as generated by new projects and other key business changes; recruiting into areas of need and focusing on sustainability
- Identification and tracking of key trends in areas including overtime, scheduled and unscheduled leave, medicals and training, retirements and cessations.
- Proactively manage the ageing of the workforce through workforce planning of when this is likely to impact, succession planning, managing the transition of the workforce (for example into part-time roles), knowledge management and transfer.
- Managing expected turnover of the workforce, including succession planning, career pathway opportunities, addressing leadership and culture and (where possible) remuneration and conditions of employment.
- Proactive future planning for those capability groups where there is significant lead team required to ensure workers are safe and ready to work
- Monitoring available supply for the workforce to ensure optimal workforce utilisation and proactive management of issues such as absenteeism and planning of scheduled leave including training and medicals

SKILLS IN DEMAND

TRAIN DRIVERS
- 46.0 FTE demand increase
- 62.0 FTE increase in gap between demand and supply

GUARDS
- 32.2 FTE demand increase
- 52.5 FTE increase in gap between demand and supply

CLEANERS
- 26.1 FTE increase in gap between demand and supply
- Small workforce size

BUSINESS PROFESSIONAL
- 15.0 FTE increase in gap between demand and supply

SECURITY
- 12.5 FTE increase in gap between demand and supply
- Small workforce size

MECHANICAL ENGINEERS
- 12.5 FTE increase in gap between demand and supply
- Small workforce size

MECHANICAL TRADE
- 11.5 FTE increase in gap between demand and supply
- Small workforce size

SHUNTERS
- 10.8 FTE increase in gap between demand and supply
- Small workforce size

SHORTAGES IN SUPPLY

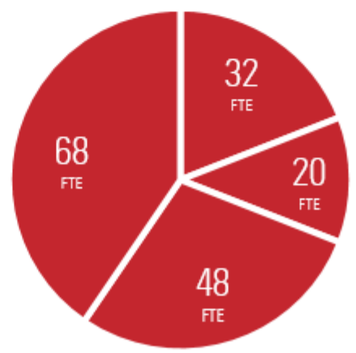
This outlines supply shortages not being addressed by recruitment

CLEANERS
- 17.6 FTE cessations
- 3.0 FTE forecast retirements

BUSINESS PROFESSIONALS
- 13.0 FTE cessations
- 1.0 FTE forecast retirements

MECHANICAL ENGINEERING
- 11.0 FTE cessations
- 1.0 FTE forecast retirements

SECURITY
- 9.5 FTE cessations
- 2.0 FTE forecast retirements



151 total FTE supplied through QR training programs by December 2016

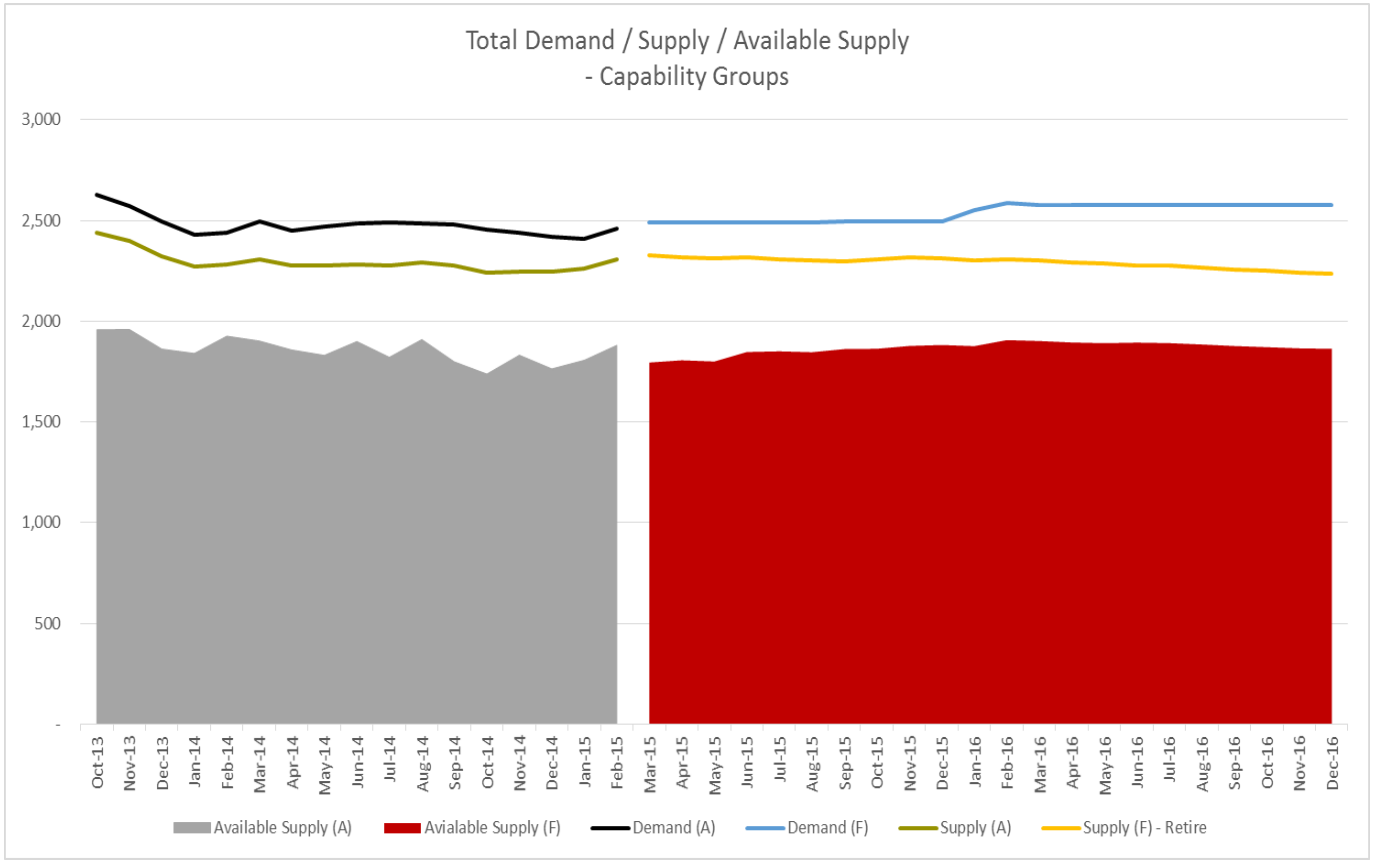
TRAINING OUR PEOPLE

The following outlines the development of our workforce resulting from training schools and programs run by QR.

+ 68.0 FTE new Station Managers and Officers
+ 48.0 FTE new Guards
+ 32.0 FTE new Train Drivers
+ 20.0 FTE new Train Controllers

Summary -22 Month Forecast

Operations Workforce -Demand, Supply, Available Supply



OPERATIONS WORKFORCE

OVERALL TRENDS AND RISKS

Over the 22 month forecast period to December 2016, demand and available supply of the overall workforce are expected to increase, while supply is forecast to decrease over the period.

This means the workforce gap between demand and supply is expected to widen by 178.4 FTE to a gap of 341.4 FTE. This gap is most strongly felt in the Operators, Controllers, Drivers and Shunters Capability (gap of 196.1 FTE) and the Customer Service Capability (gap of 74.1 FTE).

The gap between demand and available supply is forecast to also widen by 22.0 FTE to a gap of 716.1 FTE. This gap is also most significant for the Operators, Controllers, Drivers and Shunters Capability (gap of 366.1 FTE) and the Customer Service Capability (gap of 107.8 FTE).

Demand, Supply, Available Supply

	FTE at Mar 15'	FTE at Dec 16'	Change (+/ -)	Impact
Demand	2,489.2	2,579.1	89.9	Increase
Supply	2,326.2	2,237.7	(88.5)	Decrease
Available Supply	1,795.1	1,863.0	67.93	Increase

Workforce Gap (Overall)

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(163.0)	(341.4)	(178.4)	↑
Demand and Available Supply	(694.1)	(716.1)	(22.0)	↑

DEMAND

Over the 22 month period, there is an increase in demand largely attributable to the Moreton Bay Rail Link project. This overall increase in demand is largely attributable to demand for the Operators, Controllers, Drivers and Shunters Capability (83.5 FTE increase), particularly for Train Driver and Guard job families.

SUPPLY

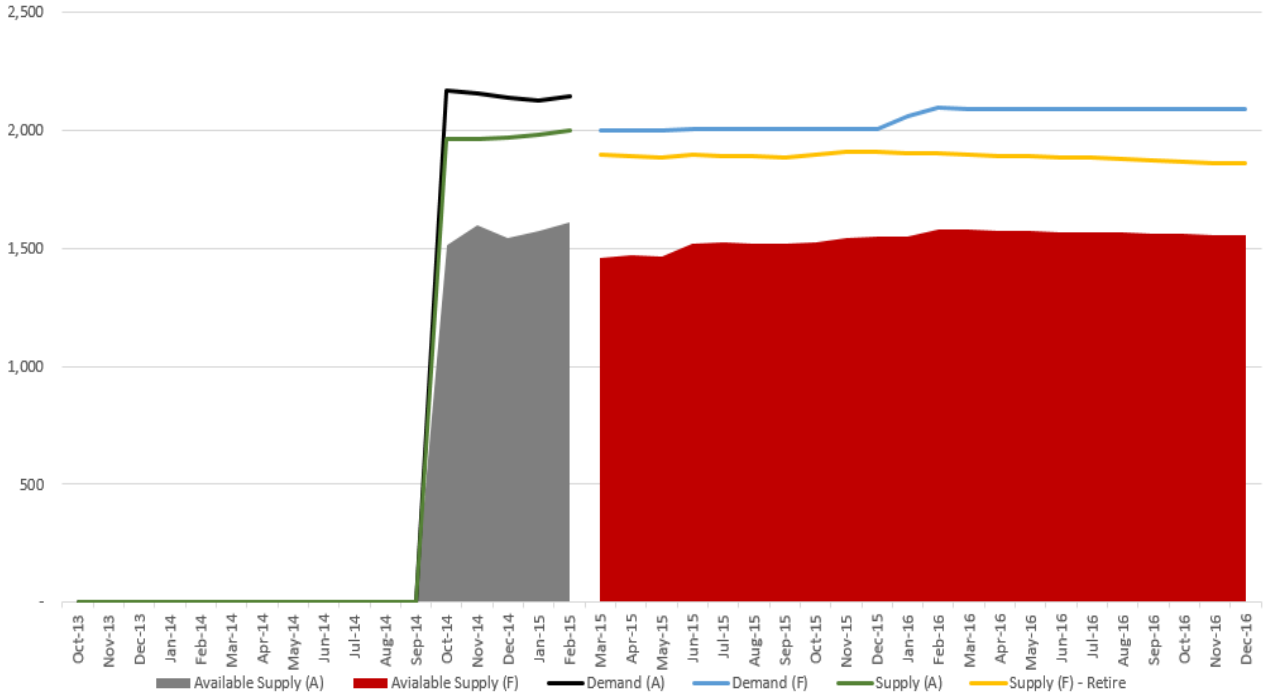
Over the 22 month period, there are a number of factors impacting on supply. This includes 71.0 FTE in anticipated retirements based on a retirement age of 63 years, 78.5 FTE in forecast cessations based on historical trends and 61.0 FTE in recruitment (plus an additional 75.0 FTE recruited at the commencement of the forecast period in March 2015).

AVAILABLE SUPPLY

Within the period from March 2015 to December 2016 it can be seen that there is a forecast increase in the available supply of the workforce. The key driver of this is 168.0 FTE moving through training schools and becoming available to work. This impact is combined with the forecast changes in the use of scheduled and unscheduled leave and medicals across the workforce.

CITYTRAIN

Citytrain Group - Demand, Supply, Available Supply



Key Findings

This analysis is only based on 6 months historical data and cannot be compared with the job family analysis. It also excludes the Shunters and Train Controllers from the original modelling (now counted in Rail Management Centre and Operations Group)

- The workforce gap between both demand and supply, and demand and available supply is forecast to widen across every Level 4 area with the exception of Station Customer Service. This will result in an overall widening of the gap between demand and supply of 122.7 FTE, reaching a gap of 226.8 by December 2016.
- Despite this, the gap between demand and available supply will shrink slightly, due to the completion of training schools which will increase the available supply of the workforce over the period. This means the gap is forecast to shrink by 13.0 FTE over the forecast period to 531.3 FTE by December 2016.

CITYTRAIN

OVERALL TRENDS AND RISKS

The Citytrain division is the largest workforce and is also subject to the greatest volatility over the next 22 months.

Overall, the demand and available supply for this workforce is forecast to increase, while supply of the Citytrain workforce is to decrease over the forecast period. This means the gap between the demand and supply of this workforce will increase to 268.9 FTE by December 2016. The workforce gap between demand and available supply will narrow, but will still be considerable, at 474.4 FTE by December 2016.

DEMAND

Demand is projected to be relatively stable for the forecast period across all level 4 groups, with the exception of SEQ Train Service Delivery which is projected to increase by 81.4 FTE. This is largely due to the increase in demand for the Operators, Controllers, Drivers and Guards Capability due to the Moreton Bay Rail Link.

SUPPLY

Supply of the Citytrain workforce is forecast to decrease in every level 4 group with the exception of Station Customer Service. The changes in supply across Citytrain are due to a combination of anticipated retirements (52.0 FTE), forecast cessations 30.3 FTE); and recruitment (51.0 FTE).

AVAILABLE SUPPLY

Available supply for the Citytrain workforce is due to increase over the next 22 months. This is caused by both a declining trend in the use of unscheduled leave as well as the workforce moving through training schools and becoming available to work (particularly in the Operators, Controllers, Drivers and Guards Capability).

Workforce Gap- Demand: Available Supply

Level 4 Organisational Structure	Gap at Mar 15'	Gap at Dec 16'	Change (+/-)	Gap Impact
Security	(11.3)	(25.4)	(14.1)	↑
SEQ Train Service Delivery	(348.7)	(326.9)	21.8	↓
Station Customer Service	(123.9)	(62.0)	61.9	↓
Train Operations	N/A	0.)	N/A	N/A
Total	(544.3)	(531.3)	13.0	↓

Demand

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Security	70.1	70.1	(0.1)	Stable
SEQ Train Service Delivery	1,187.5	1,269.0	81.4	Increase
Station Customer Service	642.3	649.4	7.0	Increase
Train Operations	100.5	99.4	(1.1)	Stable
Total	2,000.4	2,087.9	87.5	Increase

Supply

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Security	67.5	54.9	(12.6)	Decrease
SEQ Train Service Delivery	1,117.9	1,084.0	(33.9)	Decrease
Station Customer Service	583.1	604.4	21.4	Increase
Train Operations	127.8	116.9	(10.9)	Decrease
Total	1,896.3	1,861.1	(35.2)	Decrease

Available Supply

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Security	56.8	40.7	(16.10)	Decrease
SEQ Train Service Delivery	809.8	882.1	72.37	Increase
Station Customer Service	483.5	534.5	51.04	Increase
Train Operations	106.0	99.3	(6.7)	Decrease
Total	1,456.1	1,556.6	100.5	Increase

Workforce Gap- Demand: Supply

Level 4 Organisational Structure	Gap at Mar 15'	Gap at Dec 16'	Change (+/-)	Gap Impact
Security	(2.6)	(15.2)	(12.6)	↑
SEQ Train Service Delivery	(69.6)	(185.0)	(115.4)	↑
Station Customer Service	(59.2)	(45.0)	14.2	↓
Train Operations	N/A	N/A	N/A	Oversupply
Total	(104.1)	(226.8)	(122.7)	↑

Train Drivers

OVERALL TRENDS AND RISKS

Overall the demand of Train Drivers is expected to increase over the 22 month period to December 2016, however the overall workforce supply is expected to decline.

This means that over the period, the workforce gap between demand and supply is expected to widen significantly by 62 FTE by December 2016. However, the workforce gap between demand and the available supply of Train Drivers will only increase slightly, reaching approximately 449.6 FTE by December 2016.

DEMAND

Overall demand for Train Drivers is expected to increase over the next 22 months by 46 FTE, most notably due to the impact of the Moreton Bay Rail Link project due to start in February 2016. An increase in demand for Train Drivers is also expected across the rail industry over the coming years, which is expected to limit workforce availability in the wider labour market.

This may place further reliance on Queensland Rail to ensure training schools for new Train Drivers to ensure that the increasing workforce gap between demand and supply is effectively managed. Critical to this is accounting for the 1 year lead time needed while the complete the training school.

SUPPLY

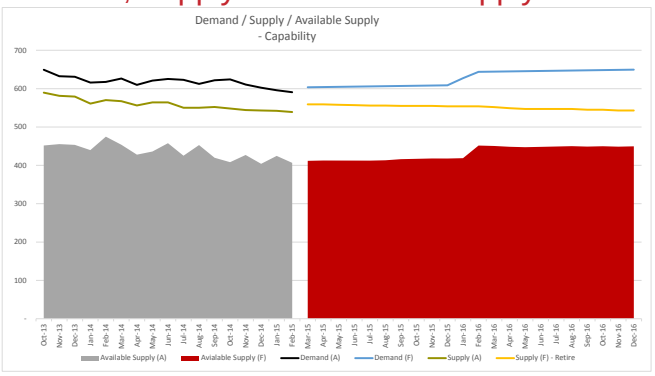
Supply of Train Drivers is due to decrease by 16.1 FTE over the period, this is largely due to the 16 FTE that are forecast to retire between March 2015 and December 2016. Cessations are also expected to compound this negative trend for the supply of the Train Driver workforce, however this data could not be fully captured for the period (as the trend went below zero).

It should be noted that the forecast does not currently include any additional training school commencements (recruitment) after February 2015 (for a 22 month period).

Key Findings

- Workforce gap between demand and supply projected to widen by 62 FTE over 22 months.
- Workforce gap between demand and the available supply of the workforce remains relatively steady (shrinking of gap by 7.9 FTE over 18 month period) to a gap of approximately 171.9 FTE.
- The peak in demand forecast from February 2016 is due to the commencement of the Moreton Bay Rail Link project.
- The peak in the available supply forecast from February 2016 is due to the completion of a training school of 32 FTE;
- Anticipated retirements of Train Drivers during the 18 month period is 16 FTE.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(44.6)	(106.6)	**(62.0)**	↑
Demand and Available Supply	(191.8)	(199.9)	**(8.1)**	↑

AVAILABLE SUPPLY

Overall the available supply of the workforce is expected to increase over the next 22 months.

The clear increase in available supply in February 2016 is due to a training school of 32 FTE of Train Drivers completing their nominal training and becoming 'available' to work.

Guards

OVERALL TRENDS AND RISKS

Overall the demand and available supply of Guards is expected to increase over the 22 month period to December 2016, however the overall workforce supply is expected to decline.

This means that over the period, the workforce gap between demand and supply is expected to increase (by 52.5 FTE) to a gap of 75.6 FTE by December 2016. However the workforce gap between demand and the available supply of Guards will remain relatively steady (increasing slightly), reaching approximately 396.4 FTE by December 2016. This workforce gap is understood to be currently addressed through overtime arrangements.

Key Findings

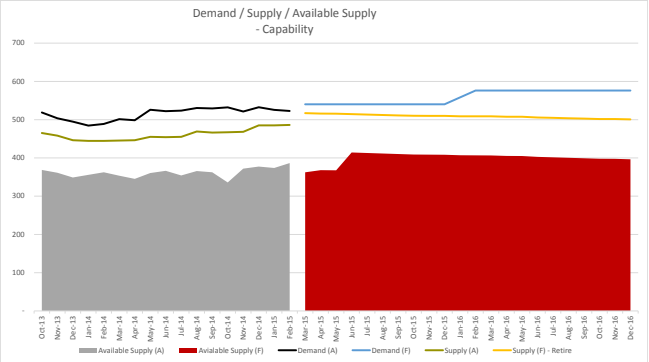
- The workforce gap between demand and supply is projected to widen by 52.5 FTE over 18 months to a gap of 75.6 FTE.
- The workforce gap between demand and the available supply of the workforce remains relatively steady (widening of gap by 2.2 FTE over 22 month period) to a gap of approximately 179.9 FTE.
- The peak in workforce demand forecast from February 2016 is due the commencement of the Moreton Bay Rail Link project.
- Peak in available supply forecast from May 2015 due a training school being completed of 48.0 FTE;
- There are 16.0 FTE in anticipated Guard retirements between March 2015 and December 2016.

DEMAND

Overall demand for Guards is expected to increase over the next 22 months, most notably due to the impact of the Moreton Bay Rail Link project due to start in February 2016.

To ensure this increase of approximately 35 FTE is not met by increasing overtime (and instead through recruitment) a training school would need to commence at least 3 months prior to account for the internal training pipeline for this workforce.

Demand, Supply and Available Supply



SUPPLY

Supply of Guards is due to decrease by 16.3 FTE over the period, this is largely due to the 16 FTE that are forecast to retire between March 2015 and December 2016. Cessations are also expected to contribute to a slight decrease in supply over the period.

Recruitment of 48 FTE in Guards into a training school impacts on supply at the start of the forecast period in March 2015. It should be noted that the forecast does not currently include any additional training school commencements (recruitment) after March 2015 (for a 21 month period).

Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(23.1)	(75.6)	**(52.5)**	↑
Demand and Available Supply	(177.7)	(179.9)	**(2.2)**	Stable

AVAILABLE SUPPLY

Overall the available supply of the workforce is expected to increase over the 22 month forecast period by around 35 FTE. This is predominantly

attributable to the completion of a training school in May 2015 of 48 FTE.

Train Operations Inspectors

OVERALL TRENDS AND RISKS

Overall the demand, supply and available supply of Train Operations Inspectors is forecast to remain relatively stable over the 22 month period to December 2016.

DEMAND

Overall demand for Train Operations Inspectors is expected to remain relatively stable through to December 2016, decreasing by 1.0 FTE.

The historical data shows that demand for this workforce has fluctuated over the previous 16 months. The significant dip in demand in November and December 2013 is hypothesised to be due redundancies of around 12 FTE, but the cessations data provided only commences from January 2014. The slight increases in demand in July 2014 and November 2014 are due to increases in overtime required of the workforce at these times.

SUPPLY

Overall supply for Train operations Inspectors is expected to remain steady over the next 22 months, with no anticipated recruitment or retirements.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Overall the available supply of the workforce is also expected to remain stable over the next 22 months (with a slight overall increase of 0.1 FTE).

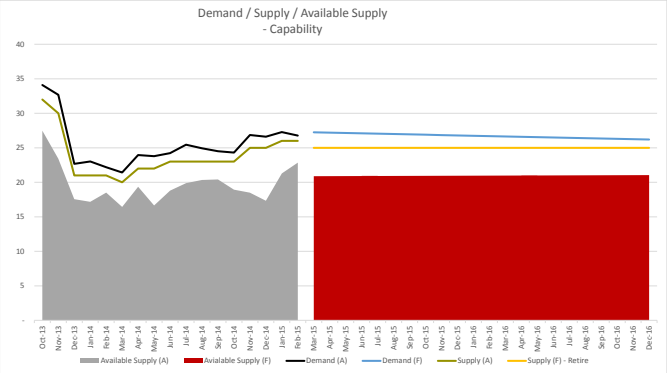
There are significant fluctuations in the historical available supply of this workforce. The drop in available supply from March to May 2014, is largely attributable to medicals. The decrease in available supply in December and January 2014/15 are due to an increase in scheduled leave (annual leave) over the Christmas period.

Key Findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- Demand, supply and available supply relatively stable over forecast period.
- Over the next 22 months the small gap between demand and supply is expected to close to 1.2 FTE. Similarly, the gap between demand and the available supply of the workforce is forecast to decrease to 5.2 FTE by December 2016.
- There are no anticipated retirements of Train Operations Inspectors during the 22 month forecast period.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(2.2)	(1.2)	**1.0**	Stable
Demand and Available Supply	(6.3)	(5.2)	**1.1**	Stable

Station Manager and Officer

OVERALL TRENDS AND RISKS

Overall the demand and supply of Station Managers and Officers is expected to remain relatively stable over the forecast period to December 2016 (increasing slightly by 2.2 FTE), however the supply and available workforce supply of Station Managers and Officers is expected to increase (by 41.4 FTE and 52.0 FTE respectively).

This means that over the forecast period the workforce gap between demand and supply will decrease by around 40% (to 34.0 FTE), and the gap between demand and available supply will decrease by almost a third (to 101.3 FTE).

DEMAND

Overall demand for Station Managers and Officers is expected to remain stable over the next 22 months, with a slight peak in January and February 2016 due to the impact of the commencement of the Moreton Bay Rail Link project.

Fluctuations in the historical supply data are attributable to increases in overtime in March and October 2014.

SUPPLY

Overall supply for Station Managers and Officers over the next 22 months is forecast to increase by 41.4 FTE over the period. This is due to a combination of the recruitment of 68 FTE, 11.5 FTE in planned cessations, and almost 18 FTE in forecast retirements over the 22 month period.

Fluctuations in the historical supply data are attributable to cessations and recruitment, with an overall downward trend in the supply of the Station Managers and Officers workforce.

AVAILABLE SUPPLY

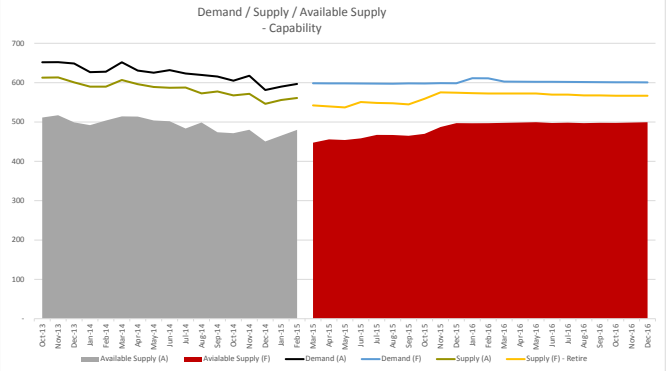
Overall the available supply of the workforce is expected to increase over the next 22 months by 52.0 FTE. This is attributable to the completion of training (approximately 3 weeks) following four intakes of planned recruitment in March, June, October and November 2015 of 17 FTE each.

The historical data for the available supply of

Key Findings

- The workforce gap between demand and supply is projected to decrease by 22.2 FTE over 18 months to a gap of 34.0 FTE by December 2016.
- There is also a forecast shrinking of the workforce gap between demand and the available supply of the workforce by 49.7 FTE over 22 month period) to a gap of 101.3 FTE.
- The peak in demand forecast in January and February 2016 is due the commencement of the Moreton Bay Rail Link project.
- The increases supply and available supply of Station Managers and Officers forecast in June/ July 2015 and October/ November 2015 is due to planned recruitment.
- Expected retirements of Station Managers and Officers during the 22 month period is 18.0 FTE.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(56.2)	(34.0)	22.2	↓
Demand and Available Supply	(151.0)	(101.3)	49.7	↓

Station Managers and Officers shows significant fluctuations which is mostly attributable to changes in annual leave and medicals for the workforce.

Security

OVERALL TRENDS AND RISKS

While the demand for the Security workforce is predicted to remain stable over the 22 months, there is a decline expected in both the supply and available supply of the security workforce. This will cause a significant widening of the gap between demand and supply and the demand and available supply of this workforce, particularly when considered in proportion to the overall workforce size.

DEMAND

Demand is predicted to remain steady over the 22 month period to December 2016.

Fluctuations in the historical supply data are attributable to recruitment of just over 20 FTE in July 2014, and 10 FTE in December 2014, combined with declines in the baseline workforce due to cessations.

SUPPLY

The forecast supply of the Security workforce is predicted to decline due to cessations of 9.5 FTE based on historical trend, reflecting the volatility of the Security workforce in the historical data. In addition there are 2 FTE in anticipated retirements in August and September 2016, with no planned recruitment for this job family.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

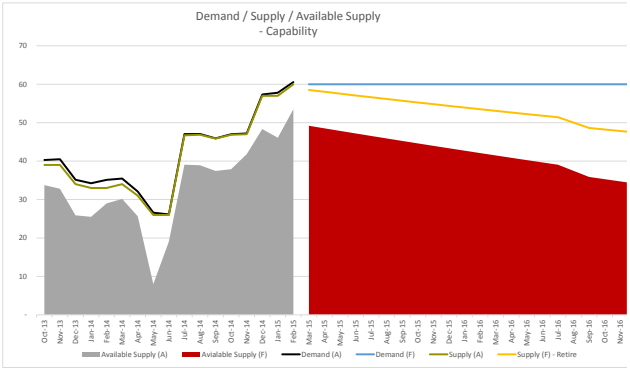
Overall the available supply of the workforce is expected to decrease over the next 22 months by 15.1 FTE. This is largely due to the corresponding decline in supply over the period.

Historical fluctuations largely match those occurring for the demand and supply of the workforce (reflecting a change in the baseline workforce) but there are some bigger variations. For example, in May 2014, 14.0 FTE were unavailable due to medicals.

Key Findings

- The workforce gap between the demand and supply of the workforce is forecast to move from minimal shortage, to a significant gap of 11 FTE by December 2016 (23% of the workforce).
- The gap between available supply and demand will also widen to reach a forecast gap of almost 16 FTE by December 2016.
- The declining trend forecast for the supply and available supply for the Security workforce is due to forecast cessations based on the historical trend of 9.5 FTE, combined with 2.0 FTE in planned retirements over the period.

Demand, Supply and Available Supply

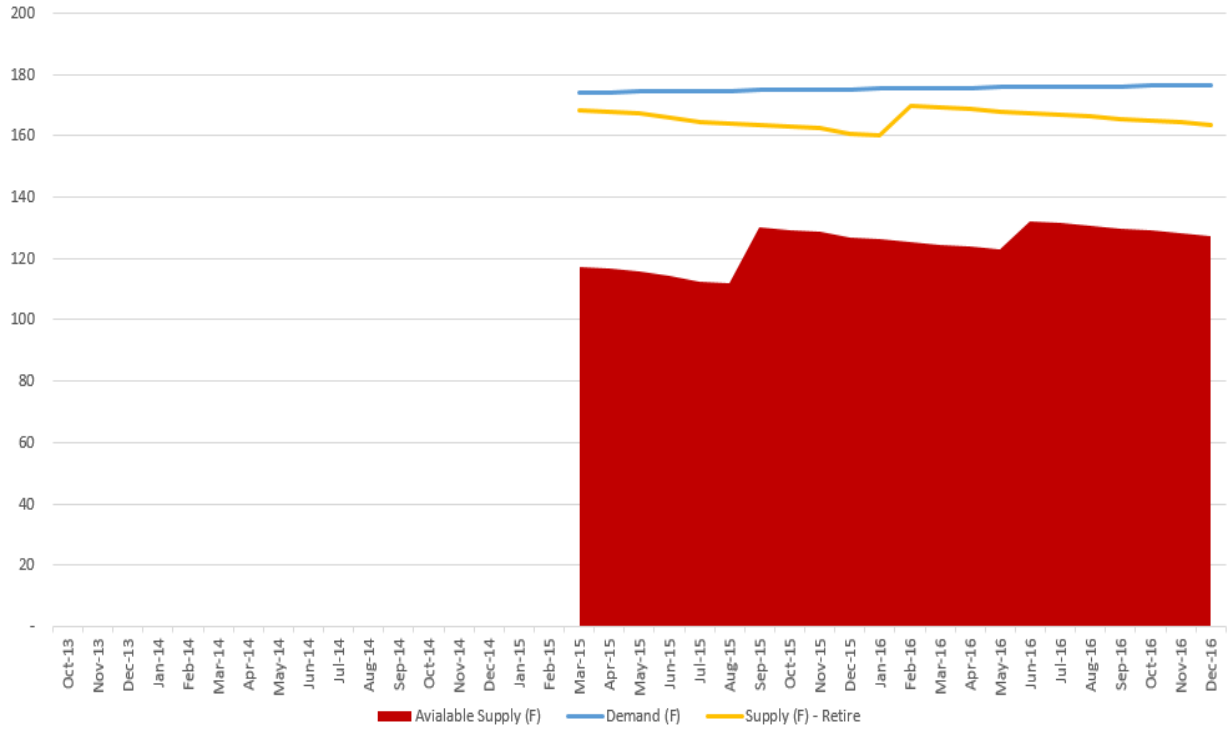


Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(1.5)	(12.5)	(11.0)	↑
Demand and Available Supply	(10.8)	(15.9)	(5.1)	↑

RAIL MANAGEMENT CENTRE AND OPERATIONS GROUP

Rail Management Centre and Operations Group -Demand, Supply, Available Supply



Key Findings

This analysis comprises only of Shunters and Train Controllers form the Capability lens. There is no historical data for this organisational group.

- The workforce gap between both demand and supply, and demand and available supply is forecast to widen across every Level 4 area with the exception of Station Customer Service.
- This will result in an overall widening of the gap between demand and supply of 126.3 FTE, and a narrowing of the gap between demand and available supply of 81.6 FTE.

RAIL MANAGEMENT AND OPERATIONS GROUP

OVERALL TRENDS AND RISKS

The Rail Management and Operations Group is a new organisational level 4 Group, comprised of Shunters and Train Controllers. As no historical information was available for this group, the job family information from Shunters and Controllers has been combined together for this analysis. As these are both small job families, it should be noted that small change sin FTE will cause significant fluctuations in forecasting.

Overall, the demand for this workforce is forecast to remain stable, while the supply is projected to decrease, available supply of this Group is forecast to increase over the 22 month period. This means the gap between the demand and supply of this workforce will increase to 12.8 FTE by December 2016. The workforce gap between demand and available supply will lessen by 7.6 FTE, reaching 49.2 FTE by December 2016.

DEMAND

Demand is projected to be relatively stable for the forecast period, changing by only 2.4 FTE over the 22 months.

SUPPLY

Supply of the Rail Management and Operations Group is forecast to decrease by 4.7 FTE over the forecast period. This is due to retirements predicted of 3.0 FTE and cessations of 12.2 FTE across the job families included in this Group, offset by recruitment of 10 FTE.

AVAILABLE SUPPLY

Available supply for the Rail Management and Operations Group is due to increase over the next 22 months. This is largely caused by the increase in available supply of Train Controllers due to the completion of two training schools of 10 FTE each.

Demand

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Total	174.2	176.6	2.4	Stable

Supply

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Total	168.5	163.8	(4.7)	Decrease

Available Supply

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Total	117.4	127.4	10.0	Increase

Workforce Gap- Demand: Supply

Level 4 Organisational Structure	Gap at Mar 15'	Gap at Dec 16'	Change (+/-)	Gap Impact
Total	(5.7)	(12.8)	(7.1)	↑

Workforce Gap- Demand: Available Supply

Level 4 Organisational Structure	Gap at Mar 15'	Gap at Dec 16'	Change (+/-)	Gap Impact
Total	(56.8)	(49.2)	7.6	↓

Train Controllers

OVERALL TRENDS AND RISKS

Overall the demand and supply of Train Controllers is expected to remain relatively stable over the forecast period to December 2016.

However the available supply of this workforce is forecast to fluctuate significantly between March 2015 to December 2016. This fluctuation is due to the completion of training schools.

DEMAND

Overall demand for Train Controllers is expected to remain stable over the next 22 months.

The historical data shows that the baseline for this workforce has fluctuated over the previous 17 months. There were 9.0 FTE recruited in both June 2014 and February 2015, and 7.0 FTE lost due to a combination of retirements and cessations during this period.

SUPPLY

The peak in supply of Train Controllers in February 2016 is due to the planned recruitment of 10 FTE in February 2016.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

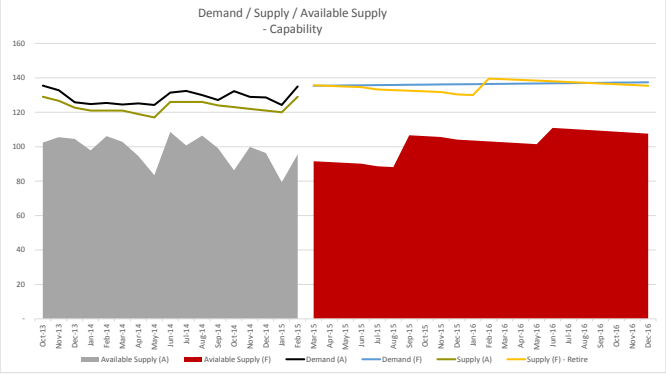
By the end of the forecast period there is an overall increase in the available supply of the workforce of around 16 FTE, largely due to the completion of two training schools of 10 FTE in both September 2015 and July 2016.

The two significant peaks in available supply in the historical data in June 2015 and February 2016 are due to the completion of training schools at these times.

Key Findings

- There is a minimal workforce gap between demand and supply of this workforce, although this does fluctuate slightly over the 22 month forecast period.
- Workforce gap between demand and the available supply of the workforce is expected to decline (shrinking of gap by 14 FTE over forecast period) to a gap of approximately 30 FTE.
- The spike in supply in February 2016 due to recruitment of 10 FTE into a training school.
- Available supply increases of 10 FTE in September 2015 and July 2016 are due to completion of training schools.
- There are 2 FTE in expected retirements of Train Controllers during the 22 month forecast period.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(0.3)	(2.0)	**(1.7)**	Stable
Demand and Available Supply	(43.8)	(29.8)	**14.0**	↓

Shunters

OVERALL TRENDS AND RISKS

Overall the demand for Shunters is forecast to remain stable over the 22 month forecast period, while the supply and available supply of this workforce are expected to decrease. This means the workforce gaps are expected to widen from March 2015 to December 2016.

DEMAND

Overall demand for Shunters is expected to remain very stable over the next 22 months, changing by only 0.3 FTE to December 2016.

The historical data shows that demand for this workforce has fluctuated over the previous 16 months. The dips and peaks in demand from September 2014 through to February 2015 are due largely to changes in overtime, and compounded by the recruitment of 2 FTE in October 2014.

SUPPLY

Overall supply for Shunters is expected to decline over the next 22 months, falling by 5 FTE over the period. This is largely due to the trend of cessations, with retirements only accounting for only 1 FTE in the 22 months to December 2016.

Historical supply has a strong downward trend in the period prior to March 2015, with the only peak in October 2014, due to recruitment.

AVAILABLE SUPPLY

Overall the available supply of the workforce is expected to decline over the next 22 months. This is largely due to the drop in supply during this period, with the proportion between available supply and supply remaining steady over the period.

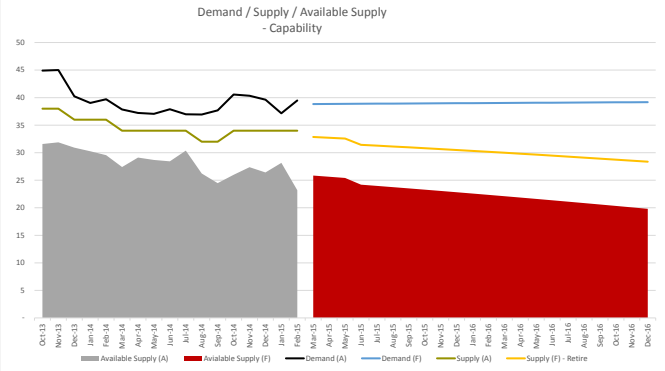
The fluctuations in the available supply of this workforce for the forecast period are due to several factors. In February and March 2014 there is a peak in available supply, largely due to an increase in scheduled leave for Shunters. The drop in available supply between August and October 2014 is attributable to an increase in medicals for the workforce.

Key Findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- Demand is relatively stable over forecast period.
- There is a widening workforce gap reaching 10.8 FTE between demand and supply (around 30% of the workforce) by December 2016.
- Workforce gap between demand and the available supply of the workforce is expected to increase (by 6.5 FTE over 22 month period) to a gap of 19.4 FTE.
- The dip in supply forecast in June 2015 is due to the expected retirement of 1 FTE

Demand, Supply and Available Supply

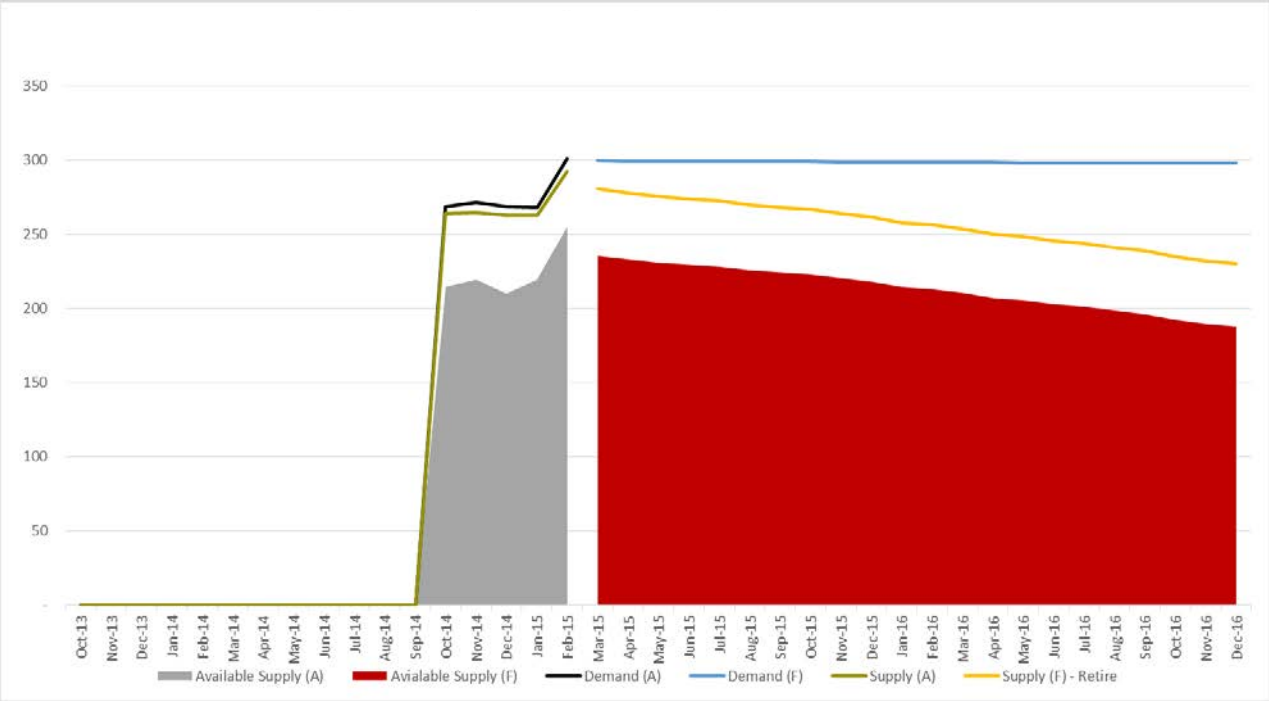


Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(5.9)	(10.8)	**(4.9)**	↑
Demand and Available Supply	(12.9)	(19.4)	**(6.5)**	↑

OPERATING ASSETS

Operating Assets Group-Demand, Supply, Available Supply



Key Findings

This analysis is only based on 6 months historical data and cannot be compared with the job family analysis.

- The workforce gap between demand and supply is expected to widen by 48.4 FTE across the Operating Assets workforce over the 22 months to 67.4 FTE.
- There is also forecast to be a widening of the workforce gap between the demand and the available supply of the workforce by December 2016, (increasing by around 45.6 FTE), reaching 109.7 FTE.

OPERATING ASSETS

OVERALL TRENDS AND RISKS

Overall, the demand for the Operating Assets division workforce is forecast to remain stable, while the supply and available supply of this workforce are expected to decline over the 22 months to December 2016. The biggest changes by FTE in supply and available supply are in the Rollingstock Maintenance group (49.4 FTE and 10.6 FTE respectively), however the Rollingstock Engineering group has a much bigger drop in supply and available supply as a proportion of the overall workforce size.

The declines in supply and available supply lead to a forecast widening of the workforce gap between both demand and supply and demand and available supply, by 49.9 and 31.0 FTE respectively

DEMAND

Demand is projected to be relatively stable for the forecast period across all level 4 groups, with a variation of no greater than +/- 1.6 over the 22 month period.

SUPPLY

Supply of the Operating Assets workforce is forecast to decrease in every level 4 group (relative to their size). These changes in supply are due to a combination of anticipated retirements (16.0 FTE) and forecast cessations (34.1 FTE). There is no planned recruitment modelled for the Operating Assets group.

AVAILABLE SUPPLY

Available supply for the Operating Assets workforce is due to decrease over the next 22 months. This is largely due to the decline in forecast supply, although this is offset by a declining trend in the use of unscheduled leave for this workforce.

Workforce Gap- Demand: Available Supply

Level 4 Organisational Structure	Gap at Mar 15'	Gap at Dec 16'	Change (+/-)	Gap Impact
Rollingstock Certification and Standards	(0.3)	(1.7)	(1.4)	Stable*
Rollingstock Engineering	(5.4)	(17.8)	(12.4)	↑
Rollingstock Maintenance	(47.9)	(66.0)	(18.1)	↑
Total	(64.1)	(109.7)	(45.6)	↑

Demand

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change over 18 months (+/-)	Demand Impact
Rollingstock Certification and Standards	2.1	2.1	(0.0)	Stable
Rollingstock Engineering	37.6	39.5	1.9	Stable
Rollingstock Maintenance	256.5	254.9	(1.6)	Stable
Other	3.2	1.1	(2.1)	Stable
TOTAL	299.4	297.6	1.8	Stable

Supply

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change over 18 months (+/-)	Demand Impact
Rollingstock Certification and Standards	2.0	0.4	(1.6)	Stable
Rollingstock Engineering	36.6	25.8	(10.7)	Decrease
Rollingstock Maintenance	238.9	201.7	(37.1)	Decrease
Other	2.9	2.3	(0.6)	Stable
TOTAL	280.4	230.2	(50.2)	Decrease

Available Supply

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change over 18 months (+/-)	Demand Impact
Rollingstock Certification and Standards	1.8	0.3	(1.44)	Stable
Rollingstock Engineering	32.2	21.7	(10.57)	Decrease
Rollingstock Maintenance	198.6	163.9	(34.79)	Decrease
Other	2.6	2.0	(0.6)	Stable
TOTAL	235.2	187.9	(47.3)	Decrease

Workforce Gap- Demand: Supply

Level 4 Organisational Structure	Gap at Mar 15'	Gap at Dec 16'	Change (+/-)	Gap Impact
Rollingstock Certification and Standards	(0.1)	(1.7)	(1.4)	Stable*
Rollingstock Engineering	(1.0)	(13.7)	(12.7)	↑
Rollingstock Maintenance	(17.6)	(53.2)	(35.6)	↑
Total	(19.0)	(67.4)	(48.4)	↑

Mechanical Engineering

OVERALL TRENDS AND RISKS

Overall the demand of Mechanical Engineers is expected to remain stable over the 22 month period to December 2016, however the supply and available workforce supply is forecast to decrease significantly (by over half the workforce size) presenting a significant workforce risk.

This means that over the period, the workforce gap between demand and supply and demand and available supply is expected to widen. The gap between demand and supply is predicted to reach 12.5 FTE by December 2016, and the gap between demand and available supply is predicted to reach 13.1 FTE by December 2016.

DEMAND

Overall demand for Mechanical Engineers is expected to remain stable over the next 22 months, with no changes expected due to new projects.

Fluctuations in the historical demand data are attributable to changes in the baseline workforce, with an additional 8 FTE being recruited in February 2015. It should be noted that demand and supply have a negligible gap historically, suggesting low levels of overtime for this workforce.

SUPPLY

Supply is forecast to decline significantly over the forecast period due to forecast turnover of 11 FTE based on the historical trend. This decline in supply is also compounded by an additional 1 FTE forecast to retire over the 22 month period. This represents over 50% reduction in the workforce between March to December 2016.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Available supply follows a similar trend to the workforce supply for Mechanical Engineers. Available supply is projected to decline for the forecast period, in line with supply. It should be noted that the gap between the supply and available supply of the workforce is negligible.

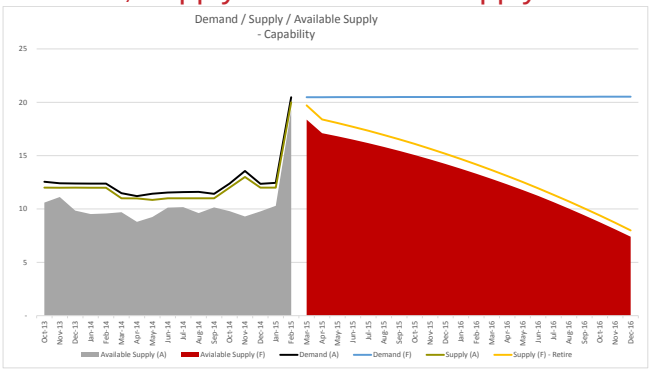
The historical availability of this workforce shows some significant fluctuations, particularly dips in April 2014 due to an increase in unscheduled leave, and November 2014 due to an increase in medicals.

Key findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- The workforce gap between demand and supply is projected to widen significantly by 11.7 FTE over the forecast period, reaching 12.5 FTE by December 2016.
- Similarly, the workforce gap between demand and the available supply of the workforce is expected to widen by 11.0 FTE over the 22 month forecast period.
- Mechanical Engineers have only 1 FTE in forecast retirements (in April 2015), however this is compounded by 11.0 FTE in forecast cessations between March 2015 and December 2016.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(0.8)	(12.5)	(11.7)	↑
Demand and Available Supply	(2.1)	(13.1)	(11.0)	↑

Electrical Engineering

OVERALL TRENDS AND RISKS

Overall the demand for Electrical Engineers is expected to remain stable over the 22 month period to December 2016, however the supply and available workforce supply are expected to decrease due to forecast cessations.

This means the workforce gap between demand and supply of Electrical Engineers is forecast to widen to 2.3 FTE by December 2016 (while this is a small difference in FTE, it represents 15% of the current workforce). Similarly the gap between demand and the available supply of the workforce is forecast to widen to 5.6 FTE by December 2016 (representing 38% of the workforce).

DEMAND

Overall demand for Electrical Engineers is expected to remain stable over the next 22 months, with no changes expected due to new projects.

Fluctuations in the historical demand data are attributable to recruitment and cessations in the baseline workforce. It should be noted that demand and supply have a negligible gap historically, suggesting low levels of overtime for this workforce.

SUPPLY

Overall supply for Electrical Engineers over the next 22 months is expected to decline due to 2.3 FTE in forecast cessations due to historical turnover. While this is a small FTE change, it does represent a significant proportion of the electrical engineering workforce. In addition this workforce is highly specialised and this makes training and sourcing them from the external labour market difficult.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Available supply follows a similar trend to the supply for the Electrical Engineers and is projected to decline. While supply is decreasing, the proportion of the workforce available to work remains stable (i.e. the gap between supply and available supply remains the stable).

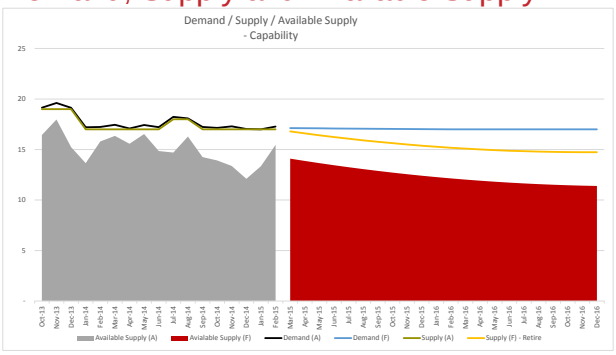
The historical availability of this workforce shows some significant fluctuations, particularly dips in January 2014 and December 2014 which are as a result of increases in unscheduled leave.

Key findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- The workforce gap between demand and supply moves from negligible in March 2015 widening to 2.3 FTE by December 2016.
- The workforce gap between demand and available supply also widens to 5.6 FTE by December 2016.
- The reduction in supply and available supply is projected due to 2.3 FTE in forecast cessations based on historical turnover data.
- There are no anticipated retirements of Electrical Engineers during the forecast period.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(0.3)	(2.3)	(2.0)	↑
Demand and Available Supply	(3.0)	(5.6)	(2.6)	↑

Electrical Trade

OVERALL TRENDS AND RISKS

Overall the demand for the Electrical Trades workforce is expected to remain relatively stable over the 22 month period to December 2016 (a slight decline of 1.4 FTE). Supply for this workforce is expected to decline over the period by 4 FTE, widening the workforce gap between demand and supply.

There is a slight decrease in available supply over the forecast period, this means the gap between demand and the available supply of the workforce is forecast to reduce over the 22 months, reaching a gap of 14.4 FTE by December 2016.

DEMAND

Overall demand for Electrical Trades is expected to remain relatively stable over the next 22 months, with a slight reduction in demand of 1.4 FTE over the 22 months based on historical trends.

Fluctuations in the historical demand data are attributable to recruitment of 9 FTE in July and September 2014. This suggests additional workforce was needed on a short term basis, but may also be due to changes in the way in which the workforce was counted in job families.

SUPPLY

Overall supply for Electrical Trades over the next 22 months is expected to be relatively stable. The decline in supply is due to 4 FTE in forecast retirements over the 22 months.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Overall supply for Electrical Trades over the next 22 months is expected to be relatively stable, decreasing by 3.0 FTE over the period. This is largely due to the changes in supply, but is offset slightly by trends in scheduled and unscheduled leave based on historical data.

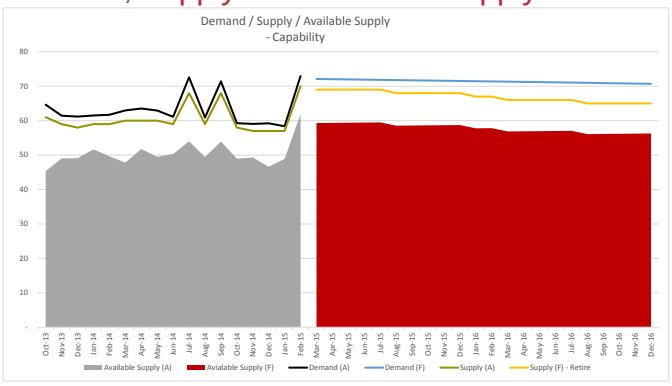
The historical availability of this workforce shows some fluctuations in addition to those attributable to supply factors. These are due to variations in scheduled and unscheduled leave.

Key findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- The workforce gap between demand and supply projected to widen by 2.6 FTE over 22 months to 5.7 FTE by December 2016.
- The workforce gap between demand and the available supply of the workforce is expected to increase by 1.6 FTE over the forecast period to 14.4 FTE.
- The decline in supply is due to 4 FTE in forecast retirements over the 22 months.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(3.1)	(5.7)	(2.6)	↑
Demand and Available Supply	(12.8)	(14.4)	(1.6)	Stable

Mechanical Trade

OVERALL TRENDS AND RISKS

Overall the demand and available supply for those in Mechanical Trades is expected to remain stable over the 22 month period to December 2016 (+/-0.4 FTE). Supply will also remain quite stable, declining slightly by 2.3 FTE over the forecast period.

This means the workforce gap between demand and supply is projected to widen slightly reaching 11.5 FTE by December 2016. However, the workforce gap between demand and the available supply of the workforce is expected to remain stable over the 22 month period, increasing by 2.3 FTE by December 2016.

DEMAND

Overall demand for Mechanical Trades is expected to remain stable over the next 22 months, with no changes expected due to new projects.

Fluctuations in the historical demand data are attributable to fluctuations in the baseline workforce increasing by 17 FTE in July and September 2014. In addition overtime fluctuates, with peaks in July 2014 and August 2014. This suggests additional workforce was needed on a short term basis, but may also be due to changes in the way in which the workforce was counted in job families.

SUPPLY

Overall supply for Mechanical Trades over the next 22 months is expected to be relatively stable. The forecast dip in supply of Mechanical Trades forecast in May 2015 and October 2016 are due to planned retirements.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

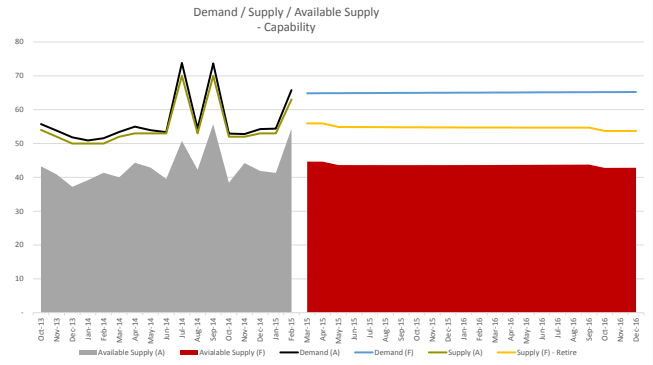
Available supply follows a similar trend to the supply for the Mechanical Trades with some additional fluctuations due to changes in scheduled and unscheduled leave. Available supply is projected to be relatively stable for the forecast period, with a slight decrease of 1.9 FTE over the 22 months due to declining scheduled leave based on a historical trend.

Overall Trends and Risks

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- The workforce gap between demand and supply is projected to widen slightly by 3.4 FTE over 22 months to 11.5 FTE by December 2016.
- However, the workforce gap between demand and the available supply of the workforce is expected to remain stable over the 18 month period, reaching 13.4 FTE by December 2016.
- The two falls in projected supply in May 2015 and September 2016 are due to 2 FTE in forecast retirements.

Demand, Supply and Available Supply

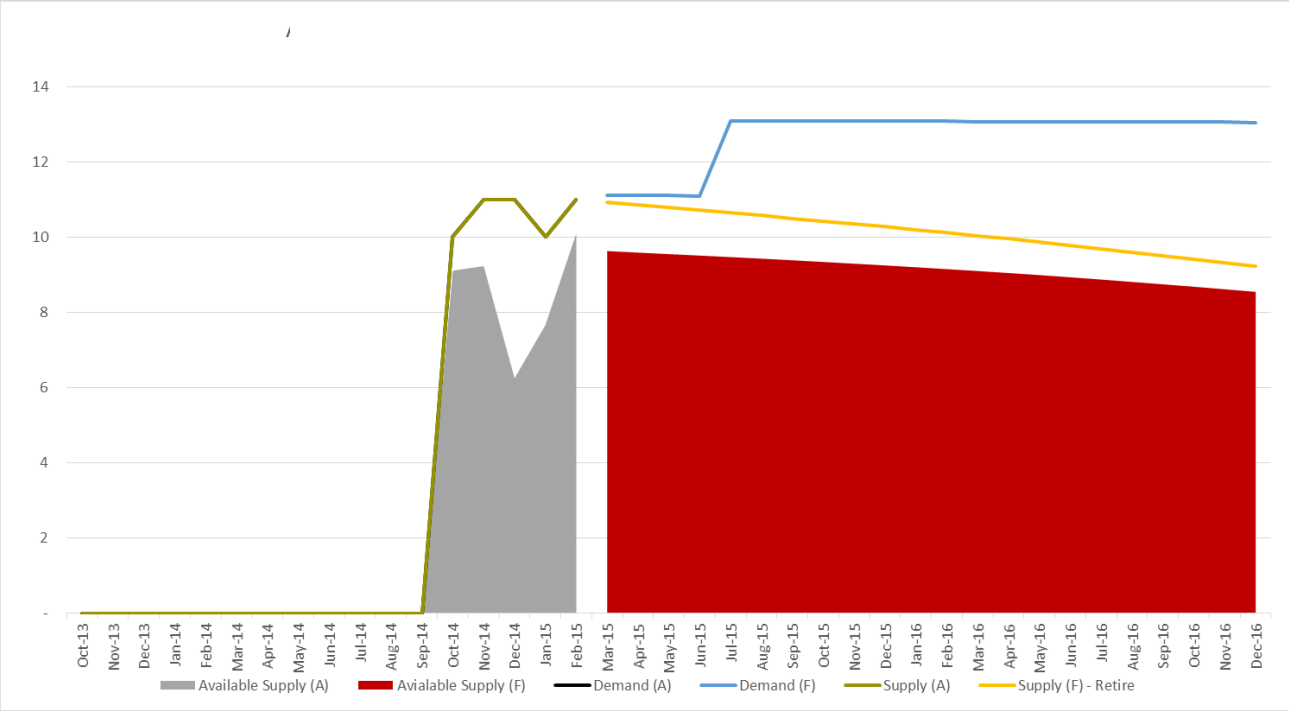


Workforce Gap (Overall)

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(8.1)	(11.5)	(3.4)	↑
Demand and Available Supply	(20.1)	(22.4)	(2.3)	↑

OPERATIONAL COORDINATION, RISK AND ASSURANCE

Operational Coordination Risk and Assurance Group-Demand, Supply, Available Supply



Key Findings

This analysis is only based on 6 months historical data and cannot be compared with the job family analysis.

- The workforce gap between demand and supply is expected to remain relatively stable (widen by 3.6 FTE) due to a slight decrease in supply.
- There is also forecast to be a widening of the workforce gap between the demand and the available supply of the workforce by December 2016, (increasing by around 2.9 FTE), reaching 4.4 FTE.

OPERATIONAL COORDINATION, RISK AND ASSURANCE

OVERALL TRENDS AND RISKS

*The workforce size for the Operational Coordination, Risk and Assurance workforce is small and therefore may be subject to **significant inaccuracies** in forecasting.*

The demand, supply and available supply for the Operational Coordination, Risk and Assurance group is expected to remain stable over the 22 month period, including across all level 4 groups.

While the minimal variations and small workforce gaps suggest this workforce is at low risk, it should be noted that any changes due to cessations, retirements, increased scheduled and unscheduled leave, training and medicals will have a significant impact on this small workforce, and therefore this workforce should be closely monitored.

DEMAND

Demand is projected to remain unchanged over the forecast period across all level 4 groups.

SUPPLY

Supply of the Operational Coordination, Risk and Assurance group is expected to decline slightly over the 22 month forecast period. This is due to forecast cessations based on historical trends.

AVAILABLE SUPPLY

The available supply of the workforce is forecast to remain stable across all level 4 groups between March 2015 and December 2016.

Workforce Gap (Overall)

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(0.2)	(3.8)	(3.6)	↑
Demand and Available Supply	(1.5)	(4.4)	(2.9)	Stable

Demand

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Operations and Facilities	2.0	2.0	(0.0)	Stable
Operations Projects Interface	1.0	1.0	(0.0)	Stable
Operations Risk and Assurance	1.0	1.0	(0.0)	Stable
Operations Stakeholder Interface	1.0	1.0	(0.0)	Stable
Train Service Delivery Compliance	4.1	4.1	(0.0)	Stable
Other	2.0	3.9	1.9	Stable
TOTAL	11.1	13.0	1.9	Stable

Supply

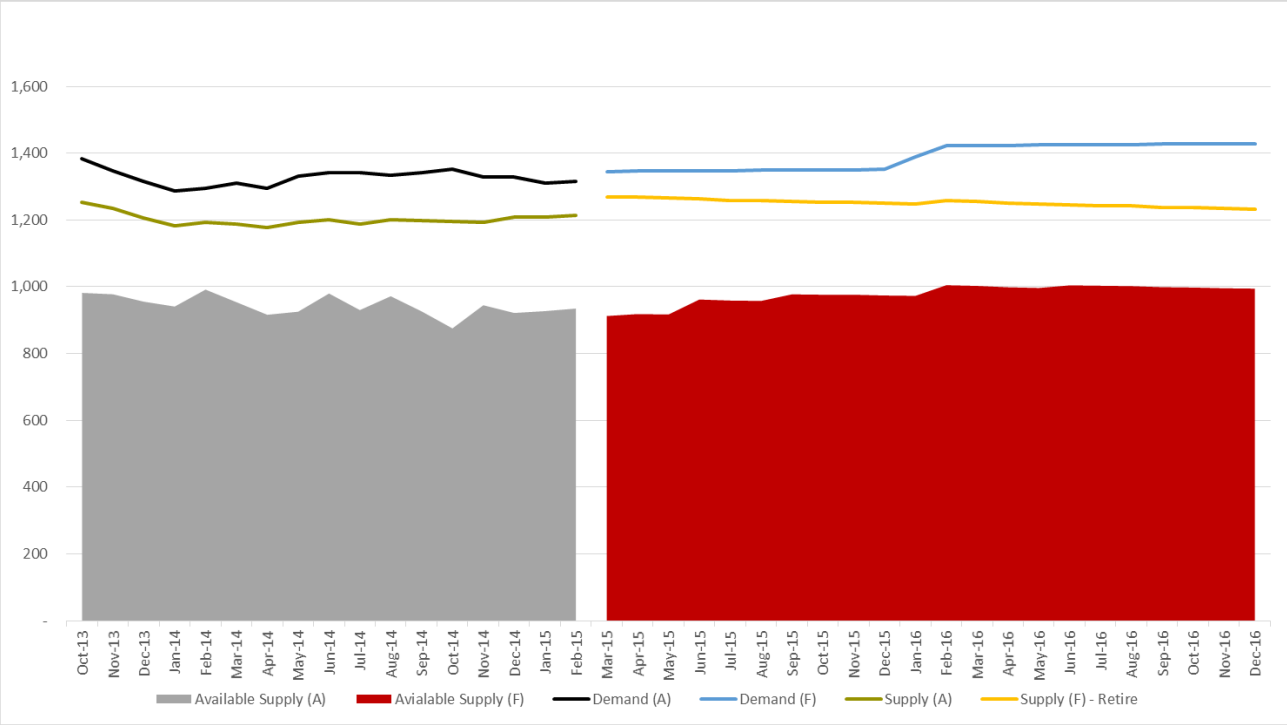
Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Operations and Facilities	2.0	1.8	(0.2)	Stable
Operations Projects Interface	1.0	0.8	(0.2)	Stable
Operations Risk and Assurance	1.0	0.8	(0.2)	Stable
Operations Stakeholder Interface	1.0	0.8	(0.2)	Stable
Train Service Delivery Compliance	4.0	3.4	(0.6)	Stable
Other	1.9	1.6	(0.3)	Stable
TOTAL	10.9	9.2	(1.7)	Stable

Available Supply

Level 4 Organisational Structure	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Operations and Facilities	1.8	1.7	(0.1)	Stable
Operations Projects Interface	0.9	0.7	(0.1)	Stable
Operations Risk and Assurance	0.9	0.7	(0.1)	Stable
Operations Stakeholder Interface	0.9	0.7	(0.1)	Stable
Train Service Delivery Compliance	3.5	3.1	(0.3)	Stable
Other	1.6	1.7	0.1	Stable
TOTAL	9.6	8.6	(1.0)	Stable

OPERATORS, CONTROLLERS, DRIVERS AND SHUNTERS

Operators, Controllers, Drivers and Shunters Capability-Demand, Supply, Available Supply



Key Findings

- The workforce gap between demand and supply is projected to increase by 120.6 FTE.
- However, the gap between demand and the available supply of the workforce will remain stable reaching 434.2 FTE.
- The demand increase over the forecast period is due to an increase in Train Drivers and Guards for Moreton Bay Rail Link;
- Available supply increase during forecast period is due to an increase in Train Drivers and Guards following training school completions;
- Supply is expected to decline, despite recruitment. This is due to expected retirements across the Capability Group of 35.0 FTE and 14.0 FTE in cessations.

Operators, Controllers, Drivers and Shunters

OVERALL TRENDS AND RISKS

There is an increase in expected demand over the next 22 months (from February 2015 onwards), however supply is projected to decrease over the period. This results in a forecast increase in the workforce gap between demand and supply of 120.6 FTE.

Despite a widening workforce gap between demand and supply, the gap between demand and the available supply of the workforce is expected to remain stable over the 22 months reaching 434.2 FTE by December 2016. This means that while in gross terms the workforce gap will widen, the available supply for this this Capability Area will remain stable for the forecast period.

Demand

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Guard	540.1	576.3	36.2	Increase
Shunters	38.8	39.2	0.3	Stable
Train Controllers	135.4	137.4	2.0	Stable
Train Driver	603.6	649.5	46.0	Increase
Train Operations Inspector	27.2	26.2	(1.0)	Stable
Total	1,345.1	1,428.6	83.5	Increase

Supply

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Guard	517.0	500.7	(16.3)	Decrease
Shunters	32.9	28.4	(4.5)	Decrease
Train Controllers	135.7	135.4	(0.2)	Stable
Train Driver	559.0	542.9	(16.1)	Decrease
Train Operations Inspector	25.0	25.0	0.0	Stable
Total	1,269.6	1,232.5	(37.09)	Decrease

Available Supply

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Guard	362.4	396.4	34.0	Increase
Shunters	25.9	19.8	(6.0)	Stable
Train Controllers	91.6	107.6	16.0	Increase
Train Driver	411.8	449.6	37.8	Increase
Train Operations Inspector	20.9	21.0	0.1	Stable
Total	912.6	994.4	82.2	Increase

Workforce Gap (Overall)

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(75.5)	(196.1)	**(120.6)**	↑
Demand and Available Supply	(432.6)	(434.2)	**(1.6)**	Stable

DEMAND

Over the 22 month period, it can be seen that there is a significant increase in the demand for Train Drivers and Guards (46 FTE and 36.2 FTE respectively), with all other occupational groups remaining stable (within +/- 2.0 FTE of the workforce as at March 2015). This leads to an overall increase in demand across the Capability for the 22 month period of 83.5 FTE.

It is also important to note that Train Drivers and Guards are typically trained in house and therefore require a lead time before they impact on the productive workforce (i.e. available supply). This takes 1 year for Drivers and 3 months for Guards.

SUPPLY

Over the next 22 months supply is forecast to decline by just over 37.0 FTE and this is due to forecast retirements of 35.0 FTE, turnover of almost 14.0 FTE, and recruitment of 10.0 FTE of Train Controllers in February 2016.

Recruitment also impacts on historical supply, with 35.0 FTE of Train Drivers recruited in February 2015, and 48.0 FTE of Guards and 10.0 FTE of Train Controllers recruited in March 2015.

AVAILABLE SUPPLY

Within the period from March 2015 to December 2016 it can be seen that there is a forecast increase in the available supply of the workforce for Train Drivers, Guards and Train Controllers (37.8, 34.0 and 16.0 FTE respectively).

The data for the period of March 2014 to February 2015 show significant fluctuations for the available supply of the Train Drivers. This is due to variations across all available supply variables, including scheduled leave, unscheduled leave and medicals, and is not attributable to any single factor.

This is largely due to the workforce progressing through internal training schools and then being available to work in those occupations within the forecast period.

Train Drivers

OVERALL TRENDS AND RISKS

Overall the demand of Train Drivers is expected to increase over the 22 month period to December 2016, however the overall workforce supply is expected to decline.

This means that over the period, the workforce gap between demand and supply is expected to widen significantly by 62 FTE by December 2016. However, the workforce gap between demand and the available supply of Train Drivers will only increase slightly, reaching approximately 449.6 FTE by December 2016.

Key Findings

- Workforce gap between demand and supply projected to widen by 62 FTE over 22 months.
- Workforce gap between demand and the available supply of the workforce remains relatively steady (shrinking of gap by 7.9 FTE over 18 month period) to a gap of approximately 171.9 FTE.
- The peak in demand forecast from February 2016 is due to the commencement of the Moreton Bay Rail Link project.
- The peak in the available supply forecast from February 2016 is due to the completion of a training school of 32 FTE;
- Anticipated retirements of Train Drivers during the 18 month period is 16 FTE.

DEMAND

Overall demand for Train Drivers is expected to increase over the next 22 months by 46 FTE, most notably due to the impact of the Moreton Bay Rail Link project due to start in February 2016. An increase in demand for Train Drivers is also expected across the rail industry over the coming years, which is expected to limit workforce availability in the wider labour market.

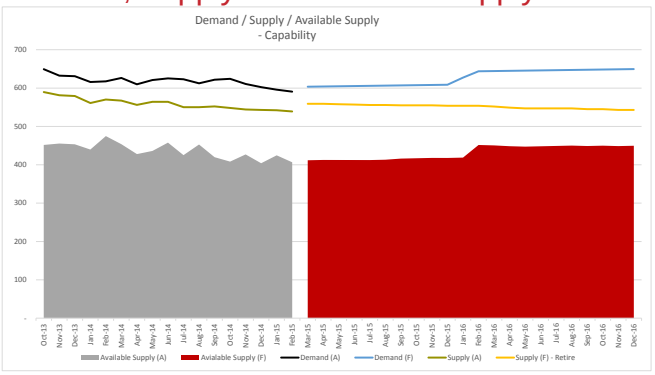
This may place further reliance on Queensland Rail to ensure training schools for new Train Drivers to ensure that the increasing workforce gap between demand and supply is effectively managed. Critical to this is accounting for the 1 year lead time needed while the complete the training school.

SUPPLY

Supply of Train Drivers is due to decrease by 16.1 FTE over the period, this is largely due to the 16 FTE that are forecast to retire between March 2015 and December 2016. Cessations are also expected to compound this negative trend for the supply of the Train Driver workforce, however this data could not be fully captured for the period (as the trend went below zero).

It should be noted that the forecast does not currently include any additional training school commencements (recruitment) after February 2015 (for a 22 month period).

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(44.6)	(106.6)	**(62.0)**	↑
Demand and Available Supply	(191.8)	(199.9)	**(8.1)**	↑

AVAILABLE SUPPLY

Overall the available supply of the workforce is expected to increase over the next 22 months.

The clear increase in available supply in February 2016 is due to a training school of 32 FTE of Train Drivers completing their nominal training and becoming 'available' to work.

Guards

OVERALL TRENDS AND RISKS

Overall the demand and available supply of Guards is expected to increase over the 22 month period to December 2016, however the overall workforce supply is expected to decline.

This means that over the period, the workforce gap between demand and supply is expected to increase (by 52.5 FTE) to a gap of 75.6 FTE by December 2016. However the workforce gap between demand and the available supply of Guards will remain relatively steady (increasing slightly), reaching approximately 396.4 FTE by December 2016. This workforce gap is understood to be currently addressed through overtime arrangements.

Key Findings

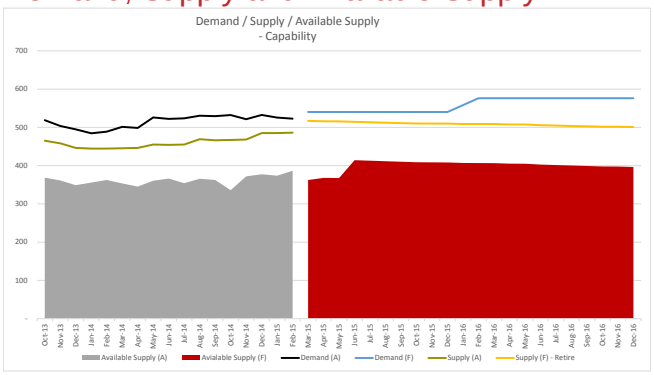
- The workforce gap between demand and supply is projected to widen by 52.5 FTE over 18 months to a gap of 75.6 FTE.
- The workforce gap between demand and the available supply of the workforce remains relatively steady (widening of gap by 2.2 FTE over 22 month period) to a gap of approximately 179.9 FTE.
- The peak in workforce demand forecast from February 2016 is due the commencement of the Moreton Bay Rail Link project.
- Peak in available supply forecast from May 2015 due a training school being completed of 48.0 FTE;
- There are 16.0 FTE in anticipated Guard retirements between March 2015 and December 2016.

DEMAND

Overall demand for Guards is expected to increase over the next 22 months, most notably due to the impact of the Moreton Bay Rail Link project due to start in February 2016.

To ensure this increase of approximately 35 FTE is not met by increasing overtime (and instead through recruitment) a training school would need to commence at least 3 months prior to account for the internal training pipeline for this workforce.

Demand, Supply and Available Supply



SUPPLY

Supply of Guards is due to decrease by 16.3 FTE over the period, this is largely due to the 16 FTE that are forecast to retire between March 2015 and December 2016. Cessations are also expected to contribute to a slight decrease in supply over the period.

Recruitment of 48 FTE in Guards into a training school impacts on supply at the start of the forecast period in March 2015. It should be noted that the forecast does not currently include any additional training school commencements (recruitment) after March 2015 (for a 21 month period).

Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(23.1)	(75.6)	**(52.5)**	↑
Demand and Available Supply	(177.7)	(179.9)	**(2.2)**	Stable

AVAILABLE SUPPLY

Overall the available supply of the workforce is expected to increase over the 22 month forecast period by around 35 FTE. This is predominantly attributable to the completion of a training school in May 2015 of 48 FTE.

Train Controllers

OVERALL TRENDS AND RISKS

Overall the demand and supply of Train Controllers is expected to remain relatively stable over the forecast period to December 2016.

However the available supply of this workforce is forecast to fluctuate significantly between March 2015 to December 2016. This fluctuation is due to the completion of training schools.

DEMAND

Overall demand for Train Controllers is expected to remain stable over the next 22 months.

The historical data shows that the baseline for this workforce has fluctuated over the previous 17 months. There were 9.0 FTE recruited in both June 2014 and February 2015, and 7.0 FTE lost due to a combination of retirements and cessations during this period.

SUPPLY

The peak in supply of Train Controllers in February 2016 is due to the planned recruitment of 10 FTE in February 2016.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

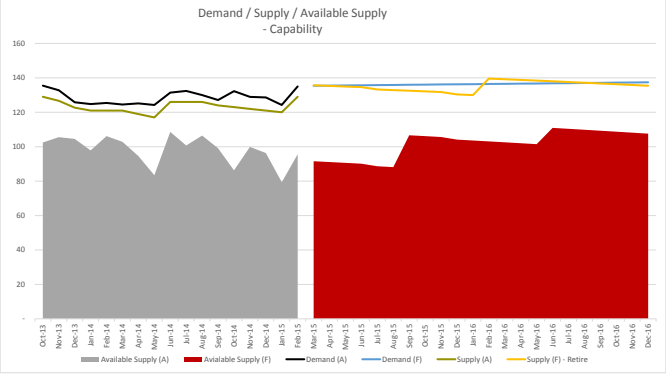
By the end of the forecast period there is an overall increase in the available supply of the workforce of around 16 FTE, largely due to the completion of two training schools of 10 FTE in both September 2015 and July 2016.

The two significant peaks in available supply in the historical data in June 2015 and February 2016 are due to the completion of training schools at these times.

Key Findings

- There is a minimal workforce gap between demand and supply of this workforce, although this does fluctuate slightly over the 22 month forecast period.
- Workforce gap between demand and the available supply of the workforce is expected to decline (shrinking of gap by 14 FTE over forecast period) to a gap of approximately 30 FTE.
- The spike in supply in February 2016 due to recruitment of 10 FTE into a training school.
- Available supply increases of 10 FTE in September 2015 and July 2016 are due to completion of training schools.
- There are 2 FTE in expected retirements of Train Controllers during the 22 month forecast period.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(0.3)	(2.0)	**(1.7)**	Stable
Demand and Available Supply	(43.8)	(29.8)	**14.0**	↓

Shunters

OVERALL TRENDS AND RISKS

Overall the demand for Shunters is forecast to remain stable over the 22 month forecast period, while the supply and available supply of this workforce are expected to decrease. This means the workforce gaps are expected to widen from March 2015 to December 2016.

DEMAND

Overall demand for Shunters is expected to remain very stable over the next 22 months, changing by only 0.3 FTE to December 2016.

The historical data shows that demand for this workforce has fluctuated over the previous 16 months. The dips and peaks in demand from September 2014 through to February 2015 are due largely to changes in overtime, and compounded by the recruitment of 2 FTE in October 2014.

SUPPLY

Overall supply for Shunters is expected to decline over the next 22 months, falling by 5 FTE over the period. This is largely due to the trend of cessations, with retirements only accounting for only 1 FTE in the 22 months to December 2016.

Historical supply has a strong downward trend in the period prior to March 2015, with the only peak in October 2014, due to recruitment.

AVAILABLE SUPPLY

Overall the available supply of the workforce is expected to decline over the next 22 months. This is largely due to the drop in supply during this period, with the proportion between available supply and supply remaining steady over the period.

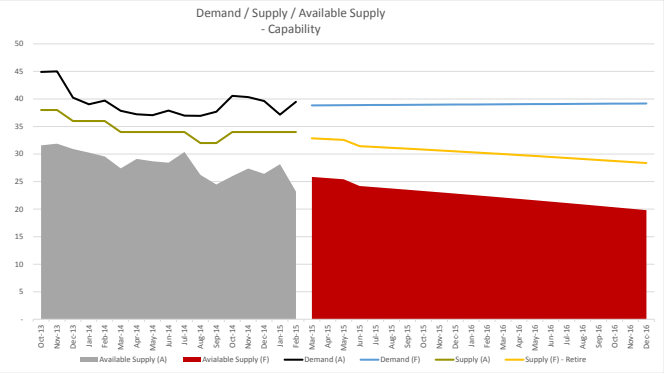
The fluctuations in the available supply of this workforce for the forecast period are due to several factors. In February and March 2014 there is a peak in available supply, largely due to an increase in scheduled leave for Shunters. The drop in available supply between August and October 2014 is attributable to an increase in medicals for the workforce.

Key Findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- Demand is relatively stable over forecast period.
- There is a widening workforce gap reaching 10.8 FTE between demand and supply (around 30% of the workforce) by December 2016.
- Workforce gap between demand and the available supply of the workforce is expected to increase (by 6.5 FTE over 22 month period) to a gap of 19.4 FTE.
- The dip in supply forecast in June 2015 is due to the expected retirement of 1 FTE

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(5.9)	(10.8)	**(4.9)**	↑
Demand and Available Supply	(12.9)	(19.4)	**(6.5)**	↑

Train Operations Inspectors

OVERALL TRENDS AND RISKS

Overall the demand, supply and available supply of Train Operations Inspectors is forecast to remain relatively stable over the 22 month period to December 2016.

DEMAND

Overall demand for Train Operations Inspectors is expected to slightly decline over the next 22 months, changing by only 1.0 FTE to December 2016.

The historical data shows that demand for this workforce has fluctuated over the previous 16 months. The significant dip in demand in November and December 2013 is hypothesised to be due redundancies of around 12 FTE, but the cessations data provided only commences from January 2014. The slight increases in demand in July 2014 and November 2014 are due to increases in overtime required of the workforce at these times.

SUPPLY

Overall supply for Train operations Inspectors is expected to remain steady over the next 22 months, with no anticipated recruitment or retirements.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Overall the available supply of the workforce is also expected to remain stable over the next 22 months (with a slight overall increase of 0.1 FTE).

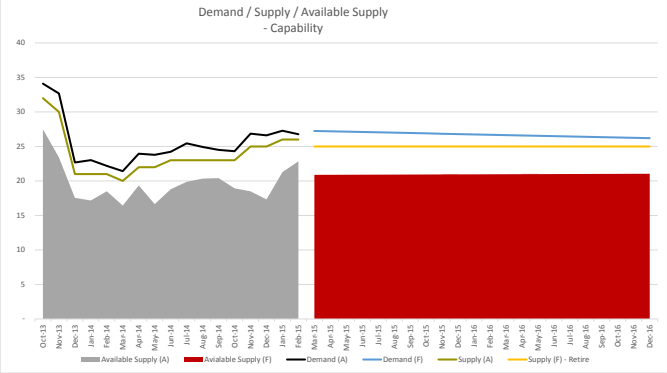
There are significant fluctuations in the historical available supply of this workforce. The drop in available supply from March to May 2014, is largely attributable to medicals. The decrease in available supply in December and January 2014/15 are due to an increase in scheduled leave (annual leave) over the Christmas period.

Key Findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- Demand, supply and available supply relatively stable over forecast period.
- Over the next 22 months the small gap between demand and supply is expected to close to 1.2 FTE. Similarly, the gap between demand and the available supply of the workforce is forecast to decrease to 5.2 FTE by December 2016.
- There are no anticipated retirements of Train Operations Inspectors during the 22 month forecast period.

Demand, Supply and Available Supply

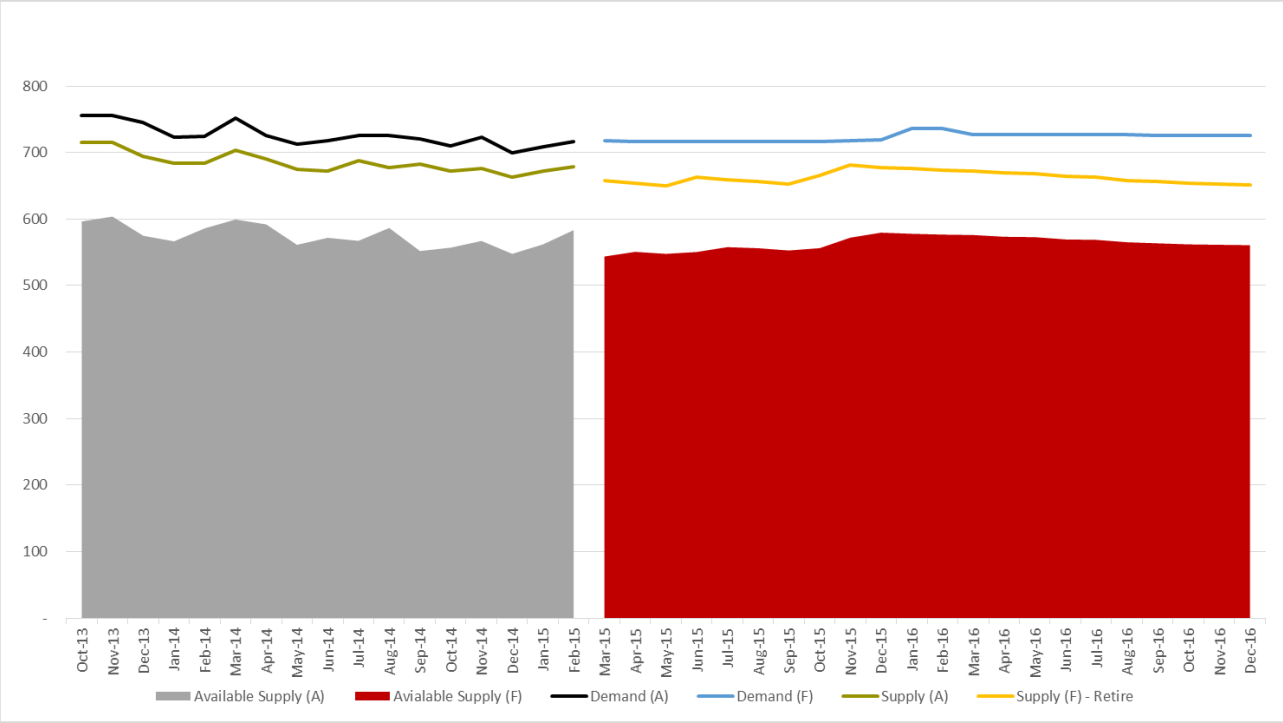


Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(2.2)	(1.2)	**1.0**	Stable
Demand and Available Supply	(6.3)	(5.2)	**1.1**	Stable

CUSTOMER SERVICE

Customer Service Capability-Demand, Supply, Available Supply



Key Findings

- Workforce gap between demand and supply is forecast to widen (by 14.8 FTE) across the Customer Service Capability over the 22 months to a gap of 74.1 FTE.
- However, there is a shrinking of the gap between demand and the available supply of the workforce of 8.6 FTE by December 2016.
- The available supply increase is largely due to completion of training of recruited Station Managers and Officers;
- Supply is expected to decline, this is largely due to expected cessations over the 22 months (38.7 FTE) combined with forecast retirements of 22.0 FTE

CUSTOMER SERVICE

OVERALL TRENDS AND RISKS

The Customer Service Capability is projected to have a slight increase in demand over the forecast period of 8.3 FTE (1.1%), and a slight decrease in supply of 6.5 FTE (1.0%). This means the gap between demand and supply will widen slightly over the 22 months, reaching a gap of 74.1 FTE by December 2016.

This contrasts with the available workforce, where there is projected to be an increase of 17 FTE due to a significant increase in the forecast availability of Station Managers and Officers. This increase will lead to a shrinking of the gap between demand and the available supply of the workforce of 8.6 FTE, resulting in a gap of 164.8 FTE by December 2016.

DEMAND

Over the 22 month period, it can be seen that demand remains very steady for this Capability Group. The only increase in demand is the 6.1 FTE increase for Cleaners over the period, and this occurs due to the commencement of the Moreton Bay Rail Link project.

The fluctuations in historical demand are due to recruitment and cessations particularly for the Station Manager and Officer job family.

SUPPLY

Over the next 22 months, supply is forecast to remain relatively steady overall for this Capability Area, however this masks significant changes in the forecast supply for the job families within this Capability.

Cleaning and Security staff have forecast declines in supply of 19.9 and 11.0 FTE respectively, which are significant to the size of these overall workforces, while the supply of Station Managers and Officers are predicted to increase by 24.5 FTE due to planned recruitment over the 22 month period.

Overall across the Capability there are 22.0 FTE in predicted retirements, 38.7 FTE in predicted cessations and 68.0 FTE in planned recruitments over the 22 month forecast period.

Key Findings

- The workforce gap between demand and supply is projected to decrease by 22.2 FTE over 18 months to a gap of 34.0 FTE by December 2016.
- There is also a forecast shrinking of the workforce gap between demand and the

Demand

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Cleaner	52.7	58.9	6.1	Increase
Customer Service	6.0	6.0	(0.0)	Stable
Security	60.0	60.0	0.0	Stable
Station Manager & Officer	598.5	600.7	2.2	Stable
Total	717.2	725.5	8.3	Increase

Supply

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Cleaner	51.1	31.2	(19.9)	Decrease
Customer Service	6.0	6.0	0.0	Stable
Security	58.5	47.5	(11.1)	Decrease
Station Manager & Officer	542.3	566.7	24.5	Increase
Total	657.9	651.4	(6.5)	Decrease

Available Supply

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Impact
Cleaner	41.6	21.4	(20.2)	Decrease
Customer Service	5.5	5.8	0.3	Stable
Security	49.2	34.1	(15.1)	Decrease
Station Manager & Officer	447.5	499.4	52.0	Increase
Total	543.8	560.7	17.1	Increase

Workforce Gap (Overall)

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(59.3)	(74.1)	(14.8)	↑
Demand and Available Supply	(173.4)	(164.8)	8.6	↓

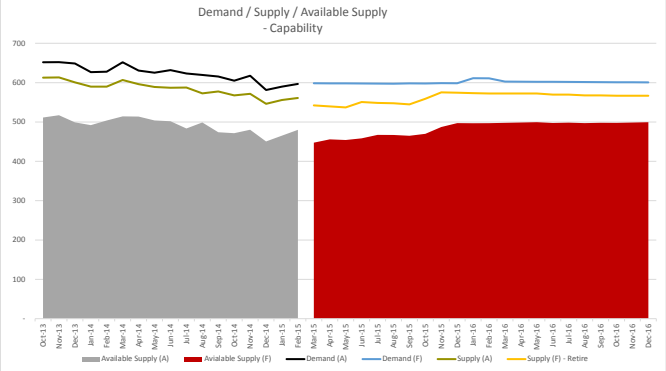
AVAILABLE SUPPLY

The trends in the available supply of the workforce, are similar to those in supply, with a decline in Cleaners and Security workforce, and an increase in Station Managers and Officers. The additional increase in availability of Station Managers and Officers (beyond recruitment) is due to declining rates of scheduled and unscheduled leave based on historical trends.

available supply of the workforce by 49.7 FTE over 22 month period) to a gap of 101.3 FTE.

- The peak in demand forecast in January and February 2016 is due the commencement of the Moreton Bay Rail Link project.
- The increases supply and available supply of Station Managers and Officers forecast in June/ July 2015 and October/ November 2015 is due to planned recruitment.
- Expected retirements of Station Managers and Officers during the 22 month period is 18.0 FTE.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(56.2)	(34.0)	22.2	↓
Demand and Available Supply	(151.0)	(101.3)	49.7	↓

Station Manager and Officer

OVERALL TRENDS AND RISKS

Overall the demand and supply of Station Managers and Officers is expected to remain relatively stable over the forecast period to December 2016 (increasing slightly by 2.2 FTE), however the supply and available workforce supply of Station Managers and Officers is expected to increase (by 41.4 FTE and 52.0 FTE respectively).

This means that over the forecast period the workforce gap between demand and supply will decrease by around 40% (to 34.0 FTE), and the gap between demand and available supply will decrease by almost a third (to 101.3 FTE).

DEMAND

Overall demand for Station Managers and Officers is expected to remain stable over the next 22 months, with a slight peak in January and February 2016 due to the impact of the commencement of the Moreton Bay Rail Link project.

Fluctuations in the historical supply data are attributable to increases in overtime in March and October 2014.

SUPPLY

Capability Lens- 17 months historical data

Overall supply for Station Managers and Officers over the next 22 months is forecast to increase by 41.4 FTE over the period. This is due to a combination of the recruitment of 68 FTE, 11.5 FTE in planned cessations, and almost 18 FTE in forecast retirements over the 22 month period.

Fluctuations in the historical supply data are attributable to cessations and recruitment, with an overall downward trend in the supply of the Station Managers and Officers workforce.

AVAILABLE SUPPLY

Overall the available supply of the workforce is expected to increase over the next 22 months by 52.0 FTE. This is attributable to the completion of training (approximately 3 weeks) following four intakes of planned recruitment in March, June, October and November 2015 of 17 FTE each.

The historical data for the available supply of Station Managers and Officers shows significant fluctuations which is mostly attributable to changes in annual leave and medicals for the workforce.

Security

OVERALL TRENDS AND RISKS

While the demand for the Security workforce is predicted to remain stable over the 22 months, there is a decline expected in both the supply and available supply of the security workforce. This will cause a significant widening of the gap between demand and supply and the demand and available supply of this workforce, particularly when considered in proportion to the overall workforce size.

DEMAND

Demand is predicted to remain steady over the 22 month period to December 2016.

Fluctuations in the historical supply data are attributable to recruitment of just over 20 FTE in July 2014, and 10 FTE in December 2014, combined with declines in the baseline workforce due to cessations.

SUPPLY

The forecast supply of the Security workforce is predicted to decline due to cessations of 9.5 FTE based on historical trend, reflecting the volatility of the Security workforce in the historical data. In addition there are 2 FTE in anticipated retirements in August and September 2016, with no planned recruitment for this job family.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

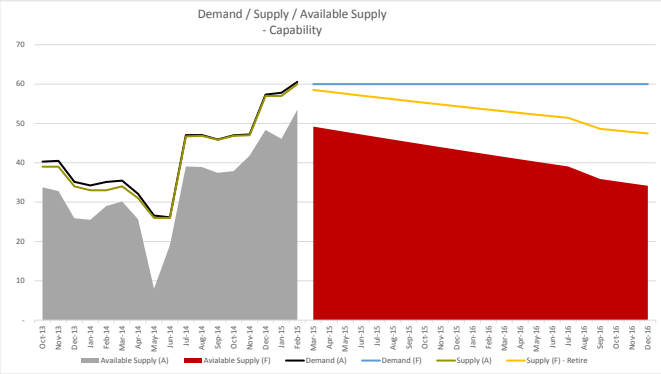
Overall the available supply of the workforce is expected to decrease over the next 22 months by 15.1 FTE. This is largely due to the corresponding decline in supply over the period.

Historical fluctuations largely match those occurring for the demand and supply of the workforce (reflecting a change in the baseline workforce) but there are some bigger variations. For example, in May 2014, 14.0 FTE were unavailable due to medicals.

Key Findings

- The workforce gap between the demand and supply of the workforce is forecast to move from minimal shortage, to a significant gap of 11 FTE by December 2016 (23% of the workforce).
- The gap between available supply and demand will also widen to reach a forecast gap of almost 16 FTE by December 2016.
- The declining trend forecast for the supply and available supply for the Security workforce is due to forecast cessations based on the historical trend of 9.5 FTE, combined with 2.0 FTE in planned retirements over the period.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(1.5)	(12.5)	(11.0)	↑
Demand and Available Supply	(10.8)	(15.9)	(5.1)	↑

Cleaners

OVERALL TRENDS AND RISKS

Overall, the demand for Cleaners is projected to increase, while the supply and available supply of this workforce is planned to significantly decrease (in terms of the size of the overall workforce). This results in a significant widening of the gap between both demand and supply, and demand and the available supply of the workforce.

DEMAND

The increase in forecast demand for the Cleaning workforce is due to an increase in demand from the Moreton bay Rail Link project. This leads to an increase in demand in January and February 2016 of approximately 6 FTE.

SUPPLY

Overall supply for Station Managers and Officers over the next 22 months is expected to decline largely due to forecast cessations based on historical data. This predicts turnover of 17.6 FTE. This downwards trend is exacerbated by 3.0 FTE in planned retirements.

Fluctuations in the historical supply data for Cleaners are attributable to an overall downward trend due to turnover, combined with recruitment most notably in September 2014 where 5.0 FTE were recruited.

AVAILABLE SUPPLY

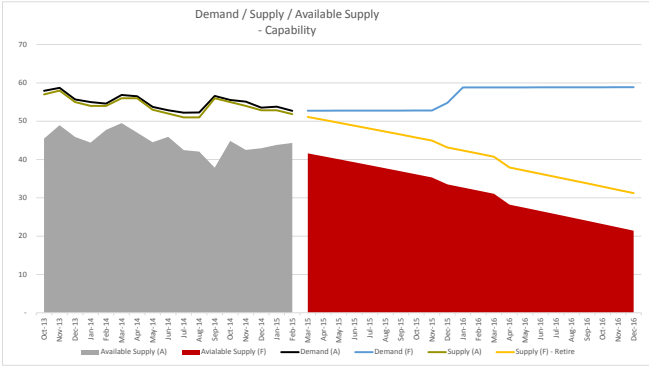
Overall the available supply of the workforce is expected to decline at a similar rate to supply over the forecast period and reflects forecast cessations and retirements of the workforce.

The historical data for the available supply of Cleaners shows significant fluctuations. This is due to a variety of factors. The dip in available supply in January 2014 is largely due to increases in annual leave, and the dip in September 2014 is due to increased medicals.

Key Findings

- The workforce gap between the demand and supply of the Cleaning workforce is forecast to move from minimal shortage, to a significant gap of 27.7 FTE by December 2016 (relative to the size of the workforce).
- There is also a predicted widening of the workforce gap between demand and the available supply of the workforce by 23.4 FTE over 22 month period) to 34.5 FTE.
- The peak in demand forecast for January and February 2016 is due the Moreton Bay Rail Link project that is set to start during that time.
- The declining trend forecast for the supply and available supply for the Cleaning workforce is due to forecast cessations based on the historical trend of 17.6 FTE, combined with 3 FTE in planned retirements over the period.

Demand, Supply and Available Supply

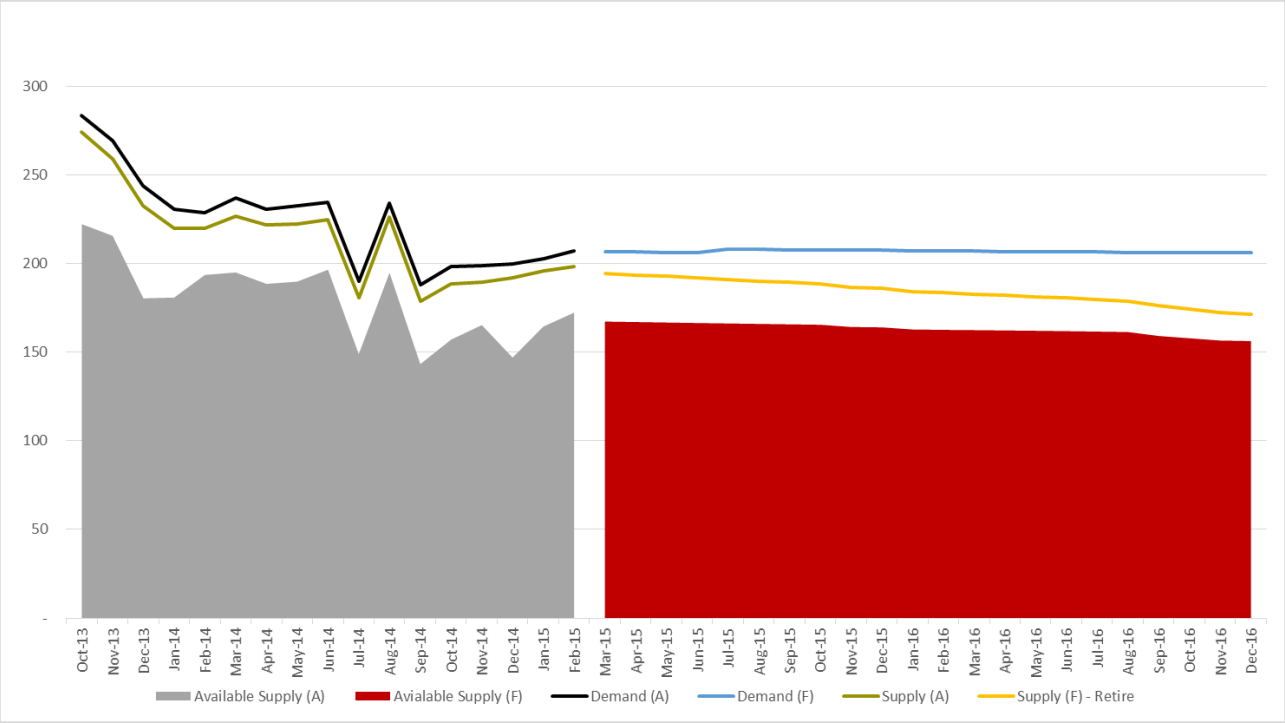


Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(1.6)	(27.7)	(26.1)	↑
Demand and Available Supply	(11.1)	(34.5)	(23.4)	↑

ADMINISTRATION AND SUPPORT

Administration and Support Capability-Demand, Supply, Available Supply



Key Findings

- The workforce gap between demand and supply will widen by 22.2 FTE across the Administration and Support Capability over the 22 months to a gap of 34.3 FTE.
- There is also a slight widening of the gap between demand and available supply of the workforce of 4.3 FTE by December 2016, resulting in a gap of 40.6 FTE.
- There 6.0 FTE forecast to retire, approximately 18 FTE in cessations and no recruitments planned for this Capability Area.

ADMINISTRATION AND SUPPORT

OVERALL TRENDS AND RISKS

The Administration and Support Capability is projected to have relatively stable demand and available supply over the next 22 months, with a decrease in the supply of this workforce during this time. This means that there will be a widening of the workforce gap between demand and supply, to a gap of 40.6 FTE, while the gap between demand and available supply will widen slightly by 10.1 FTE.

DEMAND

Over the 22 month period, it can be seen that every occupational group across the Capability is expected to remain stable (+/- 2 FTE). Fluctuations in the historical demand data are attributable to a drop of 44 FTE in July 2014 and again in September 2014. While this may be due to turnover, redundancies and recruitment of the baseline workforce, it is expected that this may be due to changes in the way the workforce was counted in the organisation.

SUPPLY

Over the forecast 22 months supply is forecast to remain steady for all except two of the job families, with Administration & Support and Business Professional expected to have declining supply. This reduction is largely due to expected turnover, with some retirements. This results in an overall reduction in supply for this Capability Area by 22.9 FTE by December 2016. Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

There is a slight decline in the forecast available supply of the Administration and Support workforce over the forecast period reflects the reduction in the available supply of Business Professionals over the period. The reason for this is largely due to the reduction in supply caused by cessations and retirements. Fluctuations in the historical available supply of the workforce are largely due to changes in scheduled and unscheduled leave.

Demand

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Demand Impact
Administration & Support	96.8	96.2	(0.6)	Stable
Business Professional	68.2	67.8	(0.4)	Stable
Contracts & Projects	2.0	4.0	2.0	Stable
Executive and Senior Manager	1.0	1.0	0.0	Stable
HR	4.1	4.0	(0.1)	Stable
Public Relations, Sales & Marketing	24.9	23.8	(1.1)	Stable
Warehousing & Distribution	9.5	9.0	(0.5)	Stable
Total	206.5	205.8	(0.6)	Stable

Supply

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Supply Impact
Administration & Support	91.1	86.1	(5.0)	Decrease
Business Professional	66.4	52.8	(13.6)	Decrease
Contracts & Projects	2.0	2.0	(0.0)	Stable
Executive and Senior Manager	1.0	1.0	0.0	Stable
HR	4.0	4.0	0.0	Stable
Public Relations, Sales & Marketing	22.0	21.0	(1.0)	Stable
Warehousing & Distribution	8.9	5.7	(3.3)	Stable
Total	194.4	171.5	(22.9)	Decrease

Available Supply

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Available Supply Impact
Administration & Support	76.1	78.7	2.6	Stable
Business Professional	58.4	48.5	(9.9)	Decrease
Contracts & Projects	1.8	1.9	0.1	Stable
Executive and Senior Manager	0.0	0.0	0.0	Stable
HR	3.6	3.7	0.1	Stable
Public Relations, Sales & Marketing	19.6	19.2	(0.4)	Stable
Warehousing & Distribution	7.7	4.4	(3.3)	Stable
Total	167.2	156.4	(10.8)	Decrease

Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(12.1)	(34.3)	(22.2)	↑
Demand and Available Supply	(39.3)	(49.4)	(10.1)	↑

Administration and Support

OVERALL TRENDS AND RISKS

Overall the demand of the Administration and Support workforce is expected to remain stable over the 22 month period to December 2016, with a slight decrease in supply, and a slight increase in available supply.

This means that over the period, the workforce gap between demand and supply is expected to widen by 4.4 FTE to a gap of 10.1 FTE by December 2016. The workforce gap between demand and the available supply of Administration and Support will decrease by 3.2 FTE, to 17.5 FTE by December 2016.

DEMAND

Demand for the Administration and Support job family is expected to remain stable over the next 22 months.

Fluctuations in the historical demand data are attributable to a drop of 44 FTE in July 2014 and again in September 2014. While this may be due to turnover, redundancies and recruitment of the baseline workforce, it is expected that this may be due to changes in the way in which the workforce was counted across the organisation.

SUPPLY

Overall supply for Administration and Support workforce over the next 22 months is expected to decline slightly. This is due to 3 FTE in anticipated retirements and 2.4 FTE in forecast turnover.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

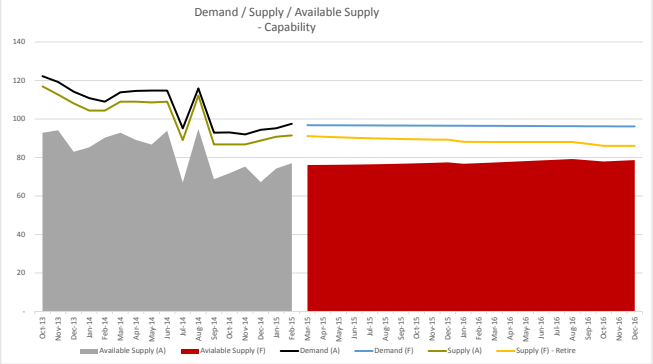
Overall the available supply of the workforce is expected to increase slightly over the next 22 months by 2.6 FTE. This is largely attributable to improvements in the levels of unscheduled leave (absenteeism).

The historical data for the available supply of the Administration and Support workforce shows significant fluctuations. Variations not attributable to the baseline workforce fluctuations are predominantly due to changes in scheduled leave.

Key Findings

- The workforce gap between the demand and supply is projected to widen over the 22 months to 10.1 FTE by December 2016 (5.8% of this workforce).
- There is a shrinking of the workforce gap between the demand and the available supply of the workforce by 3.2 FTE over 18 month period) to approximately 17.5 FTE.
- There is a forecast increase in the available supply of the Administration and Support workforce due to improved absenteeism.
- Expected retirements of Administration and Support workforce during the 18 month period is 3 FTE.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(5.7)	(10.1)	(4.4)	↑
Demand and Available Supply	(20.7)	(17.5)	3.2	↓

Business Professional

OVERALL TRENDS AND RISKS

Overall the demand for Business Professional roles is expected to remain stable over the 22 month period to December 2016, however the supply and available workforce supply is expected to decrease over the 22 month period.

There is a negligible gap between the demand and supply of Business Professional and Support roles at March 2015, but this is forecast to increase by 13.2 FTE, reaching a gap of 15.0 FTE by December 2016. The workforce gap between demand and the available supply of Business Professionals will also increase to a gap of 18.3 FTE by December 2016.

DEMAND

Overall demand for Business Professional and Support roles is expected to remain stable over the next 22 months.

Fluctuations in the historical demand data are attributable to two key drops of around 20 FTE in July 2014 and September 2014. While the fluctuations may be due to combinations of turnover, retirements and recruitment over this short period, it is likely due to changes in the way in which the workforce was counted across the organisation.

SUPPLY

The supply of the workforce is expected to decrease over the forecast period by around 14 FTE, with the majority (13 FTE) due to projected cessations. 1 FTE is predicted to retire over the 22 month period.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

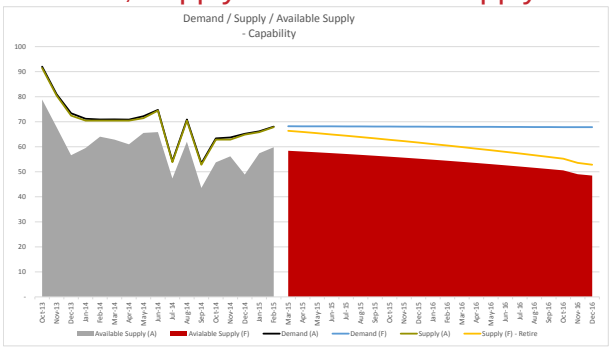
Overall the available supply of the workforce is expected to decrease over the next 22 months by approximately 9 FTE. This is largely attributable to the decline in supply, however this is offset by a declining trend in the use of scheduled leave over the forecast period based on historical data.

The historical data for the available supply of the Administration and Support workforce shows significant fluctuations. This is largely due to scheduled leave.

Key findings

- The minimal workforce gap between demand and supply is projected to widen over forecast period by 13.2 FTE to 15.0 FTE by December 2016.
- The workforce gap between demand and the available supply of the workforce is also expected to widen, increasing by 8.5 FTE over 22 month period) to 18.3 FTE.
- Expected retirements of Business Professional and Support roles during the 18 month period is 1.0 FTE, with expected turnover for other reasons to reach approximately 13.0 FTE.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(1.8)	(15.0)	(13.2)	↑
Demand and Available Supply	(9.8)	(18.3)	(8.5)	↑

Public Relations, Sales and Marketing

OVERALL TRENDS AND RISKS

Overall the demand, supply and available supply for the Public Relations, Sales and Marketing occupations is expected to remain relatively stable over the 22 month period to December 2016.

Demand for these occupations will decline slightly (by 1.1 FTE), supply will decrease slightly (by 1.0 FTE) and available supply is due to decrease slightly (by 0.4 FTE). This will reduce the workforce gap between demand and supply to 2.8 FTE (13% of the workforce) by December 2016. The gap between demand and the available supply of this workforce will shrink slightly, reaching a gap of 4.6 FTE by December 2016.

DEMAND

Overall demand for Public Relations, Sales and Marketing roles is expected to decline slightly over the next 22 months, due to the historical trend.

Fluctuations in the historical demand data are attributable to cessations, retirements and recruitment. The big drop in the baseline workforce prior to January 2014 is likely due to cessations but this cannot be confirmed as cessations data has only been provided from January 2014.

SUPPLY

Overall supply for the Public Relations, Sales and Marketing workforce over the next 22 months is expected to be stable, decreasing by 1 FTE due to an anticipated retirement in September 2016.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Overall the available supply of the workforce is expected to remain fairly stable, with a slight decrease of 0.4 FTE over the next 22 months.

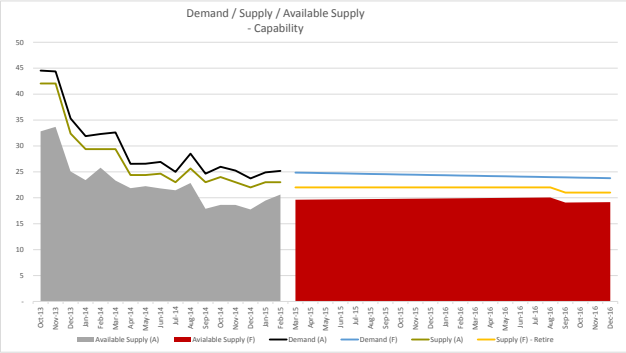
The historical data for the available supply of the Public Relations, Sales and Marketing workforce shows significant fluctuations. This is due to variations across all available supply variables, but most notably scheduled leave.

Key Findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- The workforce gap between demand and supply is expected to remain stable (just under 3 FTE) over the forecast period.
- There is also predicted stability in the workforce gap between demand and the available supply of the workforce, decreasing slightly by 0.7 FTE over 22 month period) to 4.6 FTE.
- Expected retirements of Public Relations, Sales and Marketing roles during the 22 month period is 1.0 FTE.

Demand, Supply and Available Supply

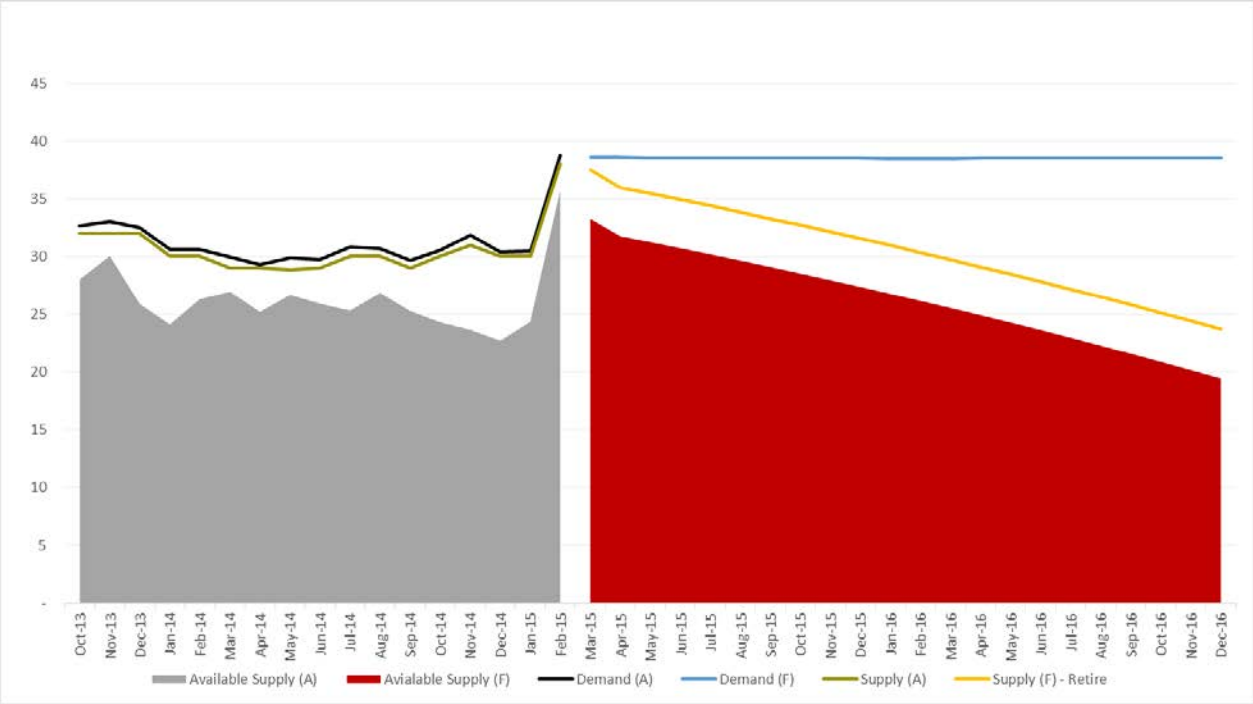


Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(2.9)	(2.8)	0.1	Stable
Demand and Available Supply	(5.3)	(4.6)	0.7	Stable

ENGINEERING

Engineering Capability-Demand, Supply, Available Supply



Key findings

- Workforce gap between demand and supply will widen significantly (by 14 FTE) over the 22 months forecast due to decreasing workforce supply across the Engineering Capability.
- Similarly, the workforce gap between the demand and the available supply of the workforce is forecast to widen due to reductions in workforce supply (reducing by 13.7 FTE) and reaching 19.0 FTE by December 2016.
- Only 1.0 FTE is anticipated to retire across the Engineering Capability, however turnover is estimated at over 13.3 FTE during the forecast period based on historical trends.

ENGINEERING

OVERALL TRENDS AND RISKS

The Engineering Capability is projected to have stable demand, over the next 22 months, however supply and available supply of the workforce are expected to decrease by over 1/3 of the overall Capability area due to forecast cessations based on historical turnover data.

This means that the workforce gaps between demand and supply, and demand and available supply in this Capability are forecast to widen significantly. While supply is decreasing, the proportion of this workforce available to work remains stable (i.e. the gap between supply and available supply remains the stable).

Any small changes in FTE for this Capability will impact significantly on the ability to meet demand, and therefore risks including turnover and the ageing of this workforce should be closely monitored over time.

DEMAND

The Engineering Capability is projected to have stable demand, over the next 22 months, with changes in these forecasts no greater than +/- 0.1. This stability is also reflected in each of the job families within this Capability.

The historical demand information shows a peak in January and February 2015 due to recruitment of 8 FTE of Mechanical Engineers in February 2015.

SUPPLY

Supply of the Engineering Capability is forecast to decline significantly over the forecast period due to forecast turnover of 13.3 FTE based on the historical trend, 11.0 FTE of this is from the Mechanical Engineering job family. This decline in supply is also compounded by an additional 1.0 FTE forecast to retire over the 22 month period. No recruitment was modelled for Engineering over the forecast period.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Available supply follows a similar trend to the supply for the Engineering Capability, declining significantly particularly in the Mechanical Engineering job family.

The historical availability of this workforce shows some significant fluctuations, particularly dips in January/ February 2013 and January/ February 2014. This is due to high levels of scheduled annual leave at this time.

Demand

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change over 18 months (+/-)	Demand Impact
Civil Engineering	1.0	1.0	0.0	Stable
Electrical Engineering	17.1	17.0	(0.1)	Stable
Mechanical Engineering	20.5	20.5	0.0	Stable
Total	38.6	38.5	(0.1)	Stable

Supply

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change over 18 months (+/-)	Supply Impact
Civil Engineering	1.0	1.0	0.0	Stable
Electrical Engineering	16.8	14.7	(2.1)	Stable
Mechanical Engineering	19.7	8.0	(11.7)	Decrease
Total	37.5	23.7	(13.8)	Decrease

Available Supply

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change over 18 months (+/-)	Available Supply Impact
Civil Engineering	0.8	0.7	(0.1)	Stable
Electrical Engineering	14.1	11.4	(2.7)	Stable
Mechanical Engineering	18.4	7.4	(11.0)	Decrease
Total	33.3	19.5	(13.8)	Decrease

Workforce Gap (Overall)

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(0.9)	(14.9)	(14.0)	↑
Demand and Available Supply	(5.3)	(19.0)	(13.7)	↑

Mechanical Engineering

OVERALL TRENDS AND RISKS

Overall the demand of Mechanical Engineers is expected to remain stable over the 22 month period to December 2016, however the supply and available workforce supply is forecast to decrease significantly (by over half the workforce size) presenting a significant workforce risk.

This means that over the period, the workforce gap between demand and supply and demand and available supply is expected to widen. The gap between demand and supply is predicted to reach 12.5 FTE by December 2016, and the gap between demand and available supply is predicted to reach 13.1 FTE by December 2016.

DEMAND

Overall demand for Mechanical Engineers is expected to remain stable over the next 22 months, with no changes expected due to new projects.

Fluctuations in the historical demand data are attributable to changes in the baseline workforce, with an additional 8 FTE being recruited in February 2015. It should be noted that demand and supply have a negligible gap historically, suggesting low levels of overtime for this workforce.

SUPPLY

Supply is forecast to decline significantly over the forecast period due to forecast turnover of 11 FTE based on the historical trend. This decline in supply is also compounded by an additional 1 FTE forecast to retire over the 22 month period. This represents over 50% reduction in the workforce between March to December 2016.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Available supply follows a similar trend to the workforce supply for Mechanical Engineers. Available supply is projected to decline for the forecast period, in line with supply. It should be noted that the gap between the supply and available supply of the workforce is negligible.

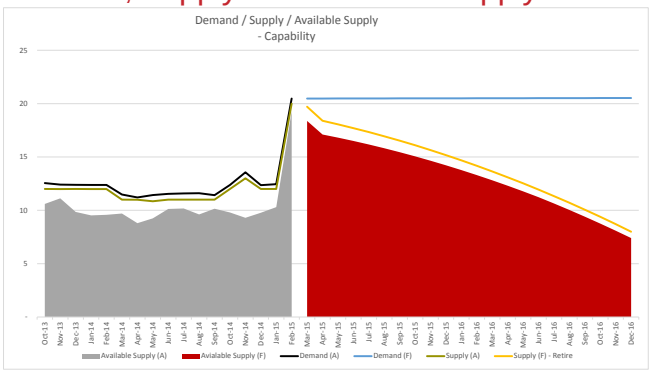
The historical availability of this workforce shows some significant fluctuations, particularly dips in April 2014 due to an increase in unscheduled leave, and November 2014 due to an increase in medicals.

Key findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- The workforce gap between demand and supply is projected to widen significantly by 11.7 FTE over the forecast period, reaching 12.5 FTE by December 2016.
- Similarly, the workforce gap between demand and the available supply of the workforce is expected to widen by 11.0 FTE over the 22 month forecast period.
- Mechanical Engineers have only 1 FTE in forecast retirements (in April 2015), however this is compounded by 11.0 FTE in forecast cessations between March 2015 and December 2016.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(0.8)	(12.5)	(11.7)	↑
Demand and Available Supply	(2.1)	(13.1)	(11.0)	↑

Electrical Engineering

OVERALL TRENDS AND RISKS

Overall the demand for Electrical Engineers is expected to remain stable over the 22 month period to December 2016, however the supply and available workforce supply are expected to decrease due to forecast cessations.

This means the workforce gap between demand and supply of Electrical Engineers is forecast to widen to 2.3 FTE by December 2016 (while this is a small difference in FTE, it represents 15% of the current workforce). Similarly the gap between demand and the available supply of the workforce is forecast to widen to 5.6 FTE by December 2016 (representing 38% of the workforce).

DEMAND

Overall demand for Electrical Engineers is expected to remain stable over the next 22 months, with no changes expected due to new projects.

Fluctuations in the historical demand data are attributable to recruitment and cessations in the baseline workforce. It should be noted that demand and supply have a negligible gap historically, suggesting low levels of overtime for this workforce.

SUPPLY

Overall supply for Electrical Engineers over the next 22 months is expected to decline due to 2.3 FTE in forecast cessations due to historical turnover. While this is a small FTE change, it does represent a significant proportion of the electrical engineering workforce. In addition this workforce is highly specialised and this makes training and sourcing them from the external labour market difficult.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Available supply follows a similar trend to the supply for the Electrical Engineers and is projected to decline. While supply is decreasing, the proportion of the workforce available to work remains stable (i.e. the gap between supply and available supply remains the stable).

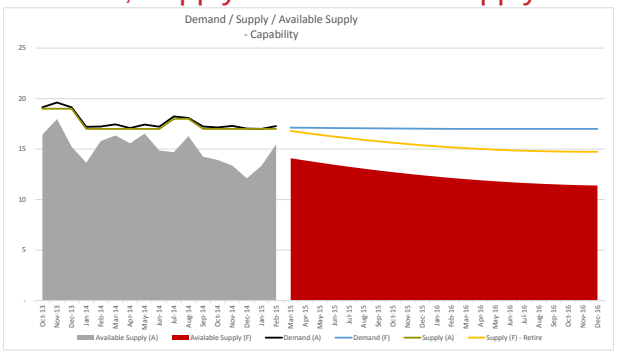
The historical availability of this workforce shows some significant fluctuations, particularly dips in January 2014 and December 2014 which are as a result of increases in unscheduled leave.

Key findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- The workforce gap between demand and supply moves from negligible in March 2015 widening to 2.3 FTE by December 2016.
- The workforce gap between demand and available supply also widens to 5.6 FTE by December 2016.
- The reduction in supply and available supply is projected due to 2.3 FTE in forecast cessations based on historical turnover data.
- There are no anticipated retirements of Electrical Engineers during the forecast period.

Demand, Supply and Available Supply

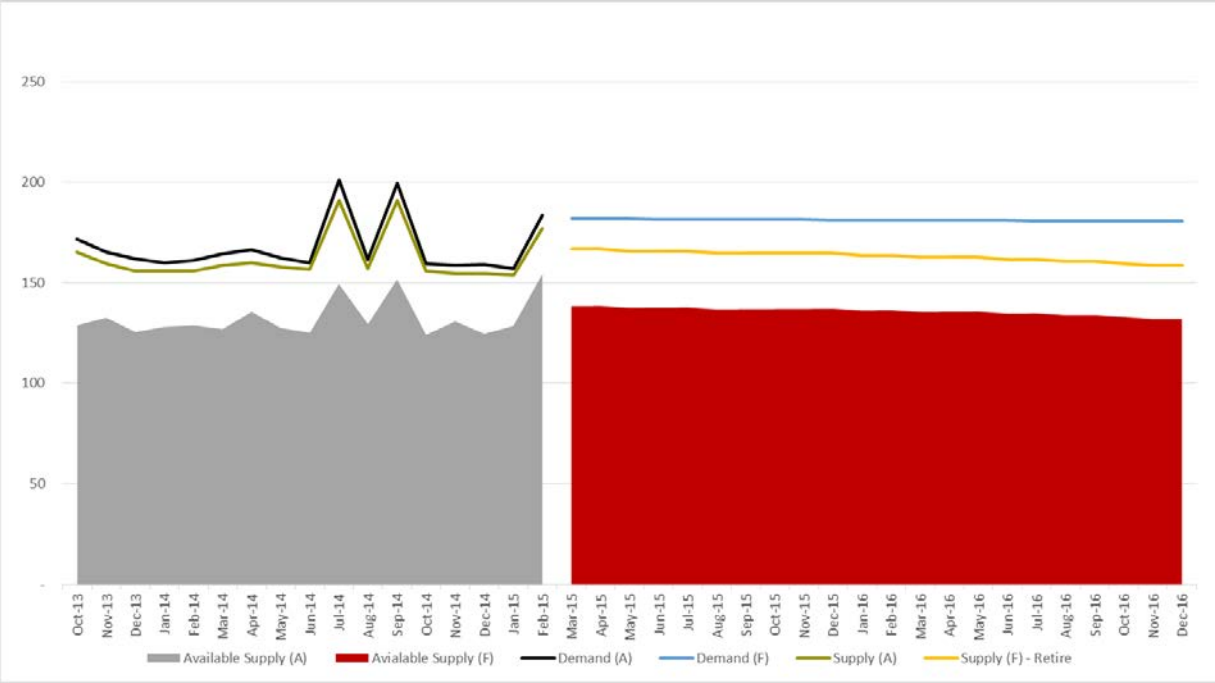


Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(0.3)	(2.3)	(2.0)	↑
Demand and Available Supply	(3.0)	(5.6)	(2.6)	↑

TECHNICIANS, TRADES AND MAINTENANCE

Technicians, Trades and Maintenance Capability-Demand, Supply, Available Supply



Key findings

- The workforce gap between demand and supply will increase by 7.1 FTE across the Technicians, Trades and Maintenance Capability over the 22 months to a gap of 22.0 FTE.
- The workforce gap between the demand and the available supply of the workforce is also forecast to widen (increasing by 5.2 FTE), reaching a gap of 48.5 FTE by December 2016.
- 9 FTE are anticipated to retire over the forecast period, with no planned recruitment modelled.

TECHNICIANS, TRADES AND MAINTENANCE

OVERALL TRENDS AND RISKS

The Technicians, Trades and Maintenance Capability is projected to have stable demand, and available supply over the next 22 months. There is only a small forecast decline in supply over the forecast period of 8.3 FTE. This stability is also reflected in each of the job families within this Capability, suggesting this is not a high risk workforce shortage area at this time.

The decrease in projected supply will lead to declining of the gap between demand and supply of 22.0 FTE by December 2016. The gap between demand and available supply will remain relatively steady, narrowing slightly by 2.9 FTE to a gap of 30.6 FTE by December.

DEMAND

Demand is projected to be very stable over the next 22 months. This is consistent across the job families within this Capability, with variations of no greater than +/- 1.5 FTE forecast for demand.

The historical demand information shows key peaks in July and September 2014 and January 2015 due to recruitment in the baseline workforce, particularly in Mechanical and Electrical Trades, with 16 additional FTE in these job families recruited just for those months.

SUPPLY

Supply of the Trades, Technicians and Maintenance Capability is also forecast to be very stable for the next 22 months. With slight decreases in Electrical and Mechanical Trades due to anticipated retirements. Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Available supply is forecast to decline slightly by 6.4 FTE during the 22 month forecast period for the Technicians, Trades and Maintenance capability. The slight increase is due to a forecast decline in unscheduled leave. The historical availability of this workforce shows some significant fluctuations consistent with the demand and supply for this workforce.

Demand

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Demand Impact
Building Manager & Technician	3.0	2.0	(0.0)	Stable
Electrical Trade	72.1	70.7	(1.4)	Stable
Labourer	11.2	11.2	0.0	Stable
Maintenance Planner	6.0	5.9	(0.1)	Stable
Mechanical Trade	64.8	65.2	0.4	Stable
Metal Fabrication Trade	3.0	3.0	(0.0)	Stable
Paint & Trim Trade	14.5	14.4	(0.2)	Stable
Plant Operator	3.1	3.1	0.0	Stable
Plumbing Trade	4.0	4.0	0.0	Stable
Total	181.8	180.6	(1.2)	Stable

Supply

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Supply Impact
Building Manager & Technician	3.0	2.0	(1.0)	Stable
Electrical Trade	69.0	65.0	(4.0)	Decrease
Labourer	11.0	10.0	(1.0)	Stable
Maintenance Planner	5.9	5.9	0.0	Stable
Mechanical Trade	56.0	53.7	(2.3)	Stable
Metal Fabrication Trade	3.0	3.0	0.0	Stable
Paint & Trim Trade	12.0	12.0	0.0	Stable
Plant Operator	3.0	3.0	0.0	Stable
Plumbing Trade	4.0	4.0	0.0	Stable
Total	166.9	158.6	(8.3)	Decrease

Available Supply

Job Family	FTE at Mar 15'	FTE at Dec 16'	Change (+/-)	Available Supply Impact
Building Manager & Technician	2.9	2.0	(0.9)	Stable
Electrical Trade	59.3	56.3	(3.0)	Stable
Labourer	9.7	9.5	(0.1)	Stable
Maintenance Planner	4.5	5.2	0.7	Stable
Mechanical Trade	44.7	42.8	(1.8)	Stable
Metal Fabrication Trade	2.7	2.8	0.1	Stable
Paint & Trim Trade	8.9	8.0	(0.9)	Stable
Plant Operator	2.6	2.7	0.1	Stable
Plumbing Trade	3.2	2.8	(0.4)	Stable
Total	138.5	132.1	(6.4)	Decrease

Workforce Gap (Overall)

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/-)	Gap Impact
Demand and Supply	(14.9)	(22.0)	(7.1)	↑
Demand and Available Supply	(43.3)	(48.5)	(5.2)	↑

Electrical Trade

OVERALL TRENDS AND RISKS

Overall the demand for the Electrical Trades workforce is expected to remain relatively stable over the 22 month period to December 2016 (a slight decline of 1.4 FTE). Supply for this workforce is expected to decline over the period by 4 FTE, widening the workforce gap between demand and supply.

There is a slight decrease in available supply over the forecast period, this means the gap between demand and the available supply of the workforce is forecast to reduce over the 22 months, reaching a gap of 14.4 FTE by December 2016.

DEMAND

Overall demand for Electrical Trades is expected to remain relatively stable over the next 22 months, with a slight reduction in demand of 1.4 FTE over the 22 months based on historical trends.

Fluctuations in the historical demand data are attributable to recruitment of 9 FTE in July and September 2014. This suggests additional workforce was needed on a short term basis, but may also be due to changes in the way in which the workforce was counted in job families.

SUPPLY

Overall supply for Electrical Trades over the next 22 months is expected to be relatively stable. The decline in supply is due to 4 FTE in forecast retirements over the 22 months.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

Overall supply for Electrical Trades over the next 22 months is expected to be relatively stable, decreasing by 3.0 FTE over the period. This is largely due to the changes in supply, but is offset slightly by trends in scheduled and unscheduled leave based on historical data.

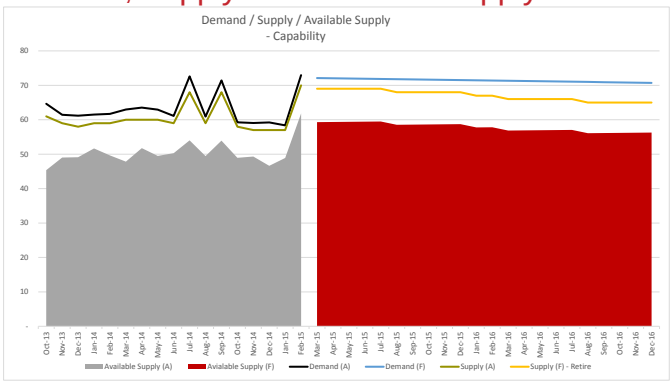
The historical availability of this workforce shows some fluctuations in addition to those attributable to supply factors. These are due to variations in scheduled and unscheduled leave.

Key findings

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- The workforce gap between demand and supply projected to widen by 2.6 FTE over 22 months to 5.7 FTE by December 2016.
- The workforce gap between demand and the available supply of the workforce is expected to increase by 1.6 FTE over the forecast period to 14.4 FTE.
- The decline in supply is due to 4 FTE in forecast retirements over the 22 months.

Demand, Supply and Available Supply



Workforce Gap

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(3.1)	(5.7)	(2.6)	↑
Demand and Available Supply	(12.8)	(14.4)	(1.6)	Stable

Mechanical Trade

OVERALL TRENDS AND RISKS

Overall the demand and available supply for those in Mechanical Trades is expected to remain stable over the 22 month period to December 2016 (+/-0.4 FTE). Supply will also remain quite stable, declining slightly by 2.3 FTE over the forecast period.

This means the workforce gap between demand and supply is projected to widen slightly reaching 11.5 FTE by December 2016. However, the workforce gap between demand and the available supply of the workforce is expected to remain stable over the 22 month period, increasing by 2.3 FTE by December 2016.

DEMAND

Overall demand for Mechanical Trades is expected to remain stable over the next 22 months, with no changes expected due to new projects.

Fluctuations in the historical demand data are attributable to fluctuations in the baseline workforce increasing by 17 FTE in July and September 2014. In addition overtime fluctuates, with peaks in July 2014 and August 2014. This suggests additional workforce was needed on a short term basis, but may also be due to changes in the way in which the workforce was counted in job families.

SUPPLY

Overall supply for Mechanical Trades over the next 22 months is expected to be relatively stable. The forecast dip in supply of Mechanical Trades forecast in May 2015 and October 2016 are due to planned retirements.

Fluctuations in the historical supply data follow that of demand, and are attributable to the same factors.

AVAILABLE SUPPLY

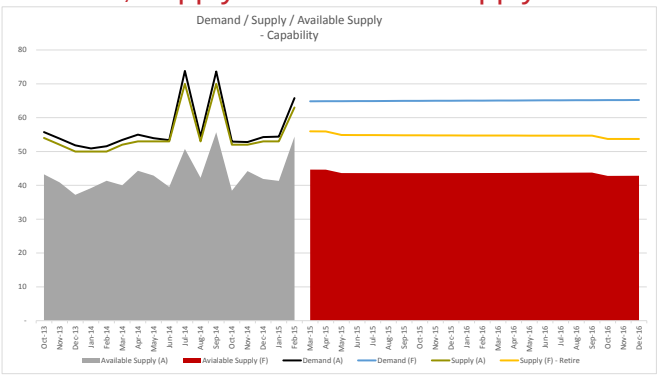
Available supply follows a similar trend to the supply for the Mechanical Trades with some additional fluctuations due to changes in scheduled and unscheduled leave. Available supply is projected to be relatively stable for the forecast period, with a slight decrease of 1.9 FTE over the 22 months due to declining scheduled leave based on a historical trend.

Overall Trends and Risks

This is a small workforce and small changes in FTE will cause significant fluctuations in forecasting.

- The workforce gap between demand and supply is projected to widen slightly by 3.4 FTE over 22 months to 11.5 FTE by December 2016.
- However, the workforce gap between demand and the available supply of the workforce is expected to remain stable over the 18 month period, reaching 13.4 FTE by December 2016.
- The two falls in projected supply in May 2015 and September 2016 are due to 2 FTE in forecast retirements.

Demand, Supply and Available Supply



Workforce Gap (Overall)

	FTE Gap at Mar 15'	FTE Gap at Dec 16'	Change (+/ -)	Gap Impact
Demand and Supply	(8.1)	(11.5)	(3.4)	↑
Demand and Available Supply	(20.1)	(22.4)	(2.3)	↑

Acknowledgements

The contribution of the Workforce Planning Steering Group who provided direction and assisted with the development of this CityTrain Resource Plan is gratefully acknowledged.

Queensland Rail Sponsorship Group

[redacted], Executive General Manager Human Resources

[redacted] – Executive General Manager Network

[redacted] – Chief Operating Officer

[redacted] - Executive General Manager Enterprise & Business Strategy

Project Steering Group

[redacted] – Senior Manager Strategy and Capability

[redacted] - Human Resources Manager (Operations)

[redacted] – Human Resources Manager (Network)

[redacted], Human Resources Manager (Enabling)

[redacted] Manager Workforce Planning & Analytics

[redacted] - Principal Workforce Adviser

[redacted]

Citytrain Business Reference Group (including proxy attendees)

[redacted] – Chief Operating Officer
[redacted] – General Manager Rail Management Centre & Operations
[redacted] – Senior Manager SEQ Train Service Delivery
[redacted] – General Manager Operating Assets
[redacted] – General Manager Citytrain
[redacted] – General Manager Operational Coordination, Risk & Assurance
[redacted] – Executive General Manager Travel & Tourist
[redacted] – Senior Manager Station Customer Service
[redacted] - Manager Group Strategy (Operations)
[redacted] - Business Support Manager
[redacted] - Manager Business Partners (Operations)
[redacted], Commercial Manager Projects & Security
[redacted] - Human Resources Manager (Operations)
[redacted] – Senior Manager Strategy and Capability
[redacted] - Manager Workforce Planning & Analytics
[redacted] - Principal Workforce Adviser

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Appendix A – Forecasting Activity Briefing

Background

1. The Strategic Workforce and Resource Planning project being undertaken by [redacted] will develop forecasts of the demand and supply of the workforce for the first time within QR. As a result of this, the methodology and approach needs to be confirmed and agreed by the Strategic Workforce and Resource Planning Steering Committee.
2. In keeping with best workforce planning practice, all forecasting will be calculated based on required full-time equivalent (FTE), which can be converted to hours and vice versa.
3. Given the requirements of the Resource Plan (a deliverable of this project), all forecasting calculations will be calculated on a monthly basis and will cover the 22 month period between March 2015 and December 2016.
4. The key areas of focus are:
   - How demand is proposed to be measured;
   - How supply is proposed to be measured;
   - The level of detail required for the forecasting;
   - How the analytics will be undertaken given the data available; and
   - How this tool will interact with other pieces being developed by the team, and how it will be created to ensure a sustainable approach that allows ongoing forecasting to be undertaken by the Workforce Planning team and wider business.

Risks/Complications

How **demand** is proposed to be measured.

5. The demand (or work effort) for the workforce will need to be based on proxy data because of the limited maturity of data currently available, with the following assumptions:

a) As the current workforce (based on their ordinary hours of work) must be able to deliver on the required demand for services (to a greater or lesser extent), this will be used as the basis of modelling demand.

b) In addition overtime will be added to encapsulate the current demand for services that is not being met by the current workforce's ordinary hours.

c) As there are a number of significant projects and policy decisions that impact on the required demand for the workforce, demand also includes projects (including policy decisions which when implemented turn into projects) that may either positively or negatively impact on demand for services.

6. This means demand will be calculated as:

Demand (FTE) = current FTE + overtime (FTE) +/- project impact (FTE)

Where current FTE will be based on the current workforce profile as at 4 March 2015; overtime hours will be based on the historical trend of overtime hours. Projects will be based on the business' identification of the FTE impact of significant projects into the future, based on actual FTE data.

How **supply** is proposed to be measured.

7. The supply of the workforce will be measured in two ways. The first will be the **trend total FTE in the workforce** (**overall supply**) and the second will be the **FTE that are *available* to work at any particular time (available supply)**, taking into account those in the workforce that are away on scheduled or unscheduled leave, training, medicals or other tasks that prevent the workforce being available to meet the required workload of the business.

8. The current workforce, measured in FTE and based on a 17 month trend up to 4 March 2015, will be used as the basis of the overall supply. This 17 month period has been selected as prior to this the organisation underwent significant workforce restructuring, and the Workforce Planning team felt that data form this period would skew the trends to be unrepresentative of the current trends in planned and unplanned leave. The forecast will then also add FTE to account for recruitment (based on actual planned recruitment), and subtract cessations, taking into account redundancies, turnover and retirements. Cessations will be based on historical trend data, except for retirements which will be based on the predicted retirements of the current workforce using an estimated retirement age of 63 years.

   Historical cessation data used is for the year 2014 only and has been based on headcount rather than FTE. In order to obtain the most accurate figure, this headcount has been converted to FTE using the % of headcount to FTE for each Job Family as on March 2015.
   Assumption: It should be noted that we have made the assumption that during the forecast period of the 22 months to December 2016 that no new recruitments into the organisation will have an age higher than 61 years, and therefore new recruitments will not impact on retirements over this period.

9. As retirements will be based on planned actual retirements based on the age of the workforce, there is a need to exclude retirements from the cessations trend information to prevent double counting.

10. The recruitment data will be based on actual planned recruitments for the training schools (i.e. for the guard, driver, station manager and controller job families). As Queensland Rail currently operate in an environment where recruitments need to be approved by the Chief Executive, no additional recruitment will be recorded for all other sections of the workforce.

11. As QR's supply data is significantly more robust than the demand data, it is expected that this forecast will be more valid and reliable than the demand forecast information.

12. Overall supply will be calculated as:

    Supply (FTE)= current FTE + recruitment (FTE) – cessations (FTE: including retirements).

13. The available supply of the workforce will be calculated based on the monthly supply, as calculated above, and will subtract from this those on scheduled leave (annual leave, maternity leave and long service leave); those on unscheduled leave

(sick/carer's leave, WorkCover); those on training courses and. All of these measures will be calculated based on historical trend data.

14. Training data will be included in forecasting two key ways. Those attending training schools (guards, drivers and controllers) will be recorded as unavailable for the time they are at the training schools. The modelling will rely on the assumption that on average guards have a 3 month training period, drivers a 1 year training period, station managers and officers a 2 weeks and 4 days training period and controllers have a 25 week training period (noting that there will be variation on this depending on individual competence).
15. Available supply will therefore be calculated as:

    Available supply (FTE) = Supply forecast for the month – FTE (Forecast) on scheduled leave (annual leave, maternity leave and long service leave) - FTE (Forecast) on unscheduled leave (sick/carer's leave, WorkCover) - FTE on training – FTE on medicals – FTE on any other special leave specific to their role.

Forecasting analytics

16. The methodology used for the calculations where historical data (of 17 months) is available, is proposed to be developed based on regression analysis as requested by Queensland Rail. For workforce variables that are highly seasonal in nature- specifically sick leave, annual leave and overtime, there may be merit in doing time series analysis on this prior to the regression analysis.
17. The variables that will be subject to this analysis are all supply and demand variables where a historical trend is used as the foundation. These include overtime, cessations (not including retirements), annual leave, maternity leave, long service leave, unscheduled leave*, training and medicals. Any 'other' variables that may impact on the workforce supply will only be included if they impact to a statistically significant degree on the available FTE.

**Unscheduled leave will primarily include the following leave categories: Sick, family/carer, maternity/parental, worker's comp, accident/trauma, sporting, military, study, rehab leave categories and others.*

18. Confounding variables (other variables that correlate to/ or influence the supply and demand of the workforce) were discussed for inclusion in the model for their causal impact, however the model is not considered to yet be of sufficient maturity to include these. Such variables include weekend days, public holidays, inclement weather, economic factors, unemployment, special events, culture, job security and population growth.

Level of detail needed for the modelling

19. It is understood that the business will need to be able to look at the demand and supply forecast of the workforce in four key ways:

    I. In aggregate (organisation level- this will be split into Citytrain Above Rail (which is the majority of the Operations workforce), and Network (which includes the Citytrain and Regional workforces));

    II. By workforce cluster- including the Capability Groups and QR Job Descriptor (Job Family) roles;

    III. By organisational level- including level 3 and 4. It is noted that the categories within these organizational levels have been exposed to various restructuring

initiatives. The current category structure (as on March 2015) has been stable since October 2014; hence, the only useful data available for these categories will be pulled from that month forward only (5 months to end of February 2015).

The above restructuring has also affected specific Job Families; where such have been discontinued in that category (potentially moved to other areas in the business). These job families are: *ICT, Finance, Engineering Manager and Misc Trade*. This will be taken into consideration; where these job families have been excluded entirely from the data model;

IV. Allowing selection by both workforce cluster and organisational level (as per II. and III. above).

Interaction of the forecasting tool with other components

20. It is expected that the forecasting model, which will be initially created to inform the Citytrain and Network Resource Planning documents, will also provide a sustainable tool for the business to maintain into the future. [redacted] will create the initial forecasting tool, but will not be responsible for its ongoing recalibration over the coming years as the data and available analytics matures.

21. It is also expected that while many parts of the model will be based on formula supporting the regression modelling, some aspects will be able to be altered to allow a user to change monthly actuals made for the forecasting (eg new recruitments).

Recommendations

I. Workforce demand will be calculated as: *Demand (FTE) = current FTE + overtime (FTE) +/- projects (FTE). (16 months)*

II. Overall workforce supply will be calculated as: *Supply (FTE) = FTE + recruitment (FTE) – cessations (including retirements). (16 months)*

III. Available workforce supply will be calculated as: *Available supply (FTE) = Supply forecast (FTE) for the month (as per paragraph 12) – FTE on scheduled leave (annual leave, maternity leave and long service leave) - FTE on unscheduled leave (sick/carer's leave, WorkCover) - FTE on training – FTE on medicals – FTE on any other special leave specific to their role.*

IV. The methodology used for the calculations where historical data (of 16 months) is available, is proposed to be developed based on regression analysis.

V. Confounding variables will not be included in the model at this stage of maturity.

VI. The analytical tool will need to account for workforce cluster (Capability Groups and Job Families) and organisational structure (level 2, 3 and 4) and allow for the combination of these to be selected and modelled by users as part of a user interface (which will be created by the Workforce Planning Team).

Annex 2 Indec Train Service Delivery Review

REPORT

TRAIN SERVICE DELIVERY REVIEW

Prepared for:

[redacted]
General Manager Citytrain

Queensland Rail

Ref: Q0417
February 2016

Contact Details:
Mr. [redacted]
Tel: [redacted]
Mob: [redacted]

Commercial-in-Confidence

DOCUMENT CONTROL

CONTROL SHEET

Version/ revision No.	Path/File name	Prepared by (author)	Reviewed by	Approved by	Version date	Security Classification
V0.9	Q0417 Report QR Train Svc Delivery Review	[redacted]	[redacted]	[redacted]	15/02/2016	Commercial-in-Confidence
		[redacted]	[redacted]	[redacted]	11/01/2016	
		[redacted]	[redacted]	[redacted]	19/11/2015	

DISTRIBUTION HISTORY

Name	Location	Issued date
[redacted] General Manager Citytrain	Upper Central Concourse, 290 Ann Street Brisbane, Qld 4001	15/02/2016
[redacted] Group Strategy Manager, Operations	Upper Central Concourse, 290 Ann Street Brisbane, Qld 4001	15/02/2016

CONTENTS

EXECUTIVE SUMMARY

This report was commissioned by Queensland Rail (QR) to review the current structure, roles, operating model and business activities of the Train Service Delivery function, and to make recommendations on alternative models and or structures if appropriate with a staged implementation plan to support transformational change. The report has been prepared with the cooperation of management and staff of Queensland Rail, as well as other operating railways. There has been a high level of cooperation between all parties involved.

The report has been completed in the context of the range of developments that are to be managed by Queensland Rail which place additional demands on the Train Services Delivery function including:

- A new timetable in 2016;
- Commencement of operations on the Moreton Bay Rail Line (MBRL mid-late 2016); and
- Testing, Commissioning and Operations of the New Generational Rollingstock and Rail Stabling Program including the new Wulkuraka Maintenance facility (commissioning is planned for mid-2016 to late 2018).

Additional challenges that will be placed on the organisation are:

- Commonwealth Games (2018); and
- Cross River Rail extension (if approved) 2022-23.

The review has found that there is a significant risk to the successful delivery of the above challenges due to the shortage of train crewing resources.

Consideration needs to be given to the creation of a role reporting directly to the Chief Operations Officer (COO) with the line responsibility for the operational readiness for the grouping of these critical projects. The role would be accountable to the COO and be provided with the delegated authority of that position in the development of a strategy and project control regime to ensure the targeted outcomes are met.

This review has been undertaken in the context of an excellent record of service delivery. The customer service performance of QR compares very favourable with the performance of the fifteen railways who contribute to the [redacted]). In particular QR produces excellent results in the primary customer performance indicators of on time running and the number of services operated as a percentage of the services scheduled when compared to the other railways.

The review included the comparison of the QR organisational model with other railways. This information was made available by the Queensland Rail personnel. This included qualitative and quantitative information to ensure the context of the data was understood.

The response from the three rail operators was as follows:

- Railway 1 – provided organisation charts, staff numbers, organisational context documents and selected position descriptions.
- Railway 2 provided organisation charts, staff numbers and quantitative performance information.
- Railway 3 – was not able to provide information in the required timeframe.

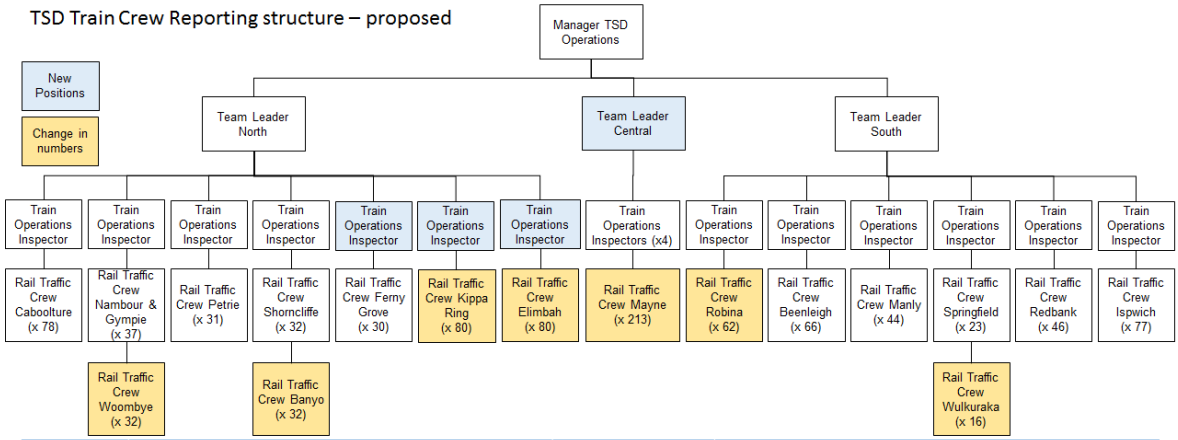
In the absence of more detailed information the report makes comparisons between with the above railways and uses the data made available in the [redacted] information held by QR.

The Train Services Division (TSD) has line management responsibility for approximately 972 Train Crew personnel. The division manages the day to day provision of train drivers and guards to the Daily Working Timetable.

The organisation structure and operating model for the management of train crew within QR is similar to those in other capital cities operating railways used on this review. This structure includes Team Leaders responsible for the allocation of duties to the next level which is the Train Operations Inspectors (TOI) who are in daily contact with the train crew. The Team Leaders are regionally based and report to the Operations Manager who in turn reports to the Senior Manager TSD. When comparing the QR Structure with other railways it was found that the structure is consistent with other railways in its form and function however the span of control and the level of train crew supervision is not consistent with the comparable railways.

Under the QR Team Leaders, the ratio of staff to supervision levels is between 1:45 and 1:50 staff and the Manager TSD Operations has a ratio of 1:125. In comparison the other railways used to compare QR have consistent ratios of approximately 1:50 across the organisations. This report recommends that a third Team Leader position be created and the planned train crew depot re-allocation be completed. This, together with the creation of three new TOI positions, will balance out the reporting ratios.

The amended structure is shown in the diagram below together with the reporting relationships before and after the recommended change.



	NORTH	CENTRAL	SOUTH
PRESENT	Total Crew 178 (Ferny Grove reporting to Mayne TOIs) TOIs 4 Ratio 1:45	Total Crew 499 TOIs 4 Ratio 1:125	Total Crew 302 TOIs 6 Ratio 1:50
PROPOSED	Total Crew 432 (Ferny Grove reporting to new TOI in North) TOIs 7 Ratio 1:62 Additional Crew 40 + 40 Klippa Ring 40 + 40 Elimbah 16 + 16 Woombye 16 + 16 Banyo	Total Crew 213 TOIs 4 Ratio 1:53 Crew relocated: 256	Total Crew 334 TOIs 6 Ratio 1:56 Additional Crew 8 + 8 Robina 8 + 8 Wulkuraka

Figure 1 – Proposed TSD Train Crew structure

The recommended structure requires 4 new positions to be created, these being a new Team Leader "Central" and three additional TOIs to be located in the Team Leader North's jurisdiction.

The restructure also reflects a recast of the crew across the existing network and new sign on points in the network associated with the opening of the Moreton Bay Railway Link (MBRL). Details of these changes can be seen in the body of the report. The new TOI positions will take responsibility of Train Crew located at the new Kippa Ring sign-on point and the new Elimbah sign-on point.

Ideally the timing of the organisational change process would be coordinated with the needs of the planned MBRL network integration timetable in April 2016. However the timing of the restructure may be affected by the current and forecast train crew shortages and the simultaneous demand on train crew for the new timetable and the testing and commissioning and introduction into service of the New Generation Rollingstock (NGR). The formal establishment of the recommended structure will need to be considered in the light of the foregoing information and a strategy is required to be developed that manages the risk of structural change and the crew shortage.

In general the study observed the normally experienced tension between the rostering management responsible for the daily provision of staff to the timetable, the Train Crew Training Resource and Team Leaders' management roles. This situation is not uncommon in other similar railways. In QR's case this situation is made worse by the current shortage of qualified drivers and guards making the delivery of the daily timetable needs difficult. Hence there is a significant tension between the Roster function, the internal Training resource and TSD Operations created by the crew shortage. Efforts are currently underway to rectify the crew shortage.

The governance of the train competency standard and compliance with the Safeworking rules is well disciplined and records show a high level of visibility of the standard of training that is being delivered and that the qualifications of the train crew are being maintained. This situation is tenuous due to the crew shortage as the timetable needs bring pressure to bear on the training needs. Care will be needed to ensure the continuity of the train crew recertification program in the face of this increasing timetable need.

The review considered the current roles, workloads and delineation of responsibilities within QR. Examination of data provided by the QR Benchmarking team and a review of the relevant Position Descriptions (PDs) indicate that the QR PDs are more generic and less specific in their description of the tasks and responsibilities of the Team Leaders, TOIs and other positions when compared with two other Australian railways. The workloads of the Team Leaders and the TOIs were reviewed and found to be very high in the current structure. Implementation of the recommended organisation structure will improve this situation.

The formal workforce plan provided by QR Corporate HR lacked detail in addressing the crew shortage and the potential for this to put at risk the successful management of the short term challenges faced by the organisation. The crew rostering manager has developed a spreadsheet that informs the training plan and the crew needs for the planned operational changes. This document serves as the workforce plan for the operations division.

The recommendations made in the body of this report are summarised as follows.

Section of report	Recommendation
4.1 Supervisory ratios	Implement a revised organisation structure including three new TOI positions, a Team Leader Central and redistributed workforce as indicated.
5.2 Staffing levels; and 10 Implementation Plan	Appoint a senior resource, reporting directly to the Chief Operating Officer with appropriate authority, to deliver an integrated program for the delivery of the planned operational challenges, the organisational changes recommended and completion of full employment in the train crew ranks.
6 Roles	Review and reinforce the protocols for the Roster function to assign TOIs, Tutor Drivers and Guards to crewing duties, including the communication protocols with their managers. Create Duty Statements for all operational roles

7 Travel Train interface	Develop an interface agreement between Citytrain and Traveltrain for the provision of shared services. Implement a formal Division wide operational control meeting.
8.1 Training programs and capacity	Review the option of assigning new drivers to specific sectors of the railway so that training can focus on a specific route and train type.
	Develop an overarching operational readiness plan that addresses the needs of the organisation for the delivery of the recommended TSD Divisions organisational change, the MBRL Timetable introduction and the NGR testing commissioning and training needs and the needs if any for the 2018 Commonwealth Games.
	Fill the vacant administrative and planning position in the Training Division as soon as possible.
9.1 Workforce Planning	See 8.1 Recommendation
9.2 Succession Planning	Engage the support of the corporate HR function to implement succession planning for all management positions, with a particular focus on the position of Senior Manager SEQ TSD.

1 INTRODUCTION

In June 2014, Queensland Rail announced a new structure where the Chief Operations Officer (COO) role was created with accountability for the Rail Operations, Customer Service and Safety Assurance and Environment functions.

Train Service Delivery became a function of the Citytrain product. The Citytrain product or function provides safe, on-time, reliable and customer-focused above rail operations for south-east Queensland.

The Manager Train Service Delivery Operations has line responsibility for approximately 972 train crew, consisting of 527 drivers and 445 guards. The role is supported by:

- two new team leaders, one north and one south;
- 12 Train Operations Inspectors (TOIs); and
- three administrative support roles.

There have been changes to both the number and role descriptions for TOIs in the last 18 months.

Train crew operate out of 13 depots / locations across the south-east Queensland network with the bulk of the workforce, around 400 train crew, located at our Mayne Depot in Bowen Hills, which is the hub of Queensland Rail's south-east Queensland rail operations.

Queensland Rail faces a range of developments in the coming years which will place additional demands on the Train Services Delivery function which include:

- A new timetable in 2016;
- Commencement of operations on the Moreton Bay Rail Line (MBRL mid-late 2016); and
- Testing, Commissioning and Operations of the New Generational Rollingstock and Rail Stabling Program including the new Wulkuraka Maintenance facility (commissioning from mid-2016 to late 2018).

Additionally, any structural changes need to accommodate future challenges such as:

- Commonwealth Games (2018); and
- Cross River Rail extension (if approved) 2022-23.

This report was commissioned by Queensland Rail (QR) to review the current structure, roles, operating model and business activities of the Train Service Delivery function, and to make recommendations on alternative models and or structures if appropriate with a staged implementation plan to support transformational change.

This report has been prepared with the cooperation of management and staff of Queensland Rail, as well as other operating railways. There has been a high level of cooperation between all parties involved.

2 SCOPE OF WORK

Queensland Rail requested the following scope of work be addressed:

a) Review the adequacy of the current management structure for Rail Traffic Crew (RTC), taking into consideration workforce numbers, span of control, role of the TOI's and the general size and distribution of the function, and suggest structure and role changes where appropriate;

b) Review and provide recommendations on the adequacy of the operating model;

c) Review the current roles within the TSD function for clarity, workloads and delineation of responsibility and accountability;

d) Examine key points of interface between managers, Rail Traffic Crew and rostering, including SEQ train crew and regional train crew and make recommendations as appropriate;

e) Benchmark Train Service Delivery operations and performance against other rail operators and systems;

f) Review Train Service Delivery training capacity and program and make recommendations as appropriate;

g) Explore opportunities for workforce and succession planning in Train Service Delivery;

h) Advise on any other observations as relevant to the objectives and scope of the review; and

i) Develop a staged implementation plan for an alternative operating model if appropriate.

During early discussions, the Chief Operating Officer also requested that Indec consider the governance arrangements for train crew in terms of the obligations under the Rail Safety Act. This has been considered in section 4 of the report.

3 METHODOLOGY

3.1 INTRODUCTION

The methodology for this review was drafted for the original proposal and then revised and agreed with Queensland Rail personnel during the first weeks of the assignment.

3.2 INTERVIEWS WITH MANAGEMENT OF QUEENSLAND RAIL

An initial inception meeting was held with the senior management team to understand the context of the review, the objectives and to review the methodology. This meeting helped confirm the appropriate list of staff to interview, and the sources of information.

3.3 DATA COLLECTION AND REVIEW

Data was collected from many sources throughout the review. The Group Strategy manager, Operations, provided organisation charts and strategy documents. The Human Resources team provided position descriptions, data from the Position Database, and information relating to the enterprise agreement.

Several key staff members provided extensive information about their roles, their teams, evidence of their processes and control procedures, and reports, and we thank them for their willing participation and professionalism.

3.4 BENCHMARKING DATA COLLECTION AND REVIEW

The comparison of the QR operating model with other railways organisational descriptions and performance information was made available by the Queensland Rail personnel. This included qualitative and quantitative information to ensure the context of the data was understood.

The response from the three rail operators was as follows:

- Railway 1 – provided organisation charts, staff numbers, organisational context documents and selected position descriptions.
- Railway 2 provided organisation charts, staff numbers and quantitative performance information.
- Railway 3 – was not able to provide information in the required timeframe.

In the absence of more detailed information the report makes comparisons between with the above railways and uses the data made available in the [redacted] information held by QR.

3.5 INTERVIEWS WITH STAFF

Indec consultants met with staff from the Train Services Delivery function and other functional areas of Queensland Rail. These interviews covered the range of issues required for the scope of the review, both directly and indirectly. People interviewed included:

1. Chief Operating Officer, [redacted];
2. General Manager, Citytrain, [redacted];
3. Group Strategy Manager, Operations, [redacted];
4. Human Resources Manager (Operations), [redacted];
5. Senior Manager Train Service Delivery Compliance, [redacted];
6. Manager Travel Network & Customer Interface, [redacted];
7. Senior Manager SEQ Train Service Delivery, [redacted];

8. Team Leader Train Service Delivery – North, [redacted];
9. Team Leader Train Service Delivery – South, [redacted];
10. Manager Train Service delivery Operations, [redacted];
11. Train Service delivery Roster Allocation Manager, [redacted];
12. Manger Train Service Delivery Training, [redacted];
13. Tutor Driver, [redacted];
14. General Manager Rail Management Centre & Operations, [redacted];
15. Senior Manager Rail Management Product Strategy & Planning, [redacted];
16. Principal Benchmarking and Insights Adviser, [redacted];
17. Senior Operations and Assurance Adviser, [redacted];
18. GM Operational Coordination, Risk and Assurance, [redacted];
19. Senior Manager Operations Projects Interface, [redacted];
20. Senior Manager Risk & Assurance, [redacted];
21. Senior Manager Strategic Operational Planning, [redacted];
22. GM Safety Assurance and Environment, [redacted];
23. Executive General Manager Travel and Tourist, [redacted];
24. GM Operating Assets, [redacted];
25. Program Manager - Operational Readiness NGR, [redacted]; and
26. Manager of Workforce Planning & Reporting, [redacted].

Information from these interviews was captured in detailed notes and has been used to inform the findings of the review, and to identify information required to support the review.

3.6 ANALYSIS OF DATA

Indec collated reports, statistics, organisational documentation and other materials relating to the scope of the review. This information was reviewed in detail to understand the context and the operating environment, and the internal processes and structure of the Train Services Delivery function.

Information sourced by the Queensland Rail Benchmarking and Insights team and from the experience embedded within the Indec team was used for the purposes of comparison with other railways. This information was then used to develop the recommended amendments to the organisational structure.

3.7 DEVELOPMENT OF RECOMMENDATIONS AND IMPLEMENTATION PLAN

Throughout the review, Indec developed preliminary recommendations, which were then tested and refined in discussions with Queensland Rail personnel.

The timing of the implementation of the recommended changes is sensitive to the challenges facing the organisation in the short term. The recommendations should support rather than disrupt those changes. A detailed program for the implementation of the organisational changes, the delivery of the 2016 integrated timetable, the integration of the NGR and the Commonwealth Games needs should be developed in close consultation with all Operating and appropriate Corporate Divisions of QR and the Dept of transport NGR project delivery team.

4 ORGANISATION STRUCTURE AND ROLES

The Train Service Delivery function reports to the General Manager, Citytrain, who in turn reports to the Chief Operating Officer for Queensland Rail. The current Team Leader structure within TSD was revised in the first half of 2015, with the introduction of two Team Leaders, reporting to the Manager TSD Operations.

The current Citytrain organisational structure is as follows, with further detail shown below.

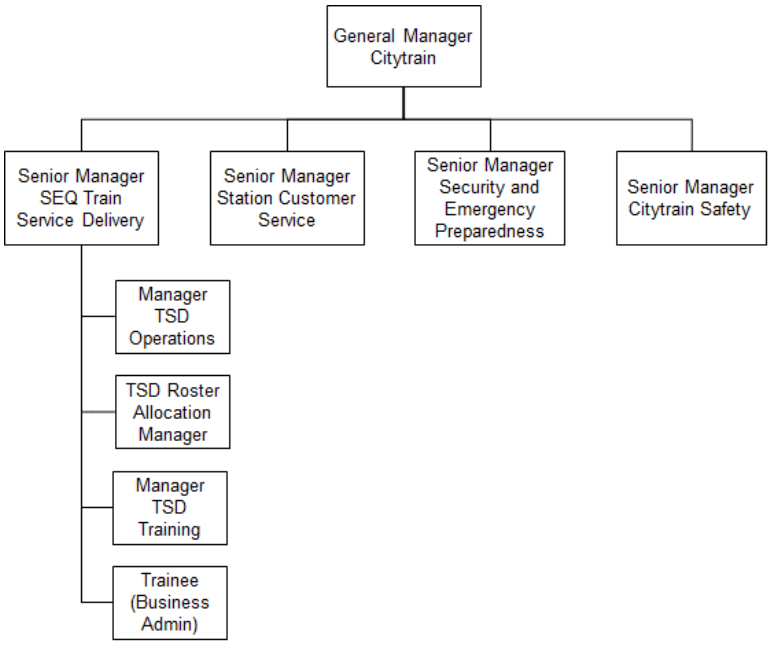


Figure 2 – TSD Function high level Organisation Chart

TSD manage the QR Train Crewing function The TSD structure is shown in detail in Figure 3 below.

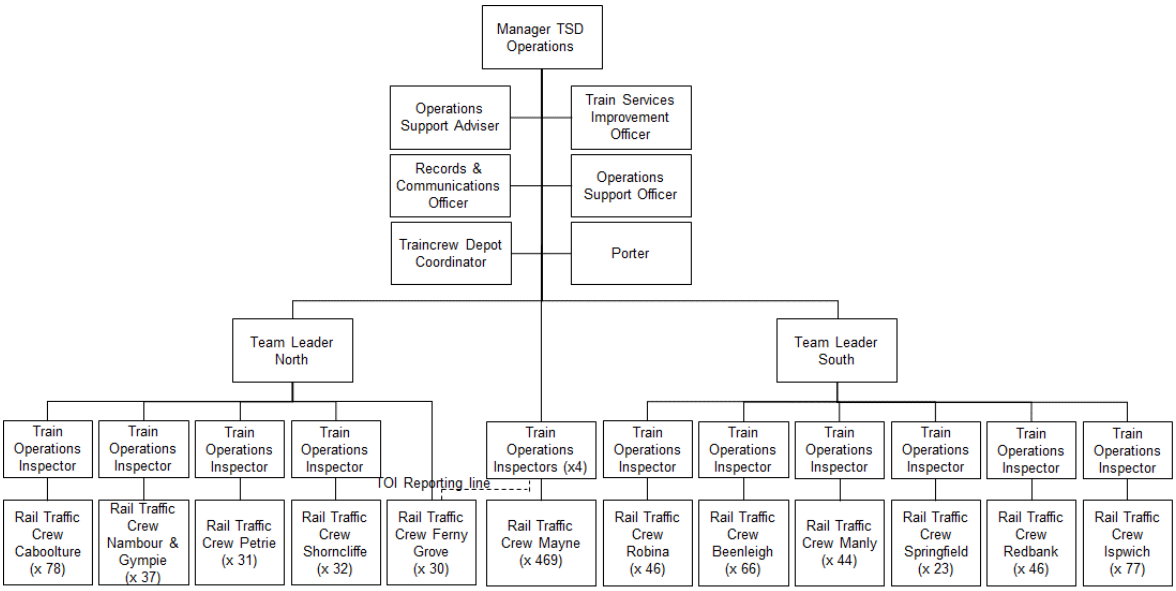


Figure 3 – TSD Operations Organisation Structure

The operating model of management and supervision of train crew in the railways used for comparison purposes and QR is similar and is shared between the field staff and the rostering and crew allocation function. The QR Roster function is responsible for allocation of staff to the daily working timetable and time and attendance. The Train Operations Inspectors (TOIs) supervise operational performance, technical and job related competency of the crews and other various functions. The operations management team address discipline and performance management matters.

Train Crew Supervision and Management		
Roster	**TSD Operations – Team Leaders / Manager TSD Operations**	**TSD Operations – Train Operations Inspectors**
Manage Leave requests Rostering, daily crew allocation Manage unscheduled absence	Discipline and performance management – Team Leaders Organisational communications – Team Leaders	Summative Assessment Ongoing coaching and monitoring Remedial training Maintenance of Competency Monitor on-time-running Incident investigation

Figure 4 – Train Crew Supervision and Management

The central rostering function requires the flexibility to allocate drivers as required to maximise efficiencies and meet the timetable needs. The operational function is at times in conflict with the train crewing function. This situation is not unusual in the experience of Indec however the current crewing shortage is adding to the tension between the parties. Reinforcement of the existing Citytrain Rail Traffic Crew Rostering Protocols would assist in the clarification of the roles and responsibilities and closer communication between the operating divisions of the COO Office would also assist. Filling vacancies in the Drivers and Guards ranks will significantly relieve the current level of operational pressure on the TSD delivery function.

4.1 SUPERVISORY RATIOS

In each of the comparison railways, the daily activities of train crew are supervised by a TOI or equivalent. However the ratio of drivers/guards to supervisory staff within QR varies considerable across the organisation.

	Team Leader North	Manager TSD Operations	Team Leader South	Totals
Number of TOI positions	4	4	6	14
Number of train crew	178	499 (including Ferny Grove crew)	302	979
Ratio of TOI: train crew	1:52	1:125	1:50	1:70

Figure 5 – Supervisory ratios with TOIs in line management

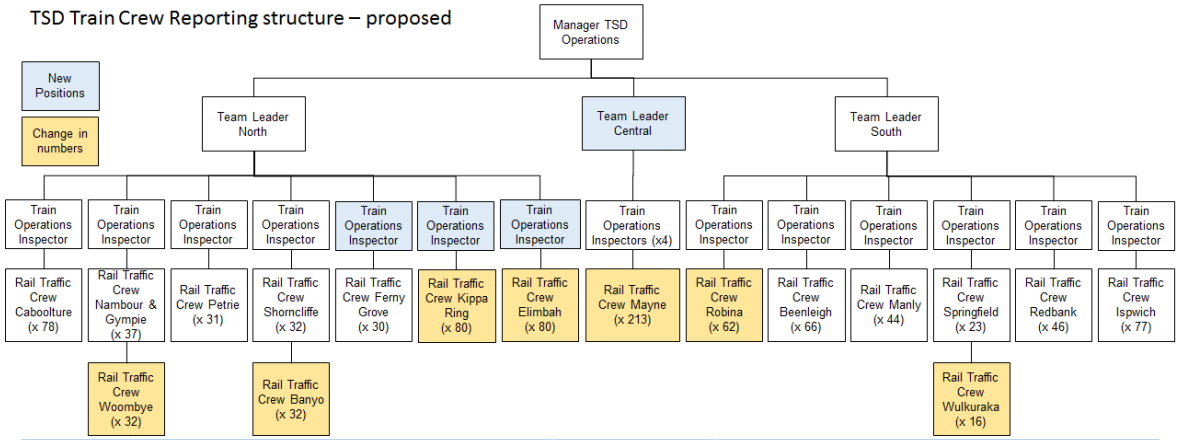
In comparison to other railways, the QR TOIs have a higher overall number of crew to supervise, and the maximum ratio at 1:125 is more than twice as high as the maximum for Railway 1 at 1:52.

As at end 2015	Data	Comment	Data	Comment	Data	Comment	Data	Comment
Number of Drivers	1217	Includes Principal and Trainer Drivers in teams	295		490		490	
Number of Guards	928	Includes Principal and Trainer Guards in teams	0	Do not employ guards	489		489	
Direct supervisors	46	Shift Managers	11	Depot Master	14	Train Operations Inspectors	17	Train Operations Inspectors
Traincrew per direct supervisor	**47**	**Maximum ratio is 1:52**	**27**	**Maximum ratio is 1:29**	**70**	**Maximum ratio is 1:125**	**58**	**Maximum ratio is 1:62**

Figure 6 – Comparison of supervisory ratios

An analysis of TOI workload by the Team Leader North and attached in Appendix D has shown that at the current level of 14 TOIs, there are insufficient rostered shifts in the year to complete the mandatory tasks workload.

To address these issues the Senior Manager TSD was consulted and a revised organisation structure was developed. The restructure considered the need to redistribute the crew and supervision for the introduction of the MBRL also the addition of three TOI positions and the establishment of an additional Team Leaders position. The revised structure is shown in Figure 7.



	NORTH	CENTRAL	SOUTH
PRESENT	Total Crew 178 (Ferny Grove reporting to Mayne TOIs) TOIs 4 Ratio 1:45	Total Crew 499 TOIs 4 Ratio 1:125	Total Crew 302 TOIs 6 Ratio 1:50
PROPOSED	Total Crew 432 (Ferny Grove reporting to new TOI in North) TOIs 7 Ratio 1:62 Additional Crew 40 + 40 Klippa Ring 40 + 40 Elimbah 16 + 16 Woombye 16 + 16 Banyo	Total Crew 213 TOIs 4 Ratio 1:53 Crew relocated: 256	Total Crew 334 TOIs 6 Ratio 1:56 Additional Crew 8 + 8 Robina 8 + 8 Wulkuraka

Figure 7 – Proposed train crew organisation structure

These changes to the supervisory ratios within QR will produce on average a supervisor to staff ratio of 1:58, with a maximum ratio of 1:62 in the North.

A revised map of depots and TOIs is shown in Figure 8 below.

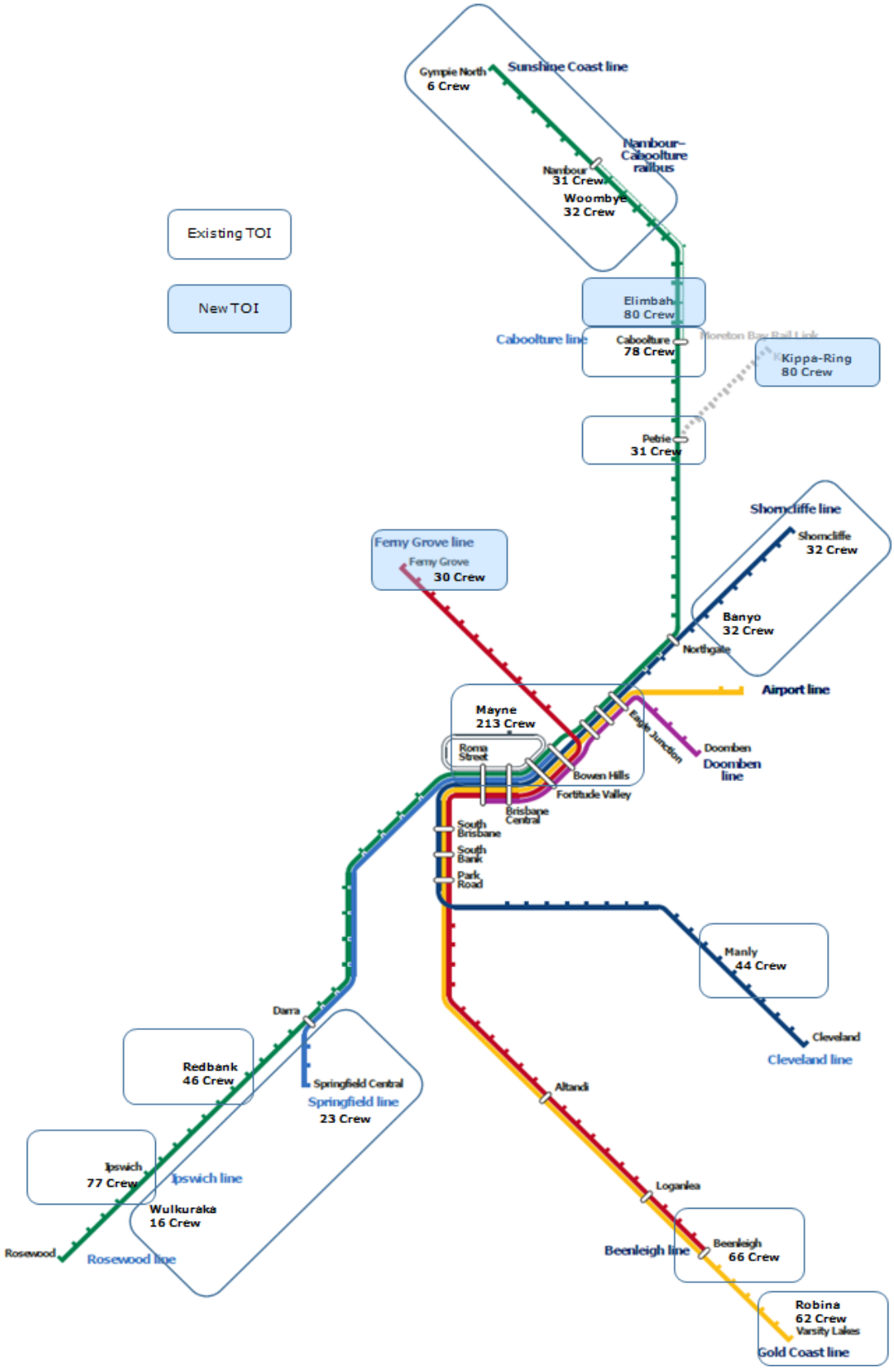


Figure 8 – Revised distribution of TOIs and crew

With the additional TOI positions, the workload analysis prepared by the Team Leader North, included in Appendix C, indicates that the number of rostered TOI shifts is equivalent to the mandatory tasks workload, without spare capacity.

Recommendation: Implement a revised organisation structure including three new TOI positions, a Team Leader Central and redistributed workforce as indicated.

4.2 GOVERNANCE

The Transport (Rail Safety) Act 2010 stipulates obligations for the management of safety risks in operating railways, and provides a system for accreditation. The requirements include a Safety Management System (SMS), management of security incidents, emergencies, health and fitness of employees, fatigue of employees and the presence of alcohol and drugs policy.

During interviews with staff, Indec explored the awareness of the Act and the SMS, and the extent to which staff were aware of their obligations in relation to Safety.

Overall, staff were aware of the Act and the SMS, including where to find it, its purpose and broadly speaking its contents. Furthermore most staff were able to describe their own obligations under the SMS and where their processes contributed to the safe operation of the railway.

The Training function is a prime example of this. The Manager TSD Training was able to describe the document framework which links the crew training modules to the Rail Safety Act and the QR SMS.

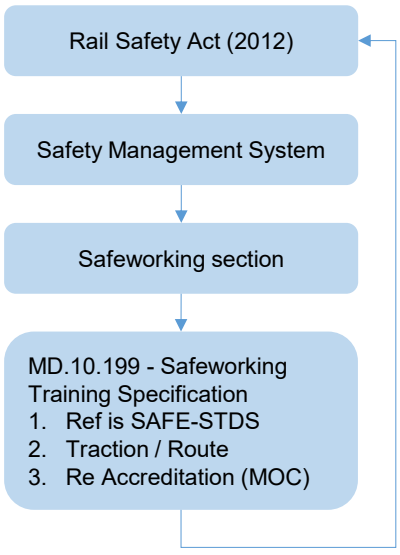
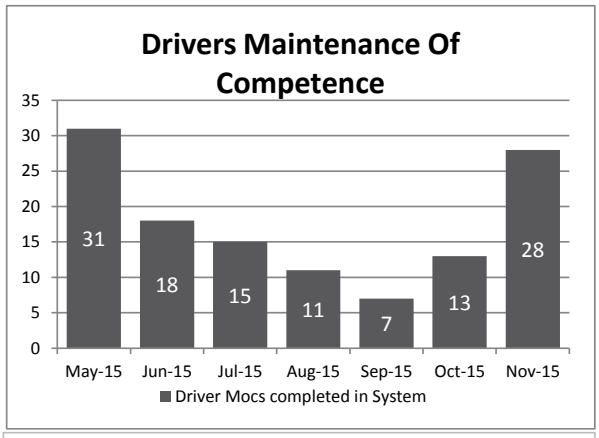
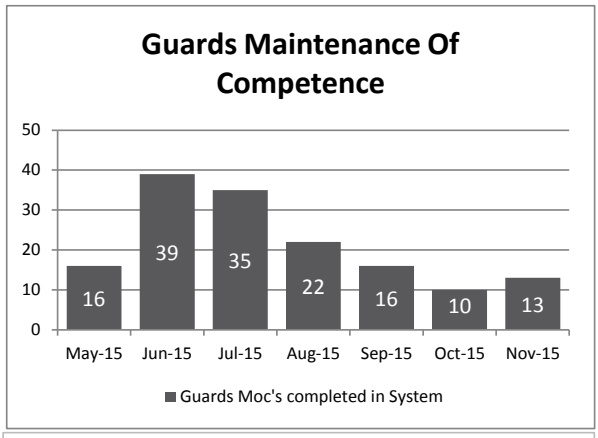


Figure 9 – Safety training document, framework

In general, the main risk to the governance of safety management appears to be in relation to the resources devoted to training and recertification of drivers as illustrated in the figure below. This is explored in sections relating to workforce planning and staffing levels.





Currently there are 4 Rail Traffic Drivers not current in their MOC. All 4 are not performing Safety Critical Work

Currently there are 5 Rail Traffic Guards not current in their MOC. All 5 are not performing Safety Critical Work

Figure 10 – Maintenance of Competence assessments completed

The Governance role provided by the Senior Manager Risk and Assurance provides an assurance function independent of TSD.

This division has three people reporting to the manager in charge. They are responsible for compliance matters, one person focuses 100% of their time on TSD, one person 80%, one other 25% each on TSD.

The section monitors compliance with the train crew Maintenance of Competency (MOC) program. This section is currently working to assure that the compliance activities are consistent with the risk register.

A monthly report is provided to the General Manager Citytrain on Compliance with Maintenance of Competency (MOC). MOC requirements includes safe working, theory and on track assessment which is required every 18 months. Records are kept by the Training Section and the Training Section enter the training program when completed into the corporate system.

The process involves the Senior Manager Risk and Assurance checking the training reports loaded within the system and checking these against the SMS requirements. Compliance section also conduct regular audits of the MOC documentation to ensure that the documentation is complete and in accordance with the SMS standard.

DTMR provides an external audit function and audit to a schedule plus undertaking ad-hoc audits at times.

Fatigue management compliance reporting is conducted by the QR corporate compliance people and distributed to managers.

5 ADEQUACY OF THE OPERATING MODEL

5.1 TSD OPERATING PERFORMANCE

The current operating model is delivering good performance results in terms of on-time-running and reliability for the current timetable and improvements in WHS indicators. This is demonstrated in Appendix B.

Staff related delays are comparable with other operating railways as reported by [redacted] and have improved in the period 2011-2014.

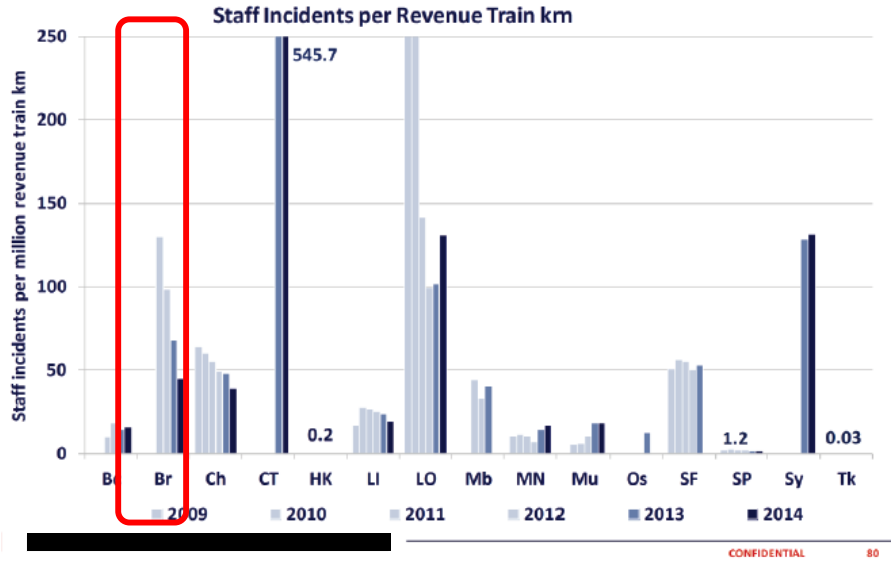


Figure 11 – Staff incidents causing a delay to the train service of 5 minutes or more

An analysis of the delays and cancellations related to crew placement shows a high degree of variation from month to month, but no significant change from 2014 to 2015.

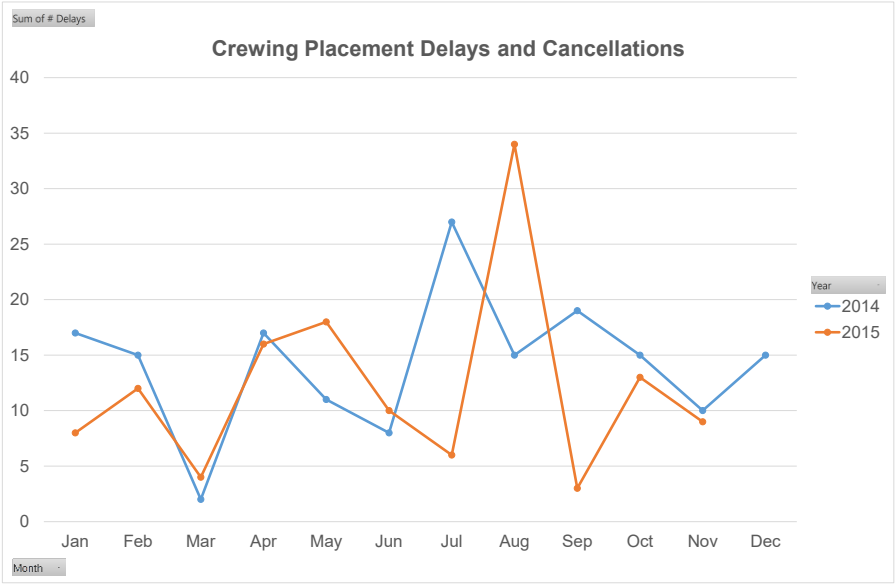


Figure 12 – QR Delays and Cancellations due to crewing placement

However, evidence from staff indicates that this performance is achieved in spite of the crew shortages within the TSD. With the challenges in 2016 of the introduction of the MBRL timetable and the NGR, and the Commonwealth Games in 2018, it will become increasingly difficult to meet the workload demands. This is explored in more detail in the following section.

5.2 STAFFING LEVELS

Train crew staffing levels are determined by the timetable, training and re certification requirements, crew availability levels and attrition rates. Although the current crew shortage levels are not impacting the timetable performance, the use of overtime, and the need to call upon Tutor crew to fill crew positions will only be exacerbated with the additional crewing requirements to service MBRL and NGR.

There is some variation in the staffing levels reported in different sources, illustrated in the following table.

	Drivers	Guards	Total
29-Oct-15 - Proposed Rail Traffic Crew Intakes to December 2017			
Budget			1026
Actual	493	482	975
Position Database - 26-Nov-15 (Provided by HR)			
Agreed staffing needs	493	493	986
Occupants employed	437	478	915

Figure 13 – Staffing Levels Oct/Nov 2015

Recruitment shortfalls in recent years have resulted in employee figures which fall short of the existing needs. The Position Database report provided by the HR team shows that 56 driver positions (11%) were vacant across the network, and 15 guard positions (3%) were vacant as at 26 November. This has implications for the ability to provide sufficient crew to ensure sustainability of the current excellent timetable performance.

It is evident that overtime is also being used to supplement normal rosters to ensure sufficient crew. While the TSD function accounts for 18.6% of QR's FTE positions, it generates 32% of QR's overtime.[1] While overtime provides a useful lever to help manage short-term fluctuations in supply and demand, persistent high levels of overtime pose risks relating to fatigue management and can mask underlying problems with short staffing.

The issues relating to vacancies also impact on other functions in TSD. The information provided by HR from the Position Database shows vacancy rates as follows.

1 Train Service Delivery Current State May 15 FINAL.PPTX

Position title	Total agreed numbers	Total Occupants	Total Vacancies	% vacant
Guards - trainee	28	11	17	61%
Roster allocation	23	17	6	26%
Driver - trainee	16	12	4	25%
Training	52	44	8	15%
Drivers - recent	59	52	7	12%
Drivers	493	437	56	11%
TSD Operations	12	11	1	8%
Guards	493	478	15	3%
Grand Total	1176	1062	114	10%

Figure 14 – Vacancy rates in TSD

While the numbers for Positions other than Drivers and Guards are not large, given the demands being placed upon the team in the coming months, there should be a strong emphasis on ensuring that the pipeline of trainees and graduating crew is full, and that the training team including Tutor Drivers and Guards is fully staffed.

The working documents used by QR for the management of staffing numbers originates in the office of rostering manager of the TSD. This document is a comprehensive spreadsheet account of crewing needs over the coming years. The numbers shown as crewing needs in this document are not necessarily aligned to those shown above. The reason for the differences in these document is not clear. However it is apparent that the TSD document is the authority on the resource planning for TSD.

In the coming 24-36 months, the staffing levels for train crew will be significantly impacted by three (3) major projects.

April 2016 Integration of the Moreton Bay Rail Link

- Crew required for testing and commissioning of the new line
- Route knowledge training
- Train crew required to operate the integrated timetable

Early 2016 to Mid-2018 – New Generation Rollingstock

- Crew required for acceptance testing
- Crew required to commission the new trains
- Training for all crew on the new train over a two year period

2018 – Gold Coast Commonwealth Games

- Additional crew required to operate additional services for spectators and participants and others

The HR Resources Plan indicates that the MBRL will require an additional 25 Driver FTEs and 10 to 15 Guard FTEs. The plan does not include forecasts of the additional requirements of the NGR, but indicates that when estimates are available a revised forecast should be prepared.

There are a number of options available to address the current and future shortfalls in crew. However, given the range of stakeholders involved in these projects, and the critical nature of the task, a strong and concerted focus on coordination and project management is required to ensure continued success in service delivery.

Recommendation: Appoint a senior resource, reporting directly to the Chief Operating Officer with appropriate authority, to develop an integrated program for the delivery of the planned operational challenges, the organisational changes recommended and completion of full employment in the train crew ranks.

6 ROLES

There are position descriptions for each role in the organisation charts. The position descriptions give generic descriptions of each role, and do not detail the tasks and responsibilities for each position.

Further guidance is found in the Performance Development Plans, which detail the expected outcomes and KPIs for each role, however the job tasks are not articulated in either document.

This has implications for staff replacement during extended leave or succession planning. There is therefore little guidance for individuals who are fulfilling roles as to what the day to day tasks are entailed in the roles.

The following table provides a summary of responsibilities based on the current job descriptions for the key roles. This demonstrates that the responsibilities are aligned to achieve organisational objectives.

Manager TSD Operations

- Achieve best crewing practices
- Measure performance against Key Performance Objectives and customer expectations.
- Manage train crew issues relevant to the area, including internal and external relationships and interfaces which impact upon train crew.
- Drive the workplace reform agenda
- Continually improve efficiency, competence and service standards
- Manage the investigation of accidents and incidents within the entire Brisbane Suburban network
- Manage the Safety and Environmental systems, policies and procedures, promoting a safety culture.
- Lead a co-operative team culture

Team Leader (x 2)

- Achieve best crewing practices
- Measure performance against Key Performance Objectives and customer expectations.
- Manage train crew issues, including internal and external relationships and interfaces which impact upon train crew
- Status reports on operational projects including train crew facilities
- Continually improve efficiency, competence and service standards
- Operational support and response to day to day operations of incidents in accordance with ZERO Harm and Queensland Rail's Safety Management System.
- Monitor the Safety and Environmental systems, policies and procedures, promoting a safety culture
- Lead a co-operative team culture

Train Operations Inspector (x 12)

- Provide train crew with technical and non-technical mentoring, coaching and support
- Assist in improving the operational performance of train crew including periodic evaluations.
- Operational support and response to day to day operations of incidents in accordance with Zero Harm and Queensland Rail's Safety Management System.
- Undertake On-Time Running monitoring at platforms and on track.
- Maintain skills, technical knowledge and Driver competencies through rostered train driving, monitoring and assessing the performance of train crew duties

- Provide operational content knowledge on current and proposed operational procedures and processes
- Conduct in-depth investigations into operational accidents and incidents
- Conduct competency based assessments to ensure train crew compliance and competence; including undertaking Driver Summative assessments and compliance monitoring.
- Deliver Recent Driver and SPAD support programs and assessments
- Review proposed changes to operational procedures/rules, documents and/or processes

Figure 15 – Position descriptions for key roles

There is considerable overlap in the responsibilities of these roles, which is then resolved in day to day operations.

The Team Leaders have an understanding of their role in the management of the Train Operations Inspectors workload, and through them the Train Crew. This includes scheduling TOIs onto particular tasks and responsibilities. This schedule is often interrupted by the rostering function as a requirement for the continuity of the daily timetable.

Similar, the roster team is able to call upon Tutor Drivers and Guards from the Training team to fill gaps in the train crew roster, which has the potential to impact upon the objectives and timelines of the Training team.

There are procedures in place for the reallocation of crew and experience tells us that the situation described above is not unusual however is exacerbated by the crew shortage.

Recommendation: Review and reinforce the protocols for the Roster function to assign TOIs, Tutor Drivers and Guards to crewing duties, including the communication protocols with their managers. Create Duty Statements for all operational roles. Review and reinforce the protocols for the Roster function to assign TOIs, Tutor Drivers and Guards to crewing duties, including the communication protocols with their managers.

7 INTERNAL AND EXTERNAL INTERFACES

There is tension between the departments of the Operations division notably to do with the allocation of train crew in the management of the daily working timetable. This was very evident on the need to keep staff up to the training needs for new trainee drivers and the re accreditation of crew.

The reporting regime for the re-accreditation of Drivers and Guards ensures that this tension between these functions doesn't create an undesirable circumstance also there is single accountability for train crew allocation to the timetable and the accreditation requirement. The issue between the operations division and train crew allocation is not unusual and has been made more difficult because of the driver shortage. This will settle to ambient levels when this situation is rectified. There is a Citytrain Rail Traffic Crew Roster Protocols document in place that delineates responsibility and process for this function.

Individual issues did present themselves, as an example the re-allocation of crew off the planned training activities by the rostering function without notification to the training team appears to occur regularly.

Also there did not appear to be any regular internal formal agenda on a service improvement program or the other change management associated with such projects as the NGR in place.

This and other examples illustrate that communication and joint planning could be improved, both between the different teams within the TSD function, and between TSD and other functional areas within the Operations Division.

There is a shortfall in the planning function for the program of operational activities required of QR. There was no evidence sited that demonstrated that a well prepared and understood program of activities is in place to deliver the challenges that will be presented to the organisation in the 2106 and beyond.

To provide this all sections of Operations Division need to be involved in the development and delivery of the plan.

The Traveltrain Division shares the training and other resources with Citytrain and so a strong working relationship needs to be developed together with an interface agreement that ensures all individual and organisational obligations and roles and responsibilities are understood. The interface agreement should include an agreed training plan and operational obligations specification.

Recommendation: Implement a formal Division wide operational control meeting.

Recommendation: Develop an interface agreement between Citytrain and Traveltrain for the provision of shared services.

8 TRAINING FUNCTION

The training team that resides within the TSD function is responsible for training and recertifying drivers and guards. The organisation structure for this team is shown in the following figure.

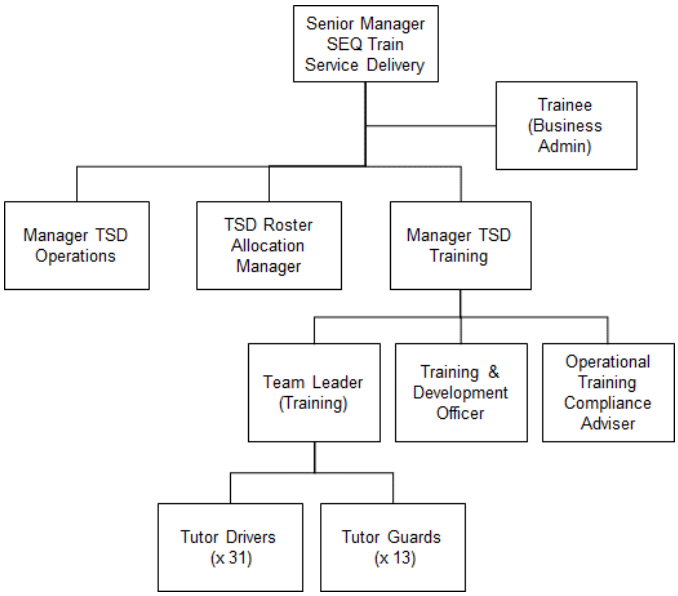


Figure 16 – TSD Training Organisation Chart

8.1 TRAINING PROGRAMS AND CAPACITY

The TSD Training team is responsible for scheduling and delivering the training for new drivers and guards. Training of a new driver takes from 12 to 15 months, and includes three months of classroom based theory learning followed by practice and route knowledge. Driver training time varies across the railways used for comparison purposes in this assignment however the time taken in QR is consistent with non sectorised multiple fleet type railways.

Given the projects planned in 2016-2018 and the demands they will place upon the train crew workload, it is worth considering assigning new drivers to specific sectors so that training can be more focused and timely.

Recommendation: Review the option of initially assigning new drivers to specific sectors of the railway so that training can focus on a specific route and train set.

Tutor Drivers and Tutor Guards fulfil both components of the training (theory and practical). The Positions Database showed that as at 26 November 2015, there were 26 Tutor Drivers employed against 32 agreed need. All 13 Tutor Guard positions were filled. The Tutors are included on the roster as crew if required and as the training need permits.

Comparisons with other railways is limited by the different structure in Railway 1. The training function is a part of the corporate HR team which provides all training needs to the organisation, and the structure and numbers for that team were not provided. However, the operational teams include Driver and Guard Trainers, both within the depot crew and within the Train Crew Operations Support area. The following comparison has been based on those positions.

As at end 2015	Railway 1 Data	Railway 1 Comment	Railway 2 Data	Railway 2 Comment	QR Citytrain - current Data	QR Citytrain - current Comment
DRIVER TRAINING						
Trainee drivers	78		15		13	
Tutor Drivers	92	Driver Trainers, including those embedded in teams	36	Driver trainers	31	
Trainee drivers per Tutor Drivers	0.8	Excludes the corporate training function	0.4		0.4	
Trainee drivers as a % of current drivers	6.4%		5.1%		2.7%	
GUARD TRAINING						
Trainee guards	50				29	
Tutor Guards	45	Guard Trainers, including those embedded in teams			13	
Trainee Guards per Tutor Guards	1.1	Excludes the corporate training function			2.2	
Trainee Guards as a % of current guards	5.4%				5.9%	

Figure 17 – Comparison of train crew training ratios

As shown in Figure 17 the ratio of trainee drives to tutor drivers is comparable with Railway 2, but lower than Railway 1. Within QR, the pool of 31 Tutor Drivers is more than twice the pool of 12 Trainee Drivers, however, they are also rostered to drive trains to meet timetable requirements as is also the case within other railways.

The attrition rate for Train Drivers appears to be in the order of 12 per annum and the class sizes in QR are 12 trainees with a capacity of ramping up the 24 if required. The additional Tutor Driver capacity will be taken up in the reaccreditation role.

The above factors indicate that QR has close to the appropriate level of Tutor Drivers to manage the day to day needs of the organisation.

However it was found during the course of the study that the training administrative and planning resource is not capable of producing a training plan because of an unfilled vacancy within the training team structure. The Position Description of the vacant position includes the preparation of the training plan that would form an essential element of a workforce plan.

It is understood that the crewing demands of the MBRL timetable and NGR introduction in early 2016 may restrict the availability of Tutor Drivers. As a result the detailed planning required to complete a cogent plan for the delivery of an implementation plan for the restructure of the TSD needs to take into account the needs of the 2016 timetable and NGR challenges.

Recommendation: Develop an overarching operational readiness plan that addresses the needs of the organisation for the delivery of the recommended TSD Divisions organisational change, the MBRL Timetable introduction and the NGR testing commissioning and training needs and the needs if any for the 2018 Commonwealth Games.

Recommendation: Fill the vacant administrative and planning position in the Training Division as soon as possible.

9 WORKFORCE AND SUCCESSION PLANNING

9.1 WORKFORCE PLANNING

During the review the following workforce planning information was provided, a;

a) workforce plan model prepared by the TSD Roster Allocation, which is updated monthly;

b) resource plan for the coming 18 months prepared by the Manager of Workforce Planning & Reporting; and

c) strategic workforce plan for a 3-5 year timeframe prepared by the Manager of Workforce Planning & Reporting.

The three documents listed above have significant inconsistencies see Figure 18 for a summary of crew numbers.

Month / Driver FTE	Jul-15	Oct-15	Jan-16	Apr-16	Jul-16	Oct-16	Dec-16
Projected Demand							
TSD Workforce Plan Model "Total Required Drivers"	523	541	540	546	546	549	548
HR Resource Plan "Demand" (p.19)	549	567	566	572	572	575	574
Projected supply							
TSD Workforce Plan Model "Total Qualified Drivers"	496	494	497	490	487	490	488
HR Resource Plan "Supply" (p.19)	522	520	523	516	513	516	514

Figure 18 – Workforce plan figures – driver demand and supply

In the absence of an agreed workforce requirement and in the face of the aforementioned challenges this situation needs to be clarified to ensure that the essential elements of a well-constructed implementation plan are identified and bought under control.

Recommendation: Develop an overarching operational readiness plan that addresses the needs of the organisation for the delivery of the:

a) recommended TSD Divisions organisational structural change;

b) MBRL TT introduction; and

c) NGR testing, commissioning, training and growth timing requirements.

9.2 SUCCESSION PLANNING

There did not appear to be a formal, structured approach to succession planning, which should also form part of the business continuity plan.

During interviews, TSD staff were able to identify appropriate candidates to fill their roles and were actively supporting this through arranging for those staff to act in their roles during extended leave. In other instances, no eligible candidates had been identified.

There is a particular risk in relation to the position of Senior Manager SEQ Train Service Delivery. The incumbent is a highly experienced and respected individual, who plays a critical role in the success of service delivery. There did not appear to be any succession planning for this key role, or for the skills and knowledge of the individual.

Recommendation: Engage the support of the corporate HR function to implement succession planning for all management positions, with a particular focus on the position of Senior Manager SEQ TSD.

10 IMPLEMENTATION PLAN

The development of an implementation plan for delivery of the recommended changes to the TSD structure cannot sensibly be produced without consideration of the needs of the MBRL Timetable, NGR crewing requirement, and the Commonwealth Games needs. This is because the train crewing drivers' and guards' employment levels are below the apparent collective needs of these initiatives. It appears that additional crew are required to satisfy the needs of all three programs and other issues may place a demand on the crewing levels that are not visible to this assignment. As a result, it is not valid to produce an organisational restructure implementation plan that will by necessity recruit TOIs out of the drivers' roles in a time when there is a critical shortage of drivers.

There is a need to restructure the crewing disposition bought on by the need to establish a new crew sign-on points (depots) at Kippa Ring and Elimbah and the Senior Manager TSD has advised that he has plans to reallocate the supervision and other crew at the same time so the beginnings of an implementation plan are formed. Also there is a Driver and Guard recruitment program in place to address the crewing shortage. However the plan to actively provide for all the risks involved in the delivery of the visible initiatives needs a broader view of the concurrent activities within QR.

The organisation faces significant challenges described above and other challenges that are not visible to this assignment. Its current shortage of train crew personnel make the challenges to be faced even more difficult than they already are.

Operational readiness for the integration of the NGR and the MBRL is at risk due to the demand this will place on the train crewing resources.

For this reason, it is recommended that consideration be given to the creation of a role with the line responsibility for the operational readiness for these critical outcomes. The role would be accountable to the COO and be provided with the delegated authority of that position in the development of a strategy and project control regime to ensure the targeted outcomes are met

Recommendation Appoint a senior resource, reporting directly to the Chief Operating Officer with appropriate authority, to develop an integrated program for the delivery of the planned operational challenges, the organisational changes recommended and completion of full employment in the train crew ranks.

APPENDIX A – SAMPLE WORKFORCE PLAN TABLE OF CONTENTS

Table of Contents

1. Introduction and overview

- Define the scope of the planning document – which teams are addressed in the workforce plan (crew, training functions – TOIs? Tutor Drivers)
- What is the period of time covered by the plan?
- Background on the functions covered including core business activities and responsibilities
- What are the relevant organisational objectives and measures?
- Why has this plan been prepared? Why is it important? How does workforce planning benefit our organisation?
- What are the performance measures for our Workforce Plan?
- How this plan was prepared, including consultation cross teams and with stakeholders throughout the organisation
- Budget limitations

2. Organisational Context

- Projects and initiatives which will impact in the plan period?
- Which other departments play a role in the support the recruitment, training and deployment of the workforce
- Budget context – available budget and the impact of the proposed workforce plan in overview
- Staff Attrition Rate
- Staff Age Profile and expected attrition rate
- Budget impact

3. Current Workforce Profile

- What is your current workforce profile in terms of demographics, numbers and job roles?
- What data sets are important to analyse (e.g. date of birth, length of service, current job role, job categories and hierarchical levels in jobs) and their status? And what are the relationships or correlations between the data sets?
- What are the current skills and competencies of your workforce? What are your strengths and development needs?
- What is the consultation with your current workforce telling you regarding workforce issues and what is working well or what could be improved?
- What are the current workforce priorities, based on your workforce profiling and analysis?
- How do you predict the availability variables for the workforce spreadsheet, including sick leave, WHS, SPAD retraining, etc.? What have these been in the recent past?
- Age Profile details
- Attrition Rate details
- Any changes that may influence these figures

- Current budget performance including base pay, overtime levels, and other

4. Recruitment and Training Plans

- Recruitment Plan (Linked to Appendices)
- Change in staff number required by month
- Relativity to agreed numbers
- Strategy employed to meet the above numbers.
- Budget implications of the recruitment plan i.e. cost of the delivery of the recruitment plan.
- Training Plan (Linked to Appendices)
- Overview of rate of qualification of employees in the nominated timeframe i.e. employees availability by month.
- Details on the strategy to be adopted in the delivery of the plan. Changes if required to training plan, recruitment drive, training staff numbers required, training methodologies and the measures to enact the changes necessary.
- Changes to facilities if required

5. Conclusion, evaluation strategy and next steps

- What are the key outcomes of your workforce action plan?
- How will you evaluate the strategies in your workforce plan?
- What are the next steps for implementation of your workforce action plan?
- What may be the success factors and the barriers to implementing this workforce plan?

6. Appendix A – Workforce plan worksheet

- Spreadsheet with detailed planning figures
- The existing planning sheet has an appropriate structure, but enhancements are required:

  a) Must be supported by detailed training plan which shows new recruitments, training period, dropout rate, and graduation

  b) Should have realistic projections for losses and gains in employed drivers which are linked to the comments and assumptions in the section “Current Workforce Profile”

  c) Must reflect actual drivers employed. The HR Database at end November 2015 showed 56 driver vacancies, however the current workforce planning spreadsheet shows the positions in the system, not the actual numbers of drivers.

  d) Must include the 2016 timetable, MBRL and NGR, detailing separate requirements for drivers to support acceptance testing, commissioning and the shifts required to train drivers.

  e) Different line items and sections should be logically linked and based on calculations

- The spreadsheet should be designed as a tool to allow scenario testing with different variables so that all stakeholders can understand the risks and consequences

7. Appendix B - Recruitment Plan

This plan should detail how many crew are to be recruited into the various types of roles, the timing of those recruitments, and any changes to the recruitment process. This should feed directly into the training plan.

Should consider not only train crew but also Tutor Drivers and Guards, and TOIs.

8. Appendix C – Training plan worksheet

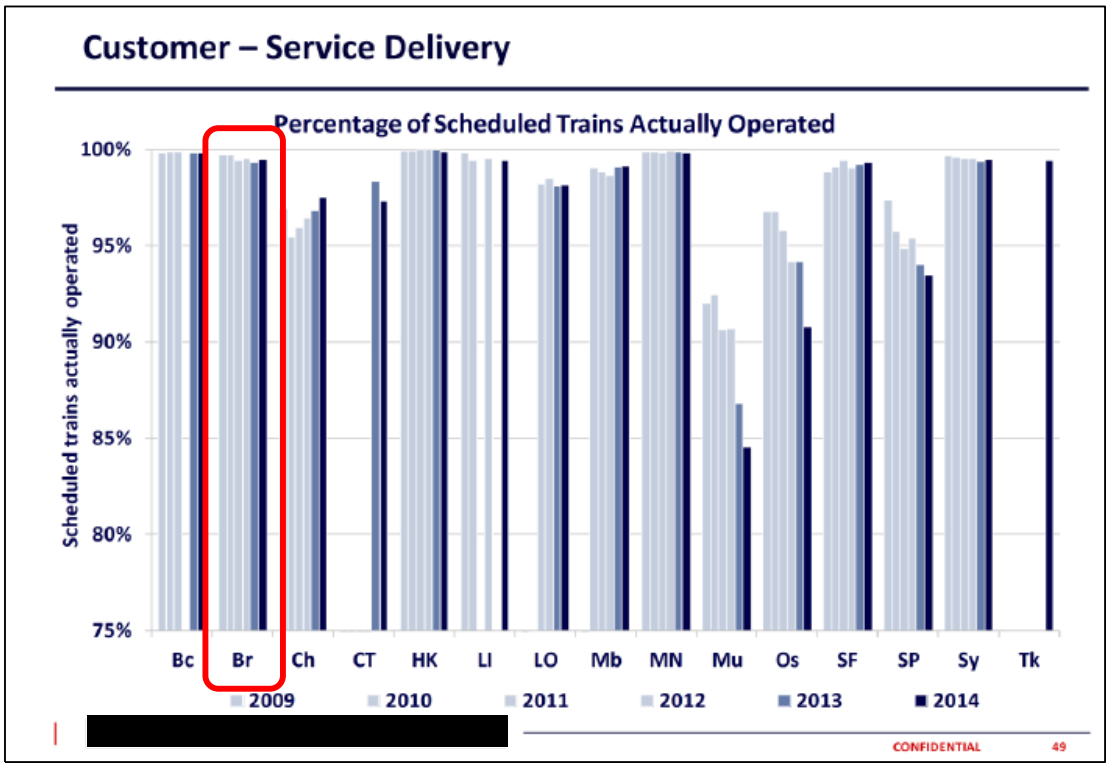
The training plan must be a planning tool which feeds into the workforce plan.

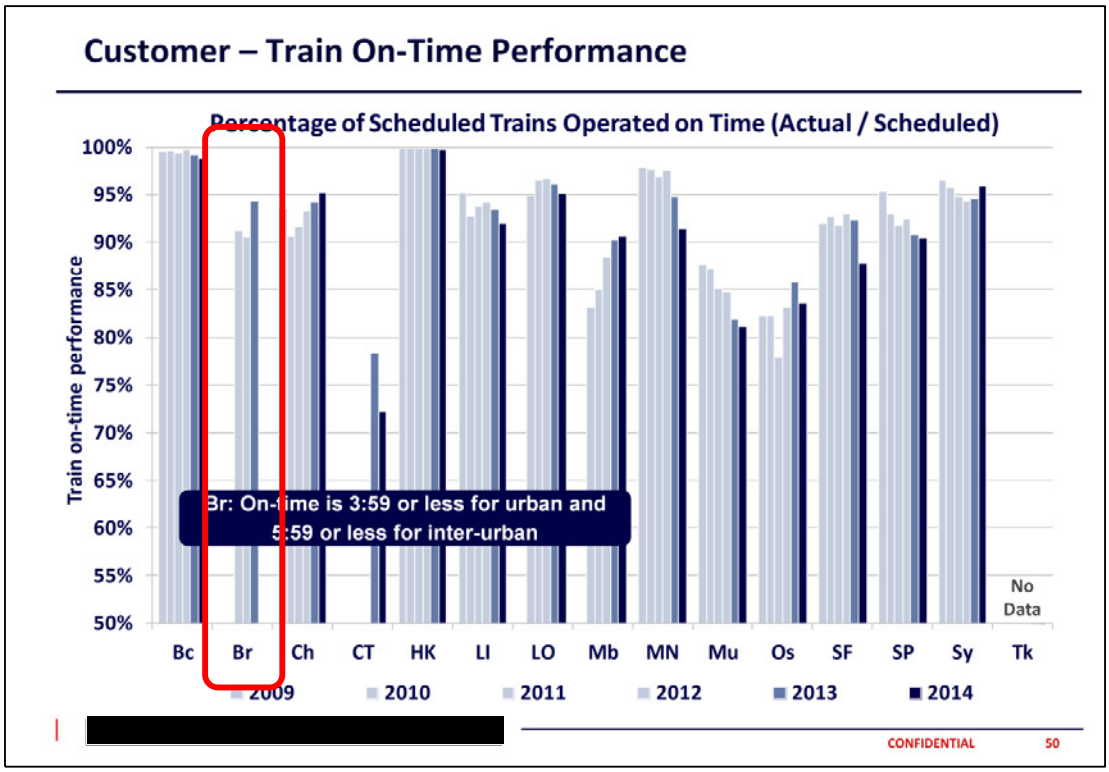
Should detail the inputs and outputs, including

- Attrition rate during training
- Average duration of new driver training, which can be varied for stress testing
- Include remedial training for performance issues
- Calculate graduating drivers
- Calculate tutor drivers required
- Allow for MBRL and NGR training including the tutor drivers required to achieve this
- Calculate the TOI shifts required for summative assessments and MOCs

APPENDIX B – OPERATIONAL PERFORMANCE

The following charts are taken from the [redacted]), which is held by the QR Benchmarking and Insights team.





APPENDIX C – TOI WORKLOAD ANALYSIS

ANALYSIS BASED ON 14 TOI POSITIONS

Mandatory Tasks	14 x Citytrain TOI's = 68.25 per week = 3,549 Rostered shifts per year	Mandatory shifts required for 2016 for known weekly/monthly duties	Mandatory shifts required for 2016 - remove one month of shifts to account for Annual Leave
Standard Rostered Shifts p/a	3,549		
Annual leave days		350	350
Sick days		140	140
Coverage Shifts		1,144	1,144
Test Train shifts		260	260
Recent Driver/SPAD monitoring shifts		260	260
Event Recorder shifts		336	308
Audits		336	308
12 & 24mth MOC's (Recent Drivers)		88	88
TOI MOC's		56	56
Summatives		63	63
SPAD Coaching Post Incident (estimation)		250	250
HSR Depot Meetings/Inspections		60	60
Yard Inspections & Safety Compliance		48	48
AoD Testing (approx 4p/mth)		52	52
Cert IV Training		42	42
Additional Training TOI's (Vigi; QNRP 3; MBRL & NGR)		70	70
Tilt Train Yard & Shunt Accreditation		42	42
MBRL Training x 1 TOI per week (6mths)		130	130
NGR Training x 1 TOI per week (12mths)		260	260
Total number of shifts	3,549	3,987	3,931
Shifts left after Mandatory known shifts removed		-438	-382
If one BLP worked by each TOI each f/n	329	-109	-53

ANALYSIS BASED ON 17 TOI POSITIONS

Mandatory Tasks	17 x Citytrain TOI's = 82.875 per week = 4,309 Rostered shifts per year	Mandatory shifts required for 2016 for known weekly/monthly duties	Mandatory shifts required for 2016 - remove one month of shifts to account for Annual Leave
Standard Rostered Shifts p/a	4,309		
Annual leave days		425	425
Sick days		170	170
Coverage Shifts		1,144	1,144
Test Train shifts		260	260
Recent Driver/SPAD monitoring shifts		260	260
Event Recorder shifts		408	374
Audits		408	374
12 & 24mth MOC's (Recent Drivers)		88	88
TOI MOC's		84	84
Summatives		63	63
SPAD Coaching Post Incident (estimation)		250	250
HSR Depot Meetings/Inspections		60	60
Yard Inspections & Safety Compliance		48	48
AoD Testing (approx 4p/mth)		52	52
Cert IV Training		60	60
Additional Training TOI's (Vigi; QNRP 3; MBRL & NGR)		85	85
Tilt Train Yard & Shunt Accreditation		51	51
MBRL Training x 1 TOI per week (6mths)		130	130
NGR Training x 1 TOI per week (12mths)		260	260
Total number of shifts	4,309	4,306	4,238
Shifts left after Mandatory known shifts removed		3	71
If one BLP worked by each TOI each f/n	408	411	479

Annex 3 Correspondence between GIRO and Queensland Rail (March 2016)

75, rue de Port-Royal Est, bureau 500
Montréal (Québec) Canada H3L 3T1

[redacted]
info@giro.ca | www.giro.ca

Improving efficiency at every turn *L'efficacité sur toute la ligne*

March 17, 2016

Mr. [redacted]
Program Manager
Queensland Rail
305 Edward Street
Brisbane QLD 4000
AUSTRALIA

Mr. [redacted]
Senior Manager TSD
Queensland Rail
69 Mayne Road
Bowen Hills QLD 4006
AUSTRALIA

Subject: Statement of Work – Final iteration for MBRL job cards optimization

Dear Mr. [redacted] and Mr. [redacted]:

As per email discussions during the week of March 14, 2016, between Mr. [redacted] and Ms. [redacted] and on-site discussions between Mr. [redacted] and Mr. [redacted], for several reasons, it has become apparent that a seventh iteration for MBRL job cards optimization is required. GIRO Inc. is pleased to submit the following proposal to QR for this additional iteration. However, this iteration must be the last and all efforts must be made to achieve that goal, as there can be no eighth iteration.

GIRO has already voiced its concerns about the impact that the rules added in the previous iterations could have on the total number of optimized shifts. There is a significant number of competing constraints in the problem, and because of them, the quality of the solutions produced may seem poor. For instance, depot strengths were not reviewed since iteration 1, although these numbers may have been brought into question by the addition of the continuous driving/guarding time rule. Consequently, we believe it is appropriate to raise the following question: As proven by the last optimizer results, based on current rules, QR's current driver and guard resource levels are not sufficient. Therefore, should a seventh iteration be performed on the current bases, knowing that its results will inevitably be infeasible? Or should rules be reviewed, allowing this final iteration to be used to produce solutions that are feasible?

To promote the success of this additional iteration, GIRO proposes that it be conducted differently from the previous iterations:

- New timetables will be imported for this iteration. As we are working with tight deadlines, updated and error-free timetables are required as soon as practical in order for work to commence. Once timetables are imported, time will simply not allow correcting or further adjusting them. Each day type will be imported only once.

  For this exercise, QR will need to import timetables into ***HASTUS*** as already demonstrated in early January 2016. QR must then make all necessary adjustments, validations, and corrections to timetable data into ***HASTUS*** directly. Data must be complete with all revenue and non-revenue trains, passing time for each station on train paths including any required load time (at train start, end, or at any point in the

.../2

path), preparation times when blocks leave and return to depots, and pull trips when blocks leave and return to depots.

As previously mentioned in other communications, since the correctness of initial data is critical well before submitting optimization jobs, all timetable data, preparation times, possible relief points, possible canteens, applicable route qualifications, and other applicable time components (walk times, sign times, break times, continuous driving/guarding times, etc.) need to be thoroughly reviewed by QR to ensure that they are free of errors. Similarly for all optimizer constraints such as global average working time, depot average working time, depot number of morning and afternoon shifts, depot global number of shifts, etc. GIRO will produce a document containing all reference data in question and QR will review and sign off on this document for optimization to commence. Although this task will require QR involvement in a busy period, this involvement is critical to make sure that the bases for the optimizer are solid and perfect, as it appears we have been working with inaccurate data for a number of iterations already. GIRO has started to build this document already.

Once this document is signed off on and all initial data is approved, the optimized Monday–Thursday schedule will be provided first and it will need to be thoroughly reviewed and validated by QR. QR must provide a single set of comments before GIRO continues work on the Friday, Saturday, and Sunday schedules. For Monday–Thursday only, GIRO is willing to produce three solutions: one with current rules, one where the only change is the continuous driving/guarding time rule having its maximum value changed from 2h30 to 3h00, and one where the only change is removal of the continuous driving/guarding time rule. Once QR reviews and validates the Monday–Thursday solutions, QR must pick one before GIRO continues work on the Friday, Saturday, and Sunday schedules. GIRO will produce only one solution for Friday, Saturday, and Sunday schedules.

The proposed cost is shown below:

Description	Cost
15 days @ AUD 1,860 – No on-site visit is proposed – Same cost as previous iteration	AUD 27,900

The proposed payment schedule is shown below:

Description	Payment
Delivery of optimization results	100%

Notes:

The invoice will be addressed to Mr. [redacted].

The agreement between QR and GIRO in relation to the work on MBRL job cards optimization, covering its agreed scope, process, acceptance testing, approval, and deliverables, is defined in our GITC Customer Contract, CON-6229 – Workforce Management System (WMS) Software Vendor Solution, executed on September 14, 2015. It also applies to this seventh iteration. Of particular note are additional provision AP13 and Attachment A to Module Order MO9 – 'MBRL Consultancy Services'.

.../3

We are looking forward to working with QR on this final iteration and we appreciate the trust placed in GIRO's solutions. Please do not hesitate to contact us should you require any other information or wish to discuss this document further.

Yours truly,

[redacted]
Account Manager, Rail / Project Director
[redacted]

GIRO-QUEENSRAIL-PROP-TCOST-LET-20160317.docx

C.C. Mr. [redacted] – Analyst, Mr. [redacted] – Senior Project Manager, Team Leader; Ms. [redacted] – Senior Business Analyst, Mr. [redacted] – TSD Roster Allocation Manager

Annex 4 Correspondence between GIRO and Queensland Rail (October 2016)

75, rue de Port-Royal Est, bureau 500
Montréal (Québec) Canada H3L 3T1
[redacted]
info@giro.ca | www.giro.ca

Improving efficiency at every turn *L'efficacite sur toute la ligne*

October 21, 2016

Mr. [redacted]
Project Manager
Queensland Rail
305 Edward Street
Brisbane QLD 4000
AUSTRALIA

Mr. [redacted]
Senior Manager TSD
Queensland Rail
69 Mayne Road
Bowen Hills QLD 4006
AUSTRALIA

Subject: Statement of Work – Exceptional additional iteration for MBRL job cards optimization

Dear Mr. [redacted] and Mr. [redacted]:

GIRO values the positive business relationship that it enjoys with Queensland Rail (QR). We note with sympathy and concern the difficulties that have accompanied the initial introduction of the MBRL extension and the way in which they have been portrayed in the media. We are sure that you will agree that none of these difficulties can be attributed to GIRO or the ***HASTUS*** software, and we appreciate the fact that no such suggestion has been made in any of the media coverage that we have seen or in any communications that we have had with you to date. We trust that QR will continue to make every effort to ensure that no misunderstandings are communicated about *HASTUS* or its role in the difficulties that have accompanied the initial introduction of the MBRL extension.

GIRO has already repeatedly voiced its concerns both verbally and in writing about the impact that the rules added in the previous optimization iterations could have on the total number of optimized shifts. There were a significant number of competing constraints in the problem, and because of them, the quality of the solutions produced was compromised. In other words, the solutions were not optimal. For instance, depot strengths were not reviewed since iteration 1, although these numbers may have been brought into question by the addition of the continuous driving/guarding time rule. Consequently, in a letter dated March 17, 2016, we raised the following point: "As proven by the last optimizer results, based on current rules, QR's current driver and guard resource levels are not sufficient. Therefore, we asked QR should another iteration be performed on the current bases, knowing that its results will inevitably be infeasible? Or should rules be reviewed, allowing this final iteration to be used to produce solutions that are feasible?" Ultimately, a final iteration was done with similar rules leading to these difficulties.

As per email discussions during the week of October 14, 2016, between Mr. [redacted] and me, for the reasons stated above, it has become apparent that an eighth iteration for MBRL job cards optimization is required. Accordingly, GIRO submits the following proposal to QR for this exceptional additional iteration. However, this iteration absolutely must be the last and all efforts must be made to achieve that goal. The success of the exercise will also depend on QR modifying its view of which rules should stay and which rules should be removed. For example, considering reduced timetables while keeping the current rules would not provide an effective solution. Unless QR is willing to modify the rules and to take GIRO's suggestions into consideration, there is little point in carrying out this exercise as results will be almost unchanged.

.../2

To promote the success of this exceptional additional iteration, GIRO proposes that it be conducted differently from the previous iterations:

- New timetables will be imported for this iteration by QR. As we are working with tight deadlines, updated and error-free timetables are required as soon as practical in order for work to commence. Once timetables are imported, time will simply not allow correcting or further adjusting them. Each day type will be imported only once.

  For this exercise, QR will need to import timetables into ***HASTUS*** as was already demonstrated in early January 2016. QR must then make all necessary adjustments, validations, and corrections to timetable data into ***HASTUS*** directly. Data must be complete with all revenue and non-revenue trains, passing time for each station on train paths including any required load time (at train start, end, or at any point in the path), preparation times when blocks leave and return to depots, and pull trips when blocks leave and return to depots. Please refer to the checklist attached. GIRO is able to commence work next week providing that an export of QR's database containing the timetables is available to us by next Tuesday, October 25.

- As previously mentioned in other communications, since the correctness of initial data is critical well before submitting optimization jobs, all timetable data, preparation times, possible relief points, possible canteens, applicable route qualifications, and other applicable time components (walk times, sign times, break times, continuous driving/guarding times, etc.) need to be thoroughly reviewed by QR to ensure that they are free of errors. Similarly for all optimizer constraints such as global average working time, depot average working time, depot number of morning and afternoon shifts, depot global number of shifts, etc. GIRO will produce a document containing all reference data in question and QR will review and sign off on this document for optimization to commence. Although this task will require QR involvement in a busy period, this involvement is critical to make sure that the bases for the optimizer are solid and perfect, as it appears we have been working with inaccurate data for some of the previous iterations.

- Once this document is signed off on and all initial data is approved, the optimized Monday–Thursday schedule will be provided first and it will need to be thoroughly reviewed and validated by QR. QR must provide a single set of comments before GIRO continues work on the Friday, Saturday, and Sunday schedules. Once QR reviews and validates the Monday–Thursday solution, GIRO will continue to work on the Friday, Saturday, and Sunday schedules.

The proposed cost is shown below:

Description	Cost
15 days @ AUD 1,860 – No on-site visit is proposed – Same cost as previous iteration	AUD 27,900

The proposed payment schedule is shown below:

Description	Payment
Delivery of optimization results	100%

Notes:

The invoice will be addressed to Mr. [redacted].

The agreement between QR and GIRO in relation to the work on MBRL job cards optimization, covering its agreed scope, process, acceptance testing, approval, and deliverables, is defined in our GITC Customer Contract, CON-6229 – Workforce Management System (WMS) Software Vendor Solution, executed on September 14, 2015. It also applies to this exceptional iteration. Of particular note are additional provision AP13 and Attachment A to Module Order MO9 – 'MBRL Consultancy Services'.

GIRO is able to commence work next week providing that an export of QR's database containing the timetables is available to us by next Tuesday, October 25 at the latest. We would also note that, as the previous iteration was intended to be the last, our experts are already committed to other projects and already have some prior on-site visits scheduled. These demands on their time will influence the speed at which we will be able to progress in this project.

We remain committed to working with QR for the success of this project and we appreciate the trust placed in GIRO's solutions. Please do not hesitate to contact us should you require any other information or wish to discuss this document further.

Yours truly,

[redacted]

Project Director

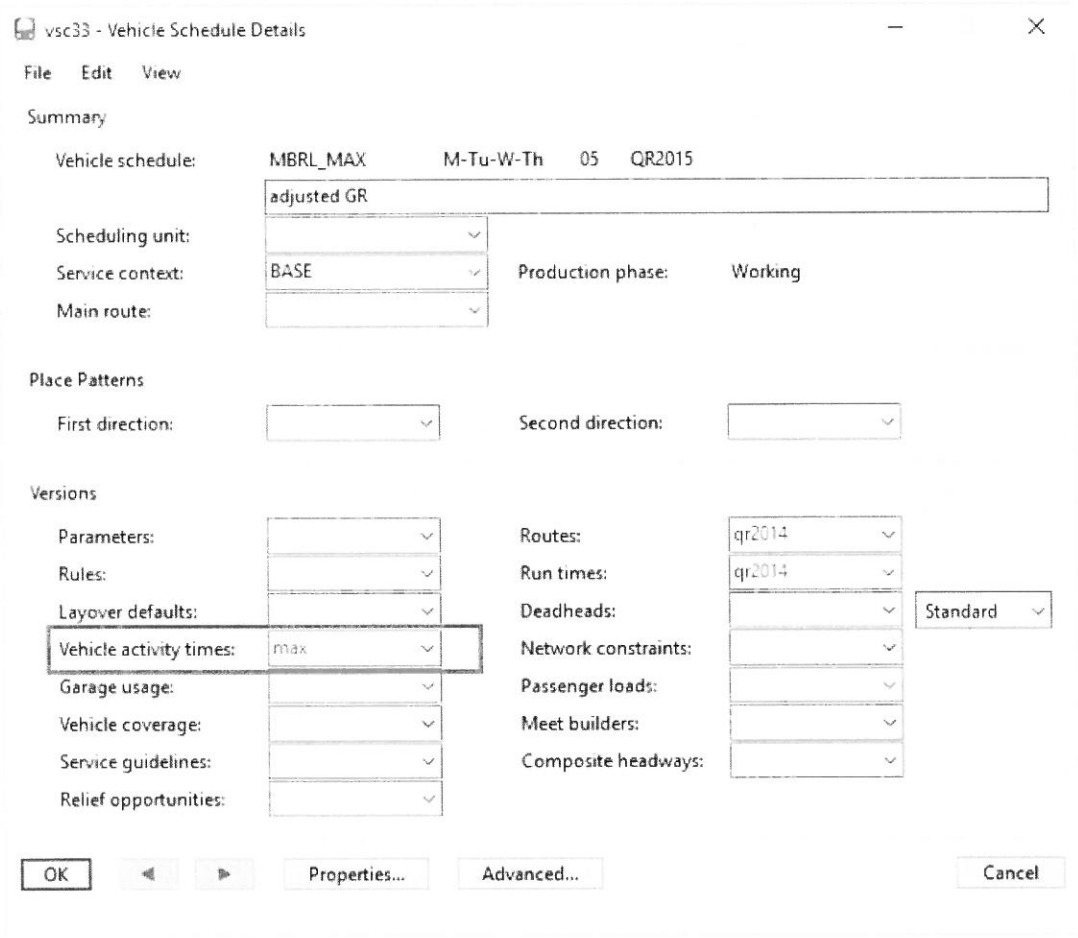
[redacted]

GIRO-QUEENSRAIL-PROP-TCOST-LET-20161021.docx

C.C. Mr. [redacted] – Analyst, Mr. [redacted] – Senior Project Manager, Team Leader; Ms. [redacted] – Senior Business Analyst, Mr. [redacted] – TSD Roster Allocation Manager

Checklist for VSC validation

1. **Import the VSC**
2. **Use the last vehicle activity times version**



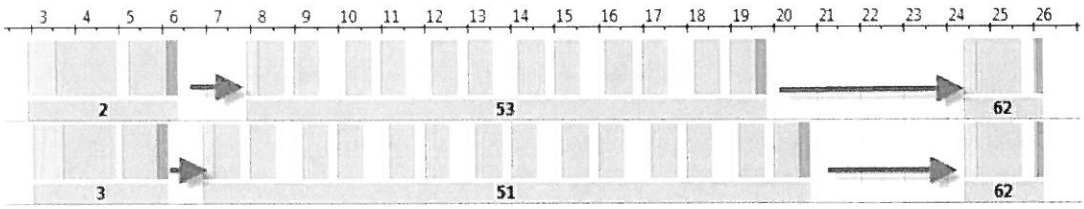
3. **Validate the trips and the blocks**

The first step is to validate that the trips are correct:

- Start time, end time.
- Duration
- Timing points

Then, verify that the links are properly linked together to make the correct blocks.

Adjust the vehicle tasks to correctly model mid-day parkings. This is important for the preparation time.

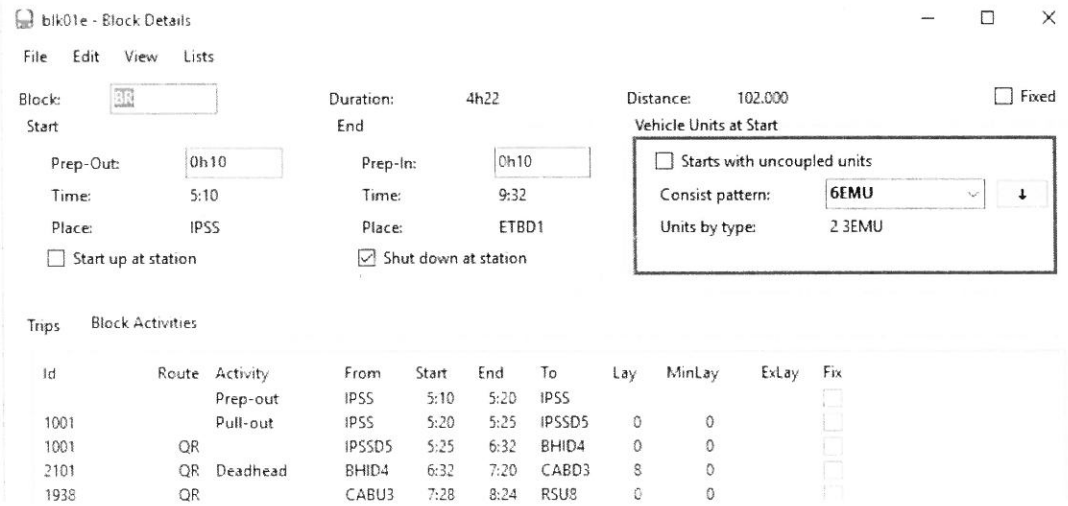


4. Validate the pull durations

For all the blocks, validate that the pull durations are correct. Make sure the blocks are ending at the proper location (E.g. IPSS instead of IPSU3).

5. Validate the consist pattern

Validate that the consist pattern of the blocks are correct. The consist pattern affects the default prep time and is important to set the trp avail for travel attribute. (3 cars vs 6 cars)

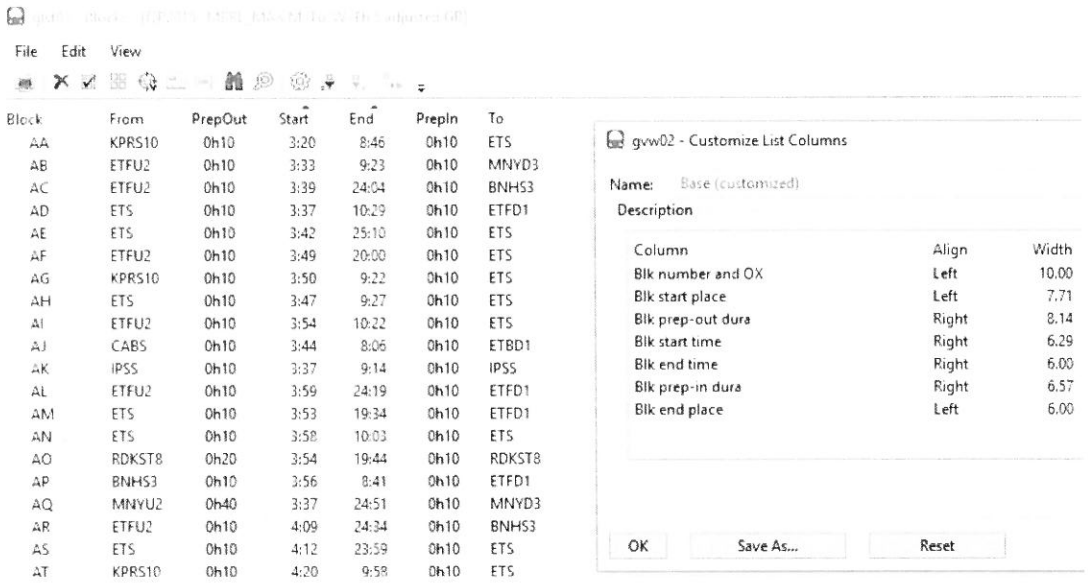


6. Validate the preparation in-out

This step is crucial as wrong preparations have slowed us down a lot in the previous iterations. You must validate that the preparation times are correct for all the blocks. Keep in mind that the definition of pull time and the prep time can sometimes be interchanged, for example when there needs to be a longer prep to change direction. For example, a train starting on the DOWN direction in IPS required 10 min of prep whereas a train going UP required 20 min.

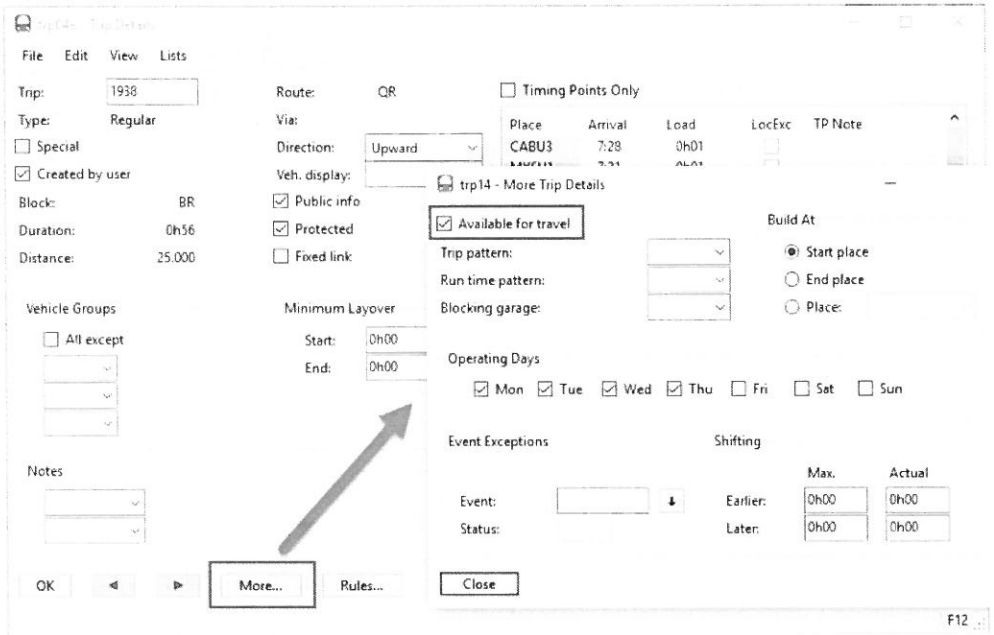
Make sure to adjust the prep time if the train is parked during the day versus taken out of the yard in the morning.

Use a list of blocks and display the blk prep-out dura and blk prep-in dura to help you spot mistakes.



7. Validate the travel availability

A trip ran by a 3-car consist unit should not be available for travel. Verify this using a list of trips and displaying the block consist pattern and the Trp avail for travel attributes. You can modify the attribute by opening the More Trip Details window. Select multiple trips, and apply the modification all at once using the command **File-> Apply on all selected**.


File Edit View Lists
Trip: 1938
Type: Regular
Special
Created by user
Block: BR
Duration: 0h56
Distance: 25.000
Route: QR
Via:
Direction: Upward
Veh. display:
Public info
Protected
Fixed link
Timing Points Only
Place Arrival Load LocExc TP Note
CABU3 7:28 0h01
trp14 - More Trip Details
Available for travel
Trip pattern:
Run time pattern:
Blocking garage:
Build At
Start place
End place
Place:
Vehicle Groups
All except
Minimum Layover
Start: 0h00
End: 0h00
Operating Days
Mon Tue Wed Thu Fri Sat Sun
Event Exceptions
Shifting
Max. Actual
Event:
Status:
Earlier: 0h00 0h00
Later: 0h00 0h00
Notes
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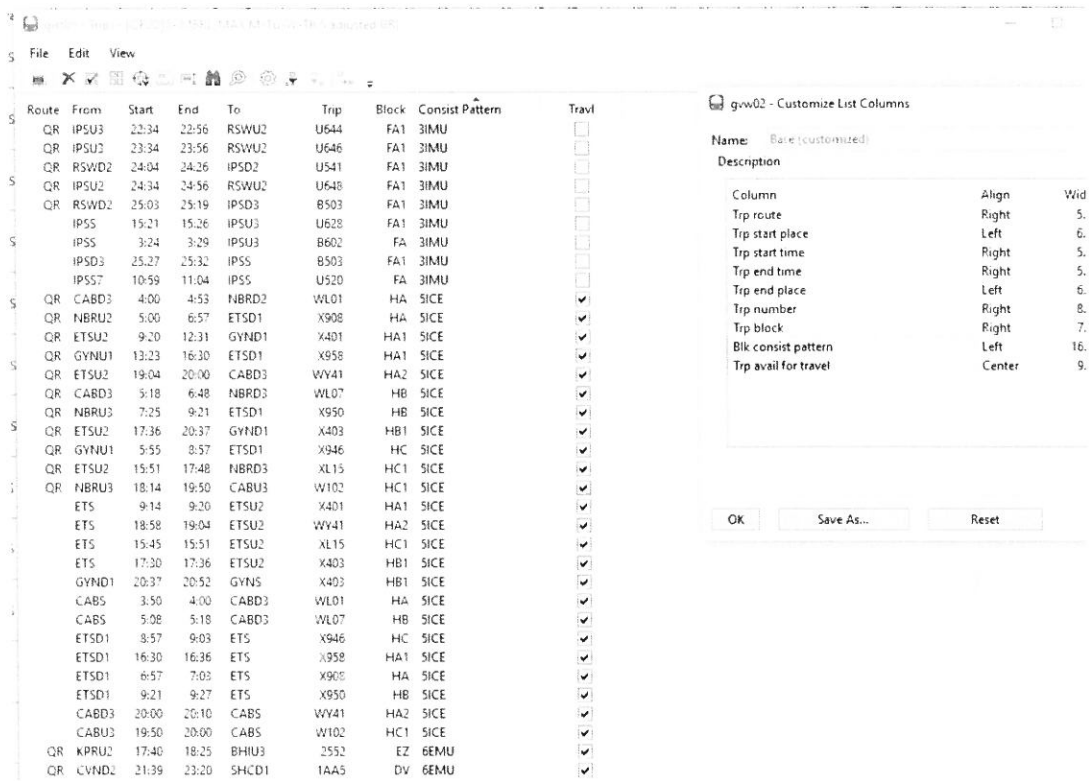
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QR IPSU3 23:34 23:56 RSWU2 U646 FA1 3IMU
QR RSWD2 24:04 24:26 IPSD2 U541 FA1 3IMU
QR IPSU2 24:34 24:56 RSWU2 U648 FA1 3IMU
QR RSWD2 25:03 25:19 IPSD3 B503 FA1 3IMU
IPSS 15:21 15:26 IPSU3 U628 FA1 3IMU
IPSS 3:24 3:29 IPSU3 B602 FA 3IMU
IPSD3 25:27 25:32 IPSS B503 FA1 3IMU
IPSS7 10:59 11:04 IPSS U520 FA 3IMU
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QR ETSU2 19:04 20:00 CABD3 WY41 HA2 5ICE
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QR GYNU1 5:55 8:57 ETSD1 X946 HC 5ICE
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CABS 5:08 5:18 CABD3 WL07 HB 5ICE
ETSD1 8:57 9:03 ETS X946 HC 5ICE
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ETSD1 6:57 7:03 ETS X908 HA 5ICE
ETSD1 9:21 9:27 ETS X950 HB 5ICE
CABD3 20:00 20:10 CABS WY41 HA2 5ICE
CABU3 19:50 20:00 CABS W102 HC1 5ICE
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Trp start time Right 5.
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Blk consist pattern Left 16.
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Annex 5 Ministerial briefing titled 'Traincrew resourcing and cancelled services – Friday 30 September 2016'

[redacted]

From: [redacted]
Sent: Monday, 10 October 2016 9:00 AM
To: [redacted]
Cc: [redacted]
Subject: FW: Train crew resourcing and cancelled service – Friday 30 September 2016.
Attachments: FINAL Document - Traincrew resourcing and cancelled service – Friday 30....pdf

Follow Up Flag: Follow up
Flag Status: Flagged

[redacted]and team – For your awareness
See attached Qld Rail briefing (from last Friday) to the Treasurer – copied to Minister Hinchliffe – relating to cancelled train services due to train crew shortfalls.

- On Friday 30 September 48 services had to be cancelled due to a number of train crew calling in sick. Most cancellations occurred outside peak.
- Qld Rail advises it is expecting a shortfall in train crews on Fridays over the next few weeks.
- The brief cites a combination of training drivers and guards for Redcliffe Peninsula line and NGR as part of the cause.
- The brief indicates TMR TransLink have been advised.

Keep well
[redacted]

[redacted]
General Manager (Transport Strategy and Planning)
Policy, Planning & Investment | Department of Transport and Main Roads

Floor 3 | Brisbane - Terrica Place | 140 Creek Street | Brisbane Qld 4000
GPO Box 213 | Brisbane Qld 4001
P: [redacted]
M: [redacted]
E: [redacted]@tmr.qld.gov.au
W: www.tmr.qld.gov.au

From: Government & Stakeholder [mailto:GovernmentStakeholder@qr.com.au]
Sent: Friday, 7 October 2016 1:58 PM
To: 'treasurer@ministerial.qld.gov.au' <treasurer@ministerial.qld.gov.au>; [redacted]@maic.qld.gov.au' ([redacted]@maic.qld.gov.au) <[redacted]@maic.qld.gov.au>
Cc: '[redacted]@treasury.qld.gov.au' <[redacted]@treasury.qld.gov.au>; [redacted]@treasury.qld.gov.au; [redacted] <[redacted]@tmr.qld.gov.au>
Subject: Traincrew resourcing and cancelled service – Friday 30 September 2016.

Good afternoon

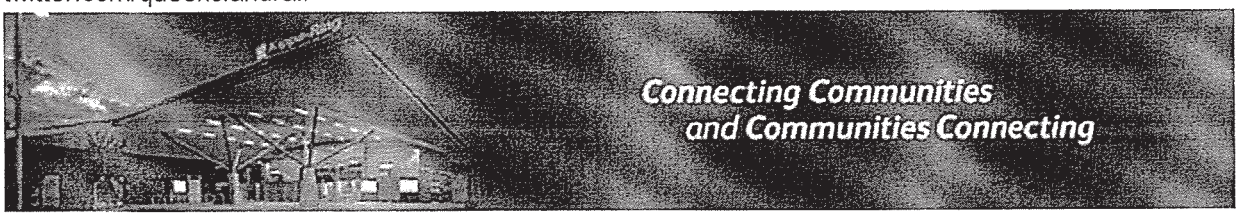
Attached for the Treasurer is Queensland Rail's Information Brief in relation to ***Traincrew resourcing and cancelled service – Friday 30 September 2016***.

Please do not hesitate to contact me if you have any questions.

Kind regards
[redacted]

QueenslandRail

[redacted]
A/Senior Ministerial & Executive Liaison Adviser
RC1, Level 13, 305 Edward Street
Brisbane, Qld 4000
T: [redacted] M: [redacted] F:
[redacted]@qr.com.au
queenslandrail.com.au
facebook.com/queenslandrail
twitter.com/queenslandrail



QueenslandRail | MCR-16-1089

TO: Treasurer, Minister for Aboriginal and Torres Strait Islander Partnerships and Minister for Sport

TITLE	Traincrew resourcing and cancelled services – Friday 30 September 2016
COPIED TO	**Minister for Transport and the Commonwealth Games** **Leader of the House**
ACTION REQUIRED	For Information
PRIORITY	Urgent

KEY ISSUES/BACKGROUND

- Delivery of the new Redcliffe Peninsula line and New Generation Rollingstock has required extensive training of Queensland Rail train drivers and guards to ensure that they have the necessary competency to work on the new infrastructure. Although this is an exciting era for Queensland Rail and for customers, this training has caused a strain on normal rostering.
- With the opening of the Redcliffe Peninsula line, tutor drivers are assisting drivers (new to the line) to become familiar with the new sections of track between Dakabin to Lawnton and Petrie to Kallangur. This requires the tutor driver to travel with the driver learning the route for a certain amount of hours until they become competent. This has resulted in 33 fewer drivers available for other shifts on Fridays.
- In the case of on-track testing for the first NGR unit, four Queensland Rail driver crews have been deployed to Maryborough in the last week.
- This training has caused a strain on normal rostering, as Queensland Rail currently only has the required numbers of drivers and guards to fill normal working timetables.
- Queensland Rail has been, and will continue to, recruit for additional train drivers and train guards to ensure adequate capacity to meet the increasing demand for rail services in South East Queensland.
- Recruitment will continue over the next 12 months.
- Queensland Rail expects to reach comfortable levels of train guards in the first quarter of the 2017-18 financial year.
- Queensland Rail will have an ongoing program of communication and consultation with union representatives and employees prior to the recruitment of drivers and guards.
- Precision planning is required to ensure training of Queensland Rail's drivers and guards can happen around normal operations. More than 470 drivers and guards have already been successfully trained on the Redcliffe Peninsula line, with the additional yet to complete their training.
- Unfortunately, due to the extensive operational and training demands associated with opening the Redcliffe Peninsula line, Trainee Driver training programs have been deferred for three months. However Queensland Rail is committed to continuing the training program and this deferral is for a short period of time only.
- To date, rostering for training has been successful, with minimal impact on normal operations. Daily peak on-time running results have been positive and largely remain in the 92-4%.

Business Group	Queensland Rail		
	Action Officer	Endorsed:	Endorsed:
Name: Position:	[redacted] S/Ministerial Adviser	[redacted] A/Chief Operating Officer	[redacted] CEO
Telephone:	[redacted]		
Date:	06/10/2016	06/10/2016	/10/ 2016

- However, on Friday 30 September 2016, Queensland Rail fell short of the number of drivers and guards needed to deliver the timetable.
- On Friday night to facilitate training, Queensland Rail was required to fill an additional 31 shifts as competent drivers piloted other drivers through new infrastructure near Petrie. Unfortunately, six of these shifts were unable to be filled due to traincrew calling in sick. This resulted in the cancellation of 48 services.
- Sixteen percent of the cancelled services occurred in the afternoon peak, however, most of the cancellations were after 7pm in the off-peak period. Queensland Rail worked hard to manage cancellations around the afternoon peak to ensure customer impact was not significant.
- Queensland Rail anticipates a shortfall of traincrew on Fridays over the next few weeks. Proactive engagement and communicate with TrasnLink will occur in advance.
- As an example of this, Queensland Rail has provided TransLink with the below messaging for their website which will be used on Friday 7 October 2016. Service alterations will also be displayed in advance.

  An intensive training schedule is currently underway to train Queensland Rail drivers on new infrastructure through Petrie.

  This training unfortunately has an effect on services whilst accredited drivers pilot others through new infrastructure to gain their competency.

  The below service alterations are in place today to facilitate this training. These alterations have been planned to minimise disruption for customers as best as possible, with most occurring outside of peak periods.

  We apologise for any delay to your service and thank you for your patience.

Queensland Rail's traincrew overall capacity

- Queensland Rail's Train Services Delivery department employs 928 qualified SEQ Rail Traffic Crew comprising 470 drivers and 458 guards working on rotating shift rosters.
- Until recently, Queensland Rail has only employed enough drivers and guards to meet its existing timetable, but with attrition and the increased training requirements to deliver the Redcliffe Peninsula line and New Generation Rollingstock, traincrew availability has reduced.
- Historically, a shortfall of approximately 25 – 30 drivers and guards is readily managed by the business. However, the current shortfall is approximately 62 drivers and 83 guards.
- To ensure Queensland Rail has enough drivers and guards to deliver the new timetable in conjunction with the Redcliffe Peninsula line and the commencement of revenue services for New Generation Rollingstock, it commenced a recruitment program for an additional 100 drivers and 100 guards in December 2015.
- The recruitment was undertaken internally with drivers being sourced from the existing guard cohort, and new guards being sourced internally also. This approach was in line with union consultation.
- The recruitment drive resulted in 79 successful candidates, which represents 39% of the 100 drivers and 100 guards' target.
- It takes approximately one year to become a fully qualified train driver and three months for a guard, so Queensland Rail is yet to see the benefits of this recruitment exercise.

Drivers

- Currently, Queensland Rail has 34 drivers in training schools. These trainees are completing schools at different times throughout the year depending on when they started.
- Queensland Rail anticipates of this number:
  - eight drivers will complete their school and be ready to drive in October/November 2016
  - three more will be available in December 2016
  - four more will be available in February/March 2017
  - 19 will be available by the end of this financial year.
- A brief overview of the scheduled training schools for drivers is below.

DRIVERS			Out	Recruitment Status
20/11/2015	12	Trainees (as at 20/11/2015) *Recruitment FY 14-15*	2/12/2015	School Filled
			4/03/2016	School Filled
			6/06/2016	School Filled
11/01/2016	13	Theory finishes 01/04/2016 *Recruitment FY 14-15*	12/12/2016	School Filled
4/04/2016	18	Theory finishes 24/06/2016	12/03/2017	School Filled
11/07/2016	20	Theory finishes 26/09/2016	12/08/2017	School Filled
9/01/2017	20	Theory finishes 27/03/2017	12/01/2018	School Filled
17/04/2017	20	Theory finishes 03/07/2017	12/06/2018	School Filled
17/07/2017	20	Theory finishes 02/10/2017	12/08/2018	14 vacancies to fill
23/10/2017	20	Theory finishes 08/01/2018	12/01/2019	20 vacancies to fill
January 2018	20	TBA	TBA	20 vacancies to fill

Guards

- Queensland Rail currently has 12 guards in training school with an anticipated completion date of late mid-late October.
- An additional 20 guards will be ready by February 2017, and a further 20 by May 2017.
- Future schools are planned, as shown below, with vacancies to be filled by the next round of recruitment.

GUARDS			Out	Recruitment Status
1/02/2016	12	Summative Completion:	22/06/2016	School Filled
3/05/2016	13	Summative Completion:	24/07/2016	School Filled
15/08/2016	12	Summative Completion:	November 2016	School Filled
7/11/2016	20	Summative Completion:	February 2017	School Filled
13/02/2017	20	Summative Completion:	May 2017	School Filled
15/05/2017	20	Summative Completion:	August 2017	9 vacancies to fill
21/08/2017	20	Summative Completion:	November 2017	20 vacancies to fill
13/11/2017	20	Summative Completion:	February 2018	20 vacancies to fill

- The recent appointment of four tutor drivers and five additional tutor guards will continue to facilitate increased training school sizes in line with ongoing recruitment.
- Stations Customer Service has already commenced a recruitment process for station staffing in preparation for the number of staff expected to apply for train crew roles.
- Subject to approval, Queensland Rail intends to run another recruitment drive for a further 100 drivers and 100 guards to fill training school scheduled for 2018 and 2019.
- To achieve the target of 100 drivers and 100 guards, the next round of recruitment will be open to the broader internal Queensland Rail cohort. If sufficient numbers are not achieved in this recruitment drive, Queensland Rail will seek to recruit externally to reach the target. This will require union consultation.

Approach to managing issues arising from current capacity in the coming weeks

- Queensland Rail is working hard to closely manage traincrew capacity over the coming weeks.
- From Tuesday 4 October, the opening of the Redcliffe Peninsula line and introduction of the associated timetable has seen an additional:
    - 24 traincrew shifts from Monday to Thursday
    - 40 traincrew shifts on Fridays, and
    - 30 traincrew shifts Saturday to Sunday.

SENSITIVITY

- Queensland Rail is currently negotiating the 2016 Traincrew Enterprise Agreement.
- Union representatives from the Australian Rail, Tram and Bus Industry Union Queensland (RTBU), Australian Federated Union of Locomotive Employees and Queensland Union of Employees (AFULE) have applied for protect action ballots, which have been approved by the Fair Work Commission.
- The unions have balloted their members and Queensland Rail will be advised on 7 October if protected industrial action will occur and to what extent – this will further disrupt services.
- Rail Back on Track advocate, [redacted] has been active on social media about the cancelled services on Friday 30 September 2016.
- On Saturday 1 October 2016, Mr [redacted] emailed Queensland media outlets to raise the issue of Friday's cancelled services and query Queensland Rail's ability to deliver the new timetable in conjunction with the opening of the Redcliffe Peninsula line.

CONSULTATION – INTERNAL STAKEHOLDERS

- State the position of the internal stakeholders

CONSULTATION – EXTERNAL STAKEHOLDERS

- Informal engagement and consultation has occurred with key unions in relation to traincrew recruitment.

EMPLOYMENT OPPORTUNITIES

- Outline how the project or initiative will sustain or create jobs in Queensland.

RESOURCE IMPLICATIONS

- Identify any financial implications, including any current/out-year impacts and source of funding.

COMMUNICATIONS STRATEGY

- Hot Issues Brief and Q&As are prepared.

ELECTION COMMITMENTS

- NIL

PREVIOUS BRIEF REF/S

- MCR-15-1162

ATTACHMENTS

- NIL

Annex 6 Letter from Queensland Rail to the Responsible Ministers titled 'Service disruptions in October 2016'

Date received: 26/10/16

and the Commonwealth Games

The Honourable Stirling Hinchliffe MP

RECEIVED
28 OCT 2016
GOVERNMENT SERVICES BRANCH

DocTrak No: SHM162

Date due to ES: 28/11/16

Allocate to: ☑ Transport ☐ Commonwealth Games

DOCTRAK No: SHM162

Copies of incoming to:
(Minister's office admin to distribute)
- ☑ CoS
- ☐ SPA
- ☐ Senior Media Advisor
- ☐ Caucus Liaison Officer
- ☐ Other:.....

Timeframe:
- ☑ Priority – 5 days
- ☐ Complex – 15 days
- ☑ Other 21 days
- ☐ Dept. for direct reply
- ☐ Dept. to call & resolve
- ☑ Dept. for appropriate action

Signatory:
- ☑ Minister
- ☐ CoS
- ☐ Director-General / CEO
- ☐ Deputy Director-General
- ☐ General Manager
- ☐ Other:.....

DATE DUE TO ES: 28/11/16

Specific instructions from the Minister's Office:
.....
.....
.....
.....
.....
.....
.....
.....

Prepared by:.....

Signed.....

Contact person: (for letter)
- ☐ Appropriate Dept. Officer
- ☐ Other:.....

Briefing note required:
- ☐ Decision
- ☐ Noting
- ☐ Meeting

Advice form required:
- ☐
- ☐ Complaint
- ☐ Registered Lobbyist

(if 'yes, Minister's office to record on lobbyist register)

General Information/Action:
- ☐ Minister's constituent
- ☐ Respond to MP's constituent
  - ☐ Cover letter to MP
- ☐ Shareholding Ministerial
- ☐ No response required – file & note
- ☐ Acknowledgement – courtesy & final

- ☐ Email for signature
- ☐ Letter for signature
- ☐ Referral to other Minister:
  - ☐ Email for signature
  - ☐ Letter for signature

.....

☐ URGENT ☑ ROUTINE

DEPARTMENTAL USE ONLY:

Cross-Ref:

Previous:

Subject: SHAREHOLDING MINISTERIAL – Service disruptions in October 2016

File ID MC: ☑ 110/00533
File ID QR: ☐ 110/00534

Notes:

Accountable area: GOC -> PPI

CC to:

Restricted: ☑ YES ☐ NO

Security Access: Doctrak. PPI. SHM

Category:
- ☐ Enquiry
- ☐ Service Request
- ☐ Compliment
- ☐ Legal/Legislative
- ☑ Information
- ☐ Complaint
- ☐ Department-instigated
- ☐ Community Engagement

Has enquirer previously raised issue with the department? ☐ YES ☑ NO

DATE 26/10/16 BY MO

QueenslandRail

Level 14, Rail Centre 1
305 Edward Street
GPO Box 1429
Brisbane QLD 4001

T [redacted]
F
E ceoqueenslandrail@qr.com.au
www.queenslandrail.com.au

Our ref: MEX-16-567

Queensland Rail Commercial-in-Confidence

The Honourable Curtis Pitt MP
Treasurer
Minister for Aboriginal and Torres Strait Islander Partnerships and
Minister for Sport
Member for Mulgrave
Level 9, Executive Building
100 George Street
BRISBANE QLD 4000

The Honourable Stirling Hinchliffe MP
Minister for Transport and the Commonwealth Games
Member for Sandgate
Level 13, Mineral House
41 George Street
BRISBANE QLD 4000

Dear Treasurer and Minister,

Service disruptions in October 2016

I refer to your letter dated 21 October 2016 requesting that an urgent meeting of the Queensland Rail Board be convened to consider the issues associated with the high number of Citytrain service cancellations in October and to ensure appropriate remedial actions are in place to address the issues.

I confirm that a meeting of Queensland Rail Board occurred at 11am today and was attended by all Members of the Board in person or by telephone. At the meeting, the Board was briefed by the relevant line executive managers regarding the causes of the recent high level of service cancellations, the interim proposal by management to address the timetabling and crewing issues that have caused these cancellations, and the remedial actions that are to be taken to restore our leading on-time running performance and rebuild the confidence of our customers.

Before addressing the specific issues referenced in your letter, I would like to apologize on behalf of the Board for the unacceptable disruptions to Queensland Rail's services during this month. The Board acknowledges that the very recent service disruptions and cancellations fall well short of Queensland Rail's high service standards and have caused significant delays for our customers. The Board recognises that the level of service performance in October is well below what is acceptable and that all available steps will be taken to urgently rectify the issues.

The Board's advice to you in relation to the specific matters set out in your letter is provided below. The Board has made its expectations very clear to the Executive Leadership Team regarding the need to implement all available measures to rectify the current situation in a timely and effective manner with a view to stabilising the current situation and then optimising our operations as soon as that is possible, so that the previous high levels of service are restored.

I can also assure you that in taking these actions Queensland Rail will continue to ensure safety is its number 1 priority at all times.

1. The cause of recent cancellations

The recent service cancellations and disruptions are due to shortfalls in availability of qualified train crew to meet the new network-wide timetable that was launched on 4 October 2016 to include the commencement of services on the Redcliffe Peninsula Line. The new timetable created an additional 650 services each week and Queensland Rail under-estimated the demand this would place on the existing train crew resources.

Queensland Rail currently employs approximately 930 qualified South East Queensland (SEQ) rail traffic crew. This is below the budgeted FTE for SEQ train crew of 1023 qualified train crew. There is, therefore, a current shortfall of at least 90 qualified train crew (assuming some overtime is performed by existing crew). Further recruitment and training of train crew is required to enable Queensland Rail to efficiently and effectively operate the new timetable.

There are a number of contributing factors that have led to the current qualified train crew shortfall and the resulting impacts on performance including:

(a) recruitment of new train crew (drivers and guards) in 2015 and 2016 has not achieved required staffing levels (this is due to a number of factors including the number of applicants not progressing through psychometric testing, as explained further in Part 2 below);

(b) there is understandably a significant lead time for recruitment and training of drivers and guards. Where suitable candidates are identified, driver training takes on average 12 months and guard training takes on average 3 months. These lead times mean it ordinarily takes considerable time to build capacity and competency within our Train Service Delivery business;

(c) the adoption of new rostering rules at around the same time as rollout of the new timetable, with the consequent impact on train crew availability. The new rules include the administrative application from 4 October 2016 of 'comfort breaks' for traincrew, comprising a twenty minute break every two and a half hours while on shift, which has led to reduced traincrew availability;

(d) some train crew resources have been re-deployed away from timetabled operations to be trained to assist with testing and commissioning of New Generation Rollingstock, which has in turn impacted on driver training and roster times;

(e) there has been a higher-than-anticipated need for train crew resources to provide piloting for drivers and guards through the Lawnton to Petrie, and Petrie to Kippa-Ring, sectors of the network since the commissioning of the Redcliffe Peninsula Line into the network. While the need for this piloting was anticipated, the extent of the piloting requirements was underestimated. The piloting requirements relate to the assessment and sign-off on the achievement of competencies by train crew to operate trains on the new parts of the network. The complexities of the Petrie junction due to the introduction of the Redcliffe Peninsula Line services has meant a higher proportion of train crew than indicated by past experience require a longer period of supervision in order to achieve their competencies. There is no option to limit the number of route familiarisation trips required by an individual driver or guard. To attempt to do so would seriously compromise safety. These assessments could not have been undertaken prior to commissioning of the Redcliffe Peninsula Line in late September 2016; and

(f) higher than usual annual leave by train crew over the past month, which is now returning to normal levels.

The Board has been advised today that the resourcing constraints likely to arise from the introduction of the new timetable were known to personnel within Queensland Rail in March 2016. An independent assurance review in March 2016, in relation to job card optimisation for the Redcliffe Peninsula Line, found there were a significant number of competing constraints and that, based on current rules and optimisation, Queensland Rail's driver and guard resource levels were not sufficient to meet the proposed service levels. While this resourcing risk was identified and a

process was developed to address the shortfall, it was self-evidently not adequately addressed in time for commencement of the new timetable on 4 October 2016. The Board and Responsible Ministers were not alerted to the extent of the shortages, or their impact on service delivery, until late last week.

2. The interim proposal in relation to timetabling and crewing

The Executive Leadership Team has today provided the Board with a proposal to address the current issues by way of an interim (revised) timetable and train crewing program. The proposal is focused on stabilizing the current operating environment based on existing available qualified train crew resources. Once the existing operating environment is stablised and on-time running performance improves, prudent consideration can then be given to optimizing operations to further improve performance.

The following matters are apparent from the proposal.

Interim Timetable

A significant body of work has been undertaken on an urgent basis over recent days to arrive at an interim timetable. The interim timetable will result in somewhat reduced numbers of train services across all lines, but will provide customers with greater certainty regarding the available train services. Reductions in services during peak periods are being minimized, wherever possible, and the interim timetable seeks to avoid the need for rail replacement buses. Once the interim timetable is in place, there is, however, still likely to be some disruptions to the interim timetable during the next two weeks while the current roster cycle is completed. This ensures fatigue and already-rostered rest breaks and leave periods are satisfied.

The interim timetable, which will commence on Tuesday 25 October 2016, will be released by 4.00am on Monday 24 October 2016.

Queensland Rail is ensuring additional customer service staff are deployed to stations across the network to provide information and assistance to affected customers in relation to the rollout and operation of the interim timetable. Queensland Rail will also encourage customers to regularly check the Translink website to plan their journey.

In relation to the train crewing, the Board has been advised that the interim timetable has been established based on current crewing levels.

Train crew resources

The Board is also advised that there is a pipeline of new train crew recruits who will come on-line over the coming months as their training and competencies are completed. These additional train-crew personnel were employed as a result of recruitment activities undertaken by Queensland Rail since December 2015. The recruitment drive for both drivers and guards in December 2015 resulted in 74 new guards being recruited in February 2016 (approximately 20% of total applicant pool was selected), allowing Queensland Rail to schedule guard training schools through to May 2017, as shown below:

Guard School Start Date	No. of Guard Trainees	Qualification Date	Recruitment Status
01 February 2016	12	22/06/2016	School Filled
03 May 2016	13	24/07/2016	School Filled
15 August 2016	12	November 2016	School Filled
07 November 2016	26	February 2017	School Filled
13 February 2017	26	May 2017	School Filled
15 May 2017	26	August 2017	15 vacancies to fill
21 August 2017	26	November 2017	26 vacancies to fill

Guard School Start Date	No. of Guard Trainees	Qualification Date	Recruitment Status
13 November 2017	26	February 2018	26 vacancies to fill

Recruitment of drivers through a staged Expression of Interest approach in December 2015 and May 2016 resulted in 79 successful candidates (39% of the total applicant pool was selected), filling training schools through to July 2017.

Driver School Start Date	No. of Driver Trainees	Qualification Date	Recruitment Status
20 November 2015	12	06 June 2016	Recruitment FY14-15
11 January 2016	13	12 December 2016	Recruitment FY14-15
04 April 2016	18	12 October 2017	School Filled
11 July 2016	20	December 2017	School Filled
09 January 2017	20	February 2018	School Filled
17 April 2017	20	April 2018	School Filled
17 July 2017	20	August 2018	14 vacancies to fill
23 October 2017	20	January 2019	20 vacancies to fill
January 2018	20	To be confirmed	To be confirmed

Queensland Rail has 33 trainee drivers currently undertaking training. Of these:

- five drivers will complete their schooling and be ready to drive on the network in October and November 2016;
- seven drivers are anticipated to be available by the end of April 2017;
- 12 drivers are anticipated to be available by the end of June 2017; and
- the remaining nine drivers are anticipated to enter traffic by the end of 2017.

A further twenty trainee drivers commenced the trainee driver school on 11 July 2016 and are currently being utilised as guards. They are scheduled to re-commence driver training on 9 January 2017.

Recruitment of a further 100 drivers and 100 guards will commence on Monday 24 October 2016 to ensure training schools can be adequately filled through to the end of 2017.

The Board has been advised that the low success rates in the recruitment processes undertaken to date are generally due to applicants not progressing past the psychometric and psychomotor testing phases of the recruitment (there is heavy emphasis on safety in the testing processes). Careful management of the utilization of existing qualified train crew resources, and ongoing recruitment activities to fill vacancies, will therefore need to be a continued area of focus.

To expedite trainee rail traffic crew training outcomes, all available tutor drivers and guards are being utilised for driver training, maintenance of certification (MOC's), re-accreditations and route tuition.

Anticipated relief of piloting demands is expected in early to mid-December 2016, however, piloting demands for the Redcliffe Peninsula line are expected to remain high for another month based on current crew training numbers. To date, 23% of drivers and 45% of guards are now signed off for operations on the Redcliffe Peninsula line.

The Board has carefully considered the information provided by management in relation to the interim timetable and crewing arrangements, and is satisfied that the arrangements will allow current operations to stabilize in order to meet required service levels for the interim timetable.

3. Satisfying On Time Running commitments under the Transport Services Contract

Queensland Rail has a history of strong performance against its on-time running targets.

The current on-time running performance for October 2016 is clearly unacceptable.

The anticipated October on-time running performance results are expected to be below target, with the following measures forecast:

- 91.78% for 24/7 customer impact against a contracted target of 95% compared to results of 95.50% in September and 95.45% for August 2016; and
- 92.34% for 24/7 contractual against a contracted target of 95%, compared to results of 96.53% in September 2016 and 96.91% for August 2016.

While this level of performance is comparable with other domestic railways, it is not reflective of Queensland Rail's usual high standard of performance. On-time running performance is expected to improve in November with implementation of the interim timetable and a number of other measures, including expediting training on the Redcliffe Peninsula Line to return key personnel back into the job card roster, returning recently retired drivers back to work to provide training (where possible) and working closely with the relevant unions to ensure a coordinated approach and effort to accelerating driver and guard training.

On-time running will continue to be monitored on a daily basis.

4. Resourcing and capacity to restore services beyond the Interim Proposal

The Board is committed to ensuring that service levels are restored as quickly as possible beyond the interim measures referenced in this letter. This will be achieved by:

(a) conducting further recruitment as a matter of priority and ensuring that existing trainees already undertaking training are progressed through their training in a timely manner;

(b) commencing the recruitment of a further 100 drivers and 100 guards on Monday 24 October 2016. This will ensure training schools can be adequately filled through to the end of 2017;

(c) continuing to progress current training programs for trainee drivers and trainee guards as quickly as possible so that those personnel achieve the necessary competencies to be rostered on to normal services;

(d) investigating the possibility of relaxing the interim administrative rules regarding 'comfort breaks';

(e) re-calling train crew from annual leave, where possible;

(f) limiting approval of further annual leave over the Christmas-New Year period, other than in exceptional circumstances;

(g) returning the 17 driver pilots and 8 guard pilots, who are currently working on pilot duties on the Redcliffe Peninsula Line, to rostered services in a timely manner after completion of the piloting requirements. The forecast rate of crew signing off on Redcliffe Peninsula Line means that pilots are expected to reduce at the following rate:

End October 2016: reduction to 10 Driver Pilots and 4 Guard Pilots
Mid November 2016: reduction to 6 Driver Pilots and 2 Guard Pilots
End November 2016: Driver and Guard Pilots rostered as required.

Queensland Rail Transit Authority (ABN 68 598 268 528) and Queensland Rail Limited (ABN 71 132 181 090)

(h) continue our discussions with rail unions to develop effective processes for implementing arrangements around part-time employment for train crew, with the intention of increasing flexible work arrangements to enhance workforce availability;

(i) ensuring a coordinated approach with rail unions in relation to accerated driver and guard training on Redcliffe Peninsula Line and reviewing current training processes and timeframes;

(j) approaching recently retired drivers and guards regarding their availability to assist with training as part of an interim solution to free up other qualified drivers and guards for rostered operations; and

(k) investigating the option of offering train crew a one-off premium overtime rate for rostered (scheduled) overtime, for a limited period, with management of fatigue being a major focus.

It is expected that successful completion of these combined initiatives will enable Queensland Rail to improve its timetabled service offering. The Board will provide Responsible Ministers with regular updates on progress of the above initiatives.

5. Historic train crew staffing levels

The Board is not aware of any requirement by the State to reduce staffing numbers in train crew.

The Board has been advised that, historically, it has not been uncommon for there to be a shortfall of approximately 25 to 30 drivers and guards in the pool of qualified train crew. Management assured the Board that such a shortfall is able to be readily (and successfully) managed by the business on a day-to-day basis, often by allocation of overtime. However, the current shortfall has grown to be more than that amount.

6. Operating Procedures and Resourcing Strategy to reinstate high levels of performance

Management will explore avenues for possible appropriate relaxation of certain rostering conditions to deliver efficiencies and flexibility within train crew rostering. If this can be achieved, the train crew rosters will be re-optimised to maximize efficiencies and foot-plate time. Management will also scope a review of other current operating procedures to determine if any further efficiencies can be achieved. Responsible Ministers will be kept advised of the outcomes of that work.

A recruitment strategy for rail traffic crew has been developed to address increasing demands for rail services on the Citytrain network. Management have indicated that in December 2015 driver and guard training schools increased their capacities from eight to 20 – 26 participants in an attempt to accelerate more driver throughput. The Board endorses that initiative.

Further, management have advised that a specialist training designer resource has been recruited to focus on continuous improvement initiatives and more efficient training being delivered for rail traffic crew.

As indicated above, recruitment of a further 100 drivers and 100 guards will commence on Monday 24 October 2016 to ensure training schools can be adequately filled through to the end of 2017.

7. Impact of timetable review on customers

Based on management's representations to the Board, the Board is satisfied that the interim timetable is being developed in a manner that appropriately balances all relevant factors including train crew availability constraints and the need to minimize the impact of any timetable changes on customers. The interim timetable does include service cancellations but customers will have certainty about what services are affected so they can plan their travel accordingly. The Board has

reiterated to management the critical importance of ensuring our customers are given certainty and timely information in relation to the services that will be provided.

From an operational perspective, all staff will continue their ongoing efforts to minimize the impact of operational changes, including cancellations and disruptions, on customers.

Closing

We appreciate that this response contains a considerable amount of detail. In summary, our objectives to meet your requirements are as follows:

(a) safely implement the interim timetable urgently, with the objective being to minimize the disruption to customers (particularly during peak services) and to give customers certainty around the services that will be available;

(b) after some anticipated disruptions in the initial two weeks of the interim timetable (as fatigue and existing leave are managed), improve performance to meet on-time running targets for the interim timetable;

(c) give effect to the additional initiatives referenced in part 4 of this letter to enable Queensland Rail to optimise its allocation of train crew in order to return to previous levels of performance;

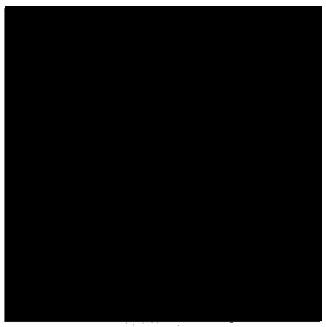
(d) in the short term, continue to look at all available options in relation to recruitment and training to maximize train crew availability; and

(e) undertake a longer term overhaul of our recruitment activities in relation to train crew including potential relaxation of recruitment rules in industrial arrangements.

Thank you for the opportunity to address the matters raised in your letter. We look forward to returning to our superior on-time running as soon as possible once these deficiencies have been addressed.

I welcome the opportunity to speak further with you in relation to any of the matters raised in this letter.

Yours sincerely



Chairman

23 October 2016

Annex 7 Extract of Queensland Rail's corporate risk system

Memorandum

Date: 1 December 2016

To: Commission of Inquiry Representative

From: [redacted]

Subject: COI Request #C12 - Traincrew Investigation

Purpose

To provide the risk rating history from Queensland Rail's GRC system regarding the corporate risk of insufficient Traincrew (identified as R.G. 1445.13) as per the COI Request #C12 below.

Req No	Date of Req	Due Date	Person to Action	Request Details	Original Req No	From
C12	28.11.2016	02.12.2016	[redacted]	Risk rating history from Queensland Rail's GRC system regarding the corporate risk of insufficient train crew (identified as R.G. 1445.13 in review with [redacted]).	n/a	Legal

Background

The approved Citytrain risk register was developed offline by Operations Compliance, Risk and Assurance (OCRA) in an excel spreadsheet. Once this risk register was finalised offline it was transferred to the Governance, Risk and Compliance (GRC) system as part of a bulk "upload" from an excel spreadsheet. The "upload" via the GRC was inputted on 6 October 2015 by the Principal Advisor Risk and Resilience – [redacted].

Once the risk register is uploaded in the GRC system, the relevant risk owner in the function is responsible for its management. Subsequently, the GM Citytrain reviewed the risk on 8 November 2016 resulting in a heightened risk level to reflect the current situation. **Attachment 1** provides a view of system change history.

The table below provides details of the risk; including, the date the risk level changed, who actioned the change and the commentary relating to the below risk:

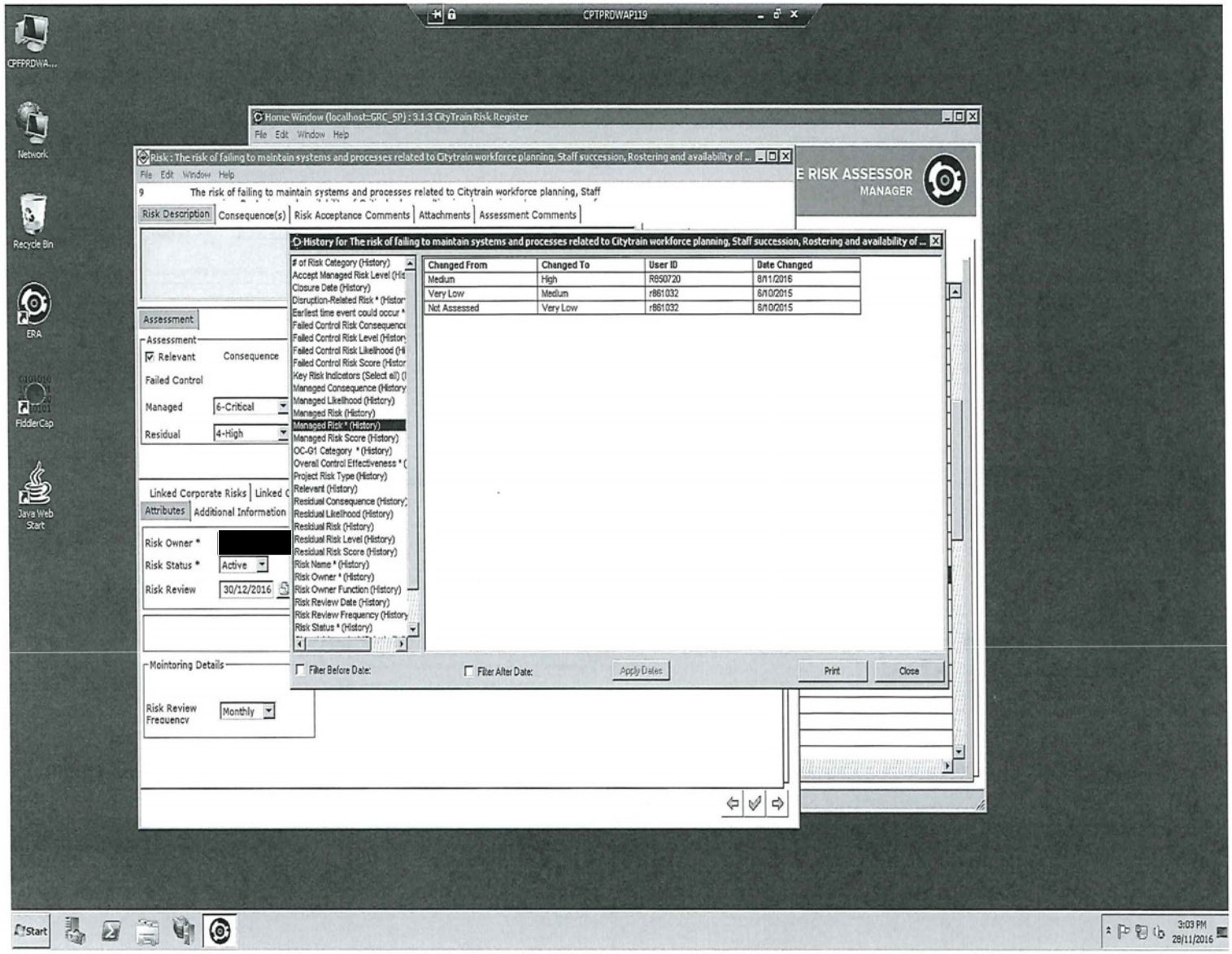
1. Citytrain Risk Register – 'The risk of failing to maintain systems and processes related to Citytrain workforce planning, staff succession, rostering and availability of critical roles resulting in adverse impacts on service performance and reputation / brand damage'.
   GRC Risk ID No. R.G. 1445.13

It should be noted that the MBRL Operational Readiness Risk Register, which has been provided to the Commission separately, is a separate risk register to the register referred to above.

Risk Register	Risk Name	Cause/s	Movement of Risk level	Person Responsible	Comments	Attachment
Citytrain Register	The risk of failing to maintain systems and processes related to Citytrain workforce planning, staff succession, rostering and availability of critical roles resulting in adverse impacts on service performance and reputation / brand damage	1 Insufficient succession plans 2 Long lead times for upskilling 3 Refresh of Enterprise Agreement 4 Workforce Planning 5 Staff numbers and Modelling not suitable 6 Strategy regarding frontline services 7 Lack of mobility across roles 8 Inadequate crewing levels 9 Inadequate rostering 10 Lack of appropriate REM reward and recognition programme 11 Change and restructure processes not managed effectively 12 Staff engagement inadequate 13 Insufficient capital and operating costs 14 Current culture 15 Recruitment process 16 Aging workforce 17 FTE cap,scenario planning	Risk rated at 'Medium' via the GRC upload on 6 October 2015. Risk rated at 'High' on 8 November 2016	[redacted]	This risk was reviewed by GM Citytrain on 8/11/2016 resulting in a heightened risk level to reflect current situation. This risk will continue to be monitored and reviewed monthly.	No attachments

		18 Prioritisation of activities (BAU and Projects) 19 Lack of identification of key roles and knowledge requirements 20 Processes not understood, planned or followed 21 EBA conditions / provisions 22 Timetable changes 23 As needs requirements 24 Special Events (EKKA, Riverfire)				

Attachment 1


CPTPRDWAP119
Home Window (localhost:GRC_SP) : 3.1.3 CityTrain Risk Register
File Edit Window Help
Risk : The risk of failing to maintain systems and processes related to Citytrain workforce planning, Staff succession, Rostering and availability of ...
E RISK ASSESSOR MANAGER
9 The risk of failing to maintain systems and processes related to Citytrain workforce planning, Staff
Risk Description | Consequence(s) | Risk Acceptance Comments | Attachments | Assessment Comments
History for The risk of failing to maintain systems and processes related to Citytrain workforce planning, Staff succession, Rostering and availability of ...
Changed From | Changed To | User ID | Date Changed
Medium | High | R6507'20 | 8/11/2016
Very Low | Medium | r861032 | 8/10/2015
Not Assessed | Very Low | r861032 | 8/10/2015
Assessment
Relevant
Consequence
Failed Control
Managed 6-Critical
Residual 4-High
Linked Corporate Risks
Attributes
Additional Information
Risk Owner *
Risk Status * Active
Risk Review 30/12/2016
Mointoring Details
Risk Review Frequency Monthly
Filter Before Date:
Filter After Date:
Apply Dates
Print
Close
Start
3:03 PM
28/11/2016

Annex 8 Report on service disruptions on 25 December 2016

QueenslandRail

305 Edward Street
GPO Box 1429
Brisbane QLD 4001

[redacted]
www.queenslandrail.com.au

Our ref:

Queensland Rail Commercial-in-Confidence

The Honourable Stirling Hinchliffe MP
Minister for Transport and the Commonwealth Games
Member for Sandgate
Level 35
1 William Street
BRISBANE QLD 4000

Dear Minister

Report on service disruptions on 25 December 2016

We refer to our interim report provided on 30 December 2016 in relation to the disruptions that occurred on the SEQ Citytrain network on 25 December 2016 due to the cancellation of 235 of the 730 train services timetabled for that day.

Our interim report provided you with key factual information in relation to the cancellations and advised that we were finalising a comprehensive report that would specifically address the causative factors that led to the cancellations. This letter comprises that comprehensive report.

The additional time required to prepare this Report was necessary given the operational focus last week on preparations for the New Year's Eve and New Year's Day services and the need to fully consider the causative factors that led to the Christmas Day cancellations.

Prior to addressing the specific issues that gave rise to the cancellations on Christmas Day, I want to again apologise on behalf of Queensland Rail for the unacceptable service disruptions that occurred on Christmas Day 2016 and for the inadequate forward notice given to customers in relation to the cancellation of the affected services.

I also want to commend and thank the Queensland Rail and Translink personnel who worked so hard on Christmas Day, and on Christmas Eve, to try to mitigate the impacts of the cancellations on our customers using the network on Christmas Day. Members of our rostering and train control team, our train crew who manned train services, our station staff who attended to customer inquiries and our communications staff who worked with Translink personnel to provide updates to customers all worked under difficult circumstances to minimise the impact of the cancellations for our customers.

Executive Summary

The cancellation of 235 timetabled services on Christmas Day 25 December 2016 was due to the combined impact of the following factors:

1. **Constrained driver availability due to Christmas Day falling on the last Sunday of the year**

   Current driver resourcing levels mean Queensland Rail is reliant on the discretionary acceptance of additional shifts and overtime by train crew. This poses a risk to service

delivery.

For Christmas Day 2016, this situation was exacerbated by there being a reduced number of drivers available to be rostered for duty due to the effect of rostering requirements specified in the Train Crew Enterprise Agreement. Christmas Day 2016 fell on the last Sunday of the year and many drivers had already worked the maximum of 18 Sundays for the year. This factor, together with planned annual leave arrangements and compulsory book-offs to manage fatigue, meant that of the total 521 drivers employed on the SEQ network, only 92 ordinary-hours drivers and 8 tutor drivers were available to be rostered for revenue services on Christmas Day. The remaining 115 of the 215 drivers required to service the half hourly Sunday timetable on Christmas Day would therefore be required from the pool of drivers prepared to work on their designated leisure period day.

The rostering implications of Christmas Day falling on the last Sunday of the year was a known factor and there was awareness of the need to rely on drivers working designated leisure days to ensure timetabled services could be met. The difficulties associated with securing the discretionary shifts, particularly in the context of train crew and rostering resources that had been stretched since October 2016, were under-estimated.

Recruitment activities currently underway, including in responding to the Five Point Plan, will increase train crew numbers and consequently increase the number of ordinary time train crew available to be rostered on a given day. This will reduce reliance upon acceptance of discretionary shifts by drivers.

Further, the rostering learnings from the October to December 2016 period will enable Queensland Rail to focus on key areas to consider in rostering to meet timetables, particularly near year-end and when higher overtime levels are employed, given the resourcing constraints from application of the Train Crew Enterprise Agreement rostering rules and fatigue management requirements.

2. **Higher than anticipated leisure day unavailability**

Queensland Rail has historically operated a train crewing model that relies upon train crew working some of their designated leisure period days to meet timetabled services and those arrangements are reflected in the Enterprise Agreement. The reliance on train crew working designated leisure days is significant on a Sunday and it is not unusual for a majority of the required driver numbers for a normal Sunday timetable (215 drivers) to be drivers who are on their designated leisure day.

For Christmas Day on Sunday 25 December 2016, a higher than anticipated number of drivers who had previously indicated willingness to be considered to work their designated leisure day indicated they were not willing to work on Christmas Day. 59 drivers, out of a total of 295 drivers on their designated leisure day, ended up working their designated leisure day on 25 December 2016. Queensland Rail makes no criticism of any of its drivers in this regard.

3. **Timing of notification of unplanned absences for Christmas Day**

Queensland Rail received notification from 10 drivers on 24 December 2016 that they were not available to work on 25 December 2016 due to the need to take sick leave. While 10 notifications is not out of the ordinary (with a total of 27 drivers ultimately advising of their unscheduled absence for 25 December 2016), the receipt of those notifications within a short timeframe on 24 December 2016, when work was already underway to alter existing

job cards to address existing unfilled shifts due to the reduced number of available drivers willing to work their designated leisure day, meant that Queensland Rail was not able to manage the impact of those notifications in an effective way.

4. **Limited rostering system flexibility to respond in current environment**

   Existing rostering systems and processes are currently under considerable pressure due to the need to manually manage timetable and job card changes since October 2016.

   Currently, significant manual intervention is required to remove and reallocate train crew job cards when train crew unavailability arises. Despite the best efforts of the relevant personnel, the timeframes associated with the completion of those manual tasks are measured in days, not hours, given the complexities of removing job cards from the system. This is not conducive to being able to identify affected services in a short timeframe which inhibits the provision of timely notice to customers in relation to service cancellations.

   Improvements associated with the introduction of the new Workforce Management System are likely to assist in managing these issues.

The key learnings arising from the cancellations on 25 December 2016 are below (with further explanation provided in Part 5):

1. **Timeliness of notification to customers**

   Improvements must be identified to provide more timely notification to customers of the impact of service cancellations. The current rostering and train crew issues facing the organisation have heavily constrained our ability to provide timely information about which particular services are affected by cancellations. This means we have not been able to provide appropriate and timely notifications and our customers have been inconvenienced as a result. The current rostering system constraints which have arisen since October 2016 and require significant manual intervention will improve to some extent once current roster optimisation processes are finalised.

   There is also a need to develop a workable contingency timetable for downgrade of services on any given day in the event of train crew unavailability or service interruptions, so communications can be given to customers in a more timely manner about when their next train service will arrive. Queensland Rail has not yet progressed such contingency planning for the 7 November 2016 timetable given the resources required to perform those tasks have been utilised in responding to day to day operational matters. There is also limited flexibility for contingency planning with current train crew resource numbers and the requirement to service the 7 November 2016 timetable.

2. **Earlier publication of public holiday and major event rosters**

   Queensland Rail will investigate the possibility of providing additional time (beyond the existing 58 hour roster notification) for pre-publication of the roster for public holidays and major events, with potentially one week's notice of the roster to ensure adequate time to ensure allocation of train crew to meet the timetabled services.

3. **More timely communication with train crew about availability**

   There is a need for a more efficient notification system to improve the timeliness of communication with train crew in relation to rostering matters (including confirmation of

acceptance or rejection of leisure day shifts). This would enable more timely decision making regarding the necessity for any service alterations which, in turn, would allow earlier communications with customers.

There is also the need to have a more effective method within rostering systems of forward warning about mounting train crew unavailability (planned or unplanned unavailability).

4. **Timetabled service offering on Christmas Day**

Patronage for Christmas Day is generally around 60% lower than for a normal Sunday. Yet, the interim timetable implemented on 7 November 2016 required the usual Sunday timetable services (half hourly) on 25 December 2016.

A review of Christmas Day patronage data for the past five years will be undertaken to enable assessment of whether Queensland Rail should reduce its service offering to a frequency less than half hourly for future Christmas Day timetables given the reduced customer loads anticipated on that day.

This Report into the circumstances associated with the Christmas Day 2016 cancellations is structured as follows:

Part 1 Background information regarding Christmas Day 2016 service offering and driver staffing requirements;

Part 2 Information regarding existing rostering practices including:
- the rostering rules prescribed in the Train Crew Enterprise Agreement; and
- the limited flexibility in current rostering systems requiring manual intervention to manage changes;
- available train crew.

Part 3 Information regarding the events leading up to Christmas Day 2016 including:
- rostering practices applied for the 25 December 2016 roster;
- the posting of the 58 hr consultation roster for 25 December 2016;
- Queensland Rail's identification of the number of unfilled driver shifts in the 58 hour consultation roster;
- steps taken to address unfilled driver shifts; and
- the timing of when it became apparent there were going to be cancellations and the steps taken to enable communication to customers.

Part 4 Steps taken to prepare for and manage the impact of cancellations on 25 December 2016 and information regarding day of operations events that occurred on 25 December 2016;

Part 5 Causative Factors and Key Learnings.

1. Background

730 train services were timetabled for Sunday 25 December 2016 providing passengers with a half hourly train service on all SEQ Citytrain network lines other than the Doomben line. This frequency of services reflects the usual Sunday timetable in place prior to 25 December 2016.

In previous years (up to Christmas Day in 2014), a reduced service offering was provided by

Queensland Rail on Christmas Day with Citytrain services on an hourly basis rather than the half hourly basis timetabled for Christmas Day 2016. For Christmas in 2015, a special timetable was implemented on Christmas Day (and subsequent days) to take into account the north coast line shut-down, however the crewing requirements to meet that timetable were less constrained as Christmas Day fell on a Friday in 2015.

In 2016, Christmas Day fell on a Sunday. The availability of train crew resources on weekend days is determined by the Train Crew Enterprise Agreement which specifies that the ordinary hours of duty for train crew are to be rostered across a maximum of 26 Saturdays and a maximum of 18 Sundays per year. These industrial arrangements mean that it is common practice for the usual Sunday timetable operated by Queensland Rail to rely heavily on drivers working one of their designated leisure days.

Rostering arrangements for Sunday 25 December 2016 were undertaken in accordance with usual rostering practices including the issuance of the roster 58 hours in advance. It was anticipated that the number of train crew who would work one of their leisure period days to fill the roster would bear some consistency with past experience for Sundays during 2016.

In terms of the specific number of drivers required to meet the Sunday timetable on 25 December 2016, as indicated earlier in this Report, Queensland Rail currently employs 521 train drivers on the SEQ network and 215 of those drivers were required to meet the Christmas Day timetable. Due to a number of factors including:

- the operation of rostering arrangements in the Train Crew Enterprise Agreement;
- the fact Christmas Day fell on the last Sunday of the year (with many drivers having already completed their maximum of 18 Sundays work per year prior to 25 December 2016);
- planned annual leave for Christmas Day (68 drivers); and
- compulsory book-offs (where drivers who work 11 consecutive days or 14 consecutive shifts (whichever occurs sooner) must be rostered off duty for a minimum of 32 hours),

there were only 92 ordinary hours drivers available to be rostered for work on Sunday 25 December 2016. An additional 8 Tutor Drivers were available. This meant that the remaining 115 drivers required to meet the service offering for the Sunday timetable on Christmas Day 2016 would need to be made up from drivers who were prepared to work one of their designated leisure days on Christmas Day.

This reliance upon discretionary effort from the train crew workforce is not an unusual situation for a Sunday.

When it became apparent that the required number of drivers would not be secured to work a designated leisure period day on Christmas Day, work had to be undertaken urgently to identify services for possible cancellation. The complex and manual nature of the tasks associated with altering job cards in the rostering system, and the receipt of further unplanned absence notifications from drivers during the day on 24 December 2016, meant that it was not until mid-afternoon on Saturday 24 December 2016 that around 150 of the required service cancellations could be identified with the remaining 85 identified later that evening.

2. Existing Rostering Framework

The prescribed rostering arrangements and rules applicable to train crew are complex and the electronic systems utilised by Queensland Rail to timetable services and roster train crew are aged and heavily dependent on manual intervention where changes are required. The integration between the various train scheduling and rostering systems is sub-optimal and where changes are required to roster arrangements or timetable services, a high degree of manual intervention is required. There are limited qualified personnel available to undertake those manual interventions and those resources have been stretched since late October 2016 with the development of new timetables, ongoing train crew rostering challenges and responding to the Commission of Inquiry.

The current Workforce Management System Project will result in the implementation of a new end-to-end rostering system which will significantly improve the flexibility and optimisation of available resources in train service delivery, rail management centre (including train controllers) and rollingstock maintenance. The project involves the introduction of the HASTUS software to improve roster planning, centralising roster information, availability of real time rostering information and improved accessibility and functionality for rostered personnel.

Industrial arrangements

Current train crew rostering arrangements are determined by the terms of the Train Crew Enterprise Agreement 2013. There are also local level rostering arrangements agreed on an informal basis by train service delivery management, outside the Train Crew Enterprise Agreement framework.

The current Train Crew Enterprise Agreement rostering rules and arrangements include the following:

(a) ordinary hours of work for a full time train crew employee are 320 hours worked across eight weeks. Those ordinary hours are required to be averaged across two four week cycles:

- in one 4 week cycle, employees may be rostered a maximum of 156 ordinary hours, across a maximum of 19 attendances;
- in the alternative 4 week cycle, employees may be rostered a maximum of 164 ordinary hours, across a maximum of 20 attendances;

(b) for drivers and guards, ordinary hours of duty may be rostered across a maximum of 26 Saturdays and 18 Sundays per year;

(c) the maximum rostered shift for duty (sign on to sign off) is 9 hours, with minimum shift of 6 hours and maximum of 8 hrs foot plate time;

(d) total rostered time away from home depot is not to exceed 34 hours;

(e) the minimum layoff period between shifts at the employee's home depot is 12 hours;

(f) a mealbreak of 40 minutes is required as part of normal working hours. This break is to be taken after completion of the third hour and finished before completion of sixth hour of shift. Employees may partake of a short personal needs break when necessary;

(g) designated leisure periods will be rostered in alternating 4 weeks periods throughout the year comprising:

- 9 days of leisure periods (Block Leisure Period (2 or more consecutive days leisure) or Single Leisure Period (minimum 32 hour period of leisure)) in the 4 week cycle with 19 attendances; and
- 8 days of leisure periods (BLP/SLP) in the 4 week work cycle with 20 attendances.

The Enterprise Agreement specifies that train crew nominate in writing to work, or not to work, their designated leisure period days with nominations to be either 'will work (yes)', 'wont' work (no)' or 'will work if mutually agreed (approach)'. Those nominations can be varied at any time by the employee.

The Enterprise Agreement states that train crew will not be penalised either way for nominating to work, or not to work, their designated leisure days.

(h) After Saturday and Sunday BLP/SLP days, the next rostered shift will not commence before 0400hrs on Monday, unless otherwise agreed;

(i) employees who work 11 consecutive days or 14 consecutive shifts (whichever occurs sooner) must be rostered off duty for a minimum of 32 hours.

Penalty payments (Enterprise Agreement)

Under the Enterprise Agreement, all time worked on a Saturday or Sunday (excluding leisure periods) attracts a penalty of 37.5% of the full flat rate.

Employees who work a designated leisure period have all time worked paid at a rate of 175% of the full flat rate.

Christmas Day allowances (Enterprise Agreement)

The Train Crew Enterprise Agreement specifies that employees working on 25 December receive:

- in the case of ordinary hours employees - employees have all time worked credited to their work cycle and receive an additional payment of 50% of the full flat rate for all time worked. This payment will be made in the fortnight during which the hours are worked; and

- in the case of hours worked on a designated leisure period - employees will be paid for all hours worked on a designated leisure period at 175% of the full flat rate. The hours worked on the designated leisure period are not credited to the employee's work cycle.

No additional allowances or payments outside the Enterprise Agreement were agreed to by Queensland Rail for train crew to work on Christmas Day 2016.

Informal agreements outside Enterprise Agreement

Rostering rules agreed on ad hoc basis by train service delivery management, outside Enterprise Agreement. Those rostering rules have included allowance for an additional meal break of 20 minutes from 4 October 2016, rules in relation to travelling spare and limitations on sectorised running.

A Heads of Agreement was entered into with unions on 14 December 2016 to remove some of those rostering rules to improve availability of train crew, with the revised arrangements

implemented from 28 December 2016 (via introduction of Summer School Timetable commencing on that day). Accordingly, for Christmas Day 2016, the informal rostering rules continued to apply to rosters for that day, including the additional 20 minute comfort break after 2 ½ hours of working.

Rostering process and practices

Train crew rosters must reflect the rostering arrangements and rules specified in the Enterprise Agreement. The process associated with creation of the Master Roster is set out below.

- the rostering process is dependent upon a file uploaded from the train planners through to the roster clerks containing the intended train service timetable;

- the roster clerks have to check the data, create a set of job cards to match the data, assign train crew to meet the job cards taking into consideration the rules referenced in the Train Crew Enterprise Agreement and the necessity for train crew to be allocated to undertake shunts, work trains, tuition trains and other types of train crew work. This process usually takes up to six months to ensure it is done correctly;

- the file is then uploaded into the Sapiens/Iway electronic rostering system, via a third party, to complete the optimisation of job cards and train crew allocations. This is usually at least a two week process with constant checking from the third party provider with the Queensland Rail roster clerks as it proceeds;

- once the optimisation results are received, there is an 8 week consultation process with Train Crew and union representatives at the various depots in South East Queensland. The process is specified in detail in the Train Crew Enterprise Agreement. Each depot then has both train crew and union representatives check the workings and proposed alterations are submitted for consideration; and

- any revisions to the rostering are loaded back into Queensland Rail's Iway system and the new linked working roster is then issued to train crew. The linked working tells train crew when they are required to work across the applicable work cycles. This forms the master roster.

Since late-October 2016, Queensland Rail has not been working from the (former) master roster given the timetable changes that have been introduced and given the need to alter train plans on day of operations to reflect train crew availability. This has meant that work has been required on an almost daily basis to manage job card changes to match train crew resources to the timetabled services. This has disrupted the job cards in the system and significantly limited forward planning.

At present, the process to alter job cards is a manual process. The time associated with this manual task is measured in days, not hours. This impedes Queensland Rail's ability to quickly identify the particular train service impacts in the event of train crew unavailability. This in turn impedes the provision of timely notice to customers and other affected stakeholders. This situation is further exacerbated at present because the key personnel who are attempting to manage the disruption to the job card rostering on a day to day basis are also responsible for developing new timetable rosters (e.g. Summer School timetable) and responding to the Commission of Inquiry.

Rostering arrangements for a particular day operate on a roster posted 58 hours in advance. That roster covers the period 0001hrs to 2359hrs on the relevant day and under ordinary

circumstances the 58 hour roster is derived from the train crew work links reflected in the applicable Master Roster.

In accordance with usual practice, the process of issuing a 58 hour consultation roster was applied in relation to the Christmas Day 2016 rostering arrangements. Further information in relation to this process for the Christmas Day 2016 workings is provided in Part 3 below.

Filling of vacancies in a SEQ roster

The Train Crew Enterprise Agreement prescribes that roster vacancies after the 58 hour roster is posted will be filled as follows:

- Step 1 – employees designated as "Available for Duty AM" or Available for Duty PM" within the relevant depot and relevant grade;
- Step 2 – employees on lowest number of SLP/BLP hours within the relevant depot and relevant grade;
- Step 3 – alteration to sign on within the relevant depot and relevant grade;
- Step 4 – employees from other depots by agreement; and
- Step 5 – other qualified staff.

These rules represent a further constraint on allocation of train crew resources when there are unfilled shifts in the roster, as was the case with the Christmas Day 2016 roster.

Annual leave

Train crew employees are entitled to five weeks (200 hours) of annual leave per completed year of service. Train crew annual leave is generally booked around 12 months in advance.

On Christmas Day 2016, there were 68 drivers on annual leave. This compares to 44 drivers on annual leave on the prior Sunday (18 December 2016).

Unplanned leave

Train crew employees accrue 10 days (80 hours) of sick leave for their own illness/injury per completed year of service. Train crew employees may apply to use up to 10 days per year of their accrued paid sick leave for carer's leave.

The average unscheduled absence days per FTE for train crew for the December 2015-November 2016 period was 14.91 days per FTE.

On Sunday 25 December 2016, 27 drivers were absent on unplanned leave. Comparative data for Christmas Day 2015, the week prior to Christmas Day 2016 and the Sunday average during 2016 is below.

Date	Number of Drivers on unplanned leave
25 December 2015 (Friday)	38 drivers on unplanned leave
Sunday 18 December 2016	30 drivers on unplanned leave
Monday 19 December 2016	28 drivers on unplanned leave
Tuesday 20 December 2016	26 drivers on unplanned leave
Wednesday 21 December 2016	28 drivers on unplanned leave
Thursday 22 December 2016	19 drivers on unplanned leave
Friday 23 December 2016	18 drivers on unplanned leave

Date	Number of Drivers on unplanned leave
Saturday 24 December 2016	14 drivers on unplanned leave
Sunday 25 December 2016	27 drivers on unplanned leave
Sunday average 2016	13 drivers on unplanned leave
New Year's Eve 2016 (Saturday 31/12/2016)	24 drivers on unplanned leave

Designated leisure days

As indicated earlier in this Report, 215 drivers were required to meet the Sunday timetable on 25 December 2016. 115 of those drivers needed to be made up from a pool of 295 drivers on designated leisure days. It is not uncommon for the bulk of drivers on a Sunday to be made up of drivers on designated leisure days.

In 2015, Christmas Day fell on a Friday and the roster for services on that day was full staffed from ordinary-hours drivers, with the exception of 2 driver roles which were filled by drivers on designated leisure days.

3. Lead up to Christmas Day 2016

The roster for 25 December 2016 was posted in accordance with normal practices, at 2pm on 22 December 2016. That 58 hour roster comprised the workings for Christmas Day (0001 hrs to 2359hrs) and included allocation of train crew who had previously indicated willingness to work on their designated leisure day. The 58 hour roster for 25 December 2016 contained vacancies due to there being insufficient train crew to meet the service requirements. Calls were being made to drivers on designated leisure periods to ascertain whether they would work their leisure period day on Christmas Day.

At 2.00pm on 22 December 2016, when the 58 hour roster was issued, there were:

- 222 drivers who had elected not to work their designated leisure day on Christmas Day;
- 73 drivers who may be prepared to work their designated leisure day and a further 22 other drivers yet to call; and
- 7 drivers who had provided notification they would be absent due to illness or carers leave on 25 December 2016.

At the Day of Operations meeting on 23 December 2016 at 10am, the situation in relation to filling of the roster for 25 December 2016 was noted as:

- there were 58 job cards where drivers were not available;
- there were 14 job cards where guards were not available;
- various steps were being taken to try to address these shortfalls including rechecking of job cards, reallocation of tutors and removal of non-critical driver duties.

These circumstances would not ordinarily warrant escalation or immediate consideration of service cancellations, given the necessity to make further contact with drivers to confirm availability to meet the job card requirements.

On Friday 23 December, 11 drivers advised they were unwilling to work their designated leisure day on Christmas Day and a further 5 drivers provided notification of unplanned (sick) leave for 25 December 2016.

In discussions with your office in the morning on Saturday 24 December 2016, we foreshadowed that cancellations in the order of approximately 100 services may be required on Christmas Day given the number of drivers available to attend work on 25 December 2016 and we were working to identify which services would be affected, with a particular focus on maintaining services to Airtrain, given the importance of having train services to and from the airport on Christmas Day.

In a subsequent update discussion with your office at around 11am on 24 December 2016, we advised that more drivers were calling in unwell for 25 December 2016. Our estimate at that time was that up to 150 service cancellations would be required. We advised that work was underway to identify which services would be cancelled with a list to be produced as soon as possible to enable customer notifications to occur.

At 1536 hrs on 24 December 2016, Queensland Rail formally notified Translink and your office in writing of an initial 150 cancellations for 25 December 2016 (further details of which are provided in Part 4 below).

Throughout the day on 24 December 2016, 10 further notifications of unplanned absence for 25 December 2016 were received from drivers. This was in addition to the 7 already notified on 22 December 2016 and the further 5 notified on 23 December 2016 (together with 5 drivers on extended sick leave).

Work continued to identify the required service cancellations for 25 December 2016 and notification of the final list of cancellations was provided to Translink at 0136 (am) on 25 December 2016 (further details are provided in Part 4 below).

As a result of the above, and as advised in our interim report on 30 December 2016, the train crew availability to service the usual Sunday timetable implemented on 25 December 2016 was as set out below, with a comparator provided for the prior Sunday (18 December 2016):

	18 December 2016	**25 December 2016**
Total number of train crew working (based on payroll information)	456 Train Crew (254 Drivers and 202 Guards)	314 Train Crew (163 Drivers and 151 guards)

	18 December 2016	**25 December 2016**
Train Crew on Unscheduled Absences (Sick or carers leave)	30 drivers 29 guards	27 drivers (including 5 on extended sick leave) and 28 guards
Train Crew on Annual leave	44 drivers 29 guards	68 drivers 51 guards
Train Crew on Block Leisure Periods or Single Leisure Periods unwilling to work	205 drivers 203 guards	225 drivers 253 guards

Part 4 Steps taken to prepare for and manage the impact of cancellations on 25 December 2016 and information regarding day of operations events on 25 December 2016

As indicated above, at 3.56pm on 24 December 2016 Queensland Rail notified Translink and your office of an initial 150 cancellations for 25 December 2016. A list of affected services was provided with notification that the RMC was working on the remainder of the list. The list of affected services identified as at 3.56pm on 24 December 2016 is contained in **Attachment A.**

At that time, attempts were still being made to contact drivers to meet the unfilled job cards and thereby minimise the impacts on the travelling public. In conjunction with that, work was underway to determine which further services for the afternoon on 25 December 2016 would need to be cancelled in the event the job cards could not be filled. There was a particular focus on limiting the impact on Airtrain services, given the likelihood of people travelling to and from the airport on Christmas Day. This work continued during the evening on 24 December 2016 and ultimately resulted in identification of a further 85 services that required cancellation, which were notified to Translink in the early morning on 25 December 2016.

On the afternoon of 24 December 2016, contact was also made with Translink to make arrangements for alternative transport for customers (bus transport) and arrangements were made for additional station staff to be rostered onto Christmas Day to provide customer service on platforms at key stations.

At 4.26pm on 24 December 2016 we were advised that in light of the service cancellations Christmas Day would be a fare-free day.

A press release was issued that evening advising that rail customers on the Citytrain network and Airtrain would travel free tomorrow all Christmas Day due to a number of train cancellations across the network, due to operational reasons. Customers were urged to check the Translink website and contact the Translink call centre for service updates.

Media outlets ran stories on Christmas Eve and Christmas Day reporting on the service cancellations.

Early on the morning of 25 December 2016, at 0136hrs, Queensland Rail notified Translink and your office of final list of cancellations for 25 December 2016 totalling 235 services. The list of affected services identified the service preceding and service following the cancelled service. A copy of the notification is contained in **Attachment B**.

Events on 25 December 2016

There was one infrastructure related incident that occurred on the network on Christmas morning on 25 December 2016. At 9.35am, Track 24B at Ferny Grove failed on the up road. The Rail Management Centre arranged for all trains to run on the down line between Mitchelton and Ferny Grove, with electricians to attend by 1020hrs. The track fault was ultimately rectified at 1045hrs. There were no other network-related issues encountered on 25 December 2016.

The remainder of the issues across the network on 25 December 2016 were due to the impact of train crew shortages and associated service cancellations.

As the day progressed the Rail Management Centre Control Desk provided real-time updates and forward notifications at 1323hrs, 1342hrs, 1357hrs, 1427hrs, 1430hrs, 1437hrs, 1446hrs,

1453hrs, 1457hrs, 1507hrs, 1536hrs, 1541hrs, 1600hrs, 1638hrs, 1655hrs and 1715hrs. These notifications were provided to various personnel including station staff to assist managing passenger movements. A copy of the 1715hrs Rail Management Centre notification on 25 December 2016 showing full trail of communications is contained in **Attachment C**.

Queensland Rail's standard Incident Detail Report for 25 December 2016, created at 23:59hrs that day (incident report IR16-27645) is **Attachment D**. That report contains a full list of the cancelled services and taxi arrangements (as reported to Rail Management Centre control) for 25 December 2016.

As indicated in our interim report on 30 December 2016, there were a range of measures implemented on Christmas Day to help mitigate the impact of the service disruptions on customers. Those measures comprised the following

(a) arrangements were put in place to provide extra shifts or extensions of existing shifts for station staff at the locations in the CBD, Ipswich, Beenleigh, Petrie, Robina and Northgate;

(b) a senior member of the Stations management team was deployed to the Rail Management Centre to assist with monitoring of passenger loads at stations on 25 December 2016;

(c) 23 additional station staff were deployed across the network. Decisions regarding where to deploy the additional staff were made based on real time information at the Rail Management Centre, including monitoring of CCTV vision of station passenger loads;

(d) station announcements were provided at major station locations (for example, CBD stations, Robina, Beenleigh, Ipswich and Petrie) and at other stations based on review of CCTV for passenger loads at those stations;

(e) security personnel at the Rail Management Centre actively monitored CCTV and if there were people waiting a long time on platforms, they were advised by the public address system or station staff (where present) that taxis would be arranged. Over 220 passengers were conveyed by taxis, with a particular focus on ensuring passengers waiting for Airtrains were provided with taxi transport to ensure they connected with flights;

(f) alternative transport was deployed to assist in moving passengers who were adversely affected by cancellations to their scheduled services. As advised in our interim report, those alternative transport arrangements comprised:

    (i) deployment of 12 buses across the network; and

    (ii) use of taxis to transport at least 220 customers. As advised in our interim report on 28 December 2016, the costs of taxi charges is not yet known as the costings do not flow through for some weeks.

(g) Translink arranged for fare gates to be opened to reflect the 'free fare' day that applied on Christmas Day.

Part 5 Causative Factors and Key Learnings

As indicated earlier in this Report, the Christmas Day 2016 cancellations were caused by the cumulative effect of the following factors.

Constrained driver availability due to Christmas Day falling on the last Sunday of the year

Current driver resourcing levels mean Queensland Rail is reliant on the discretionary acceptance of additional shifts and overtime by drivers. While this train crewing model has been utilised successfully for some time, the increased service offering provided under current timetables, the addition of a further 20 minute comfort break from 4 October 2016 and a delay in recruitment and training of drivers since November 2015 has created a shortfall in available crew, meaning a greater reliance is placed upon drivers accepting discretionary shifts. This cannot be maintained on a long term basis and recruitment to increase driver numbers is underway to address the issue as part of the response to the Five Point Plan.

For Christmas Day 2016, the current driver resourcing constraints were exacerbated by there being a reduced number of drivers available to be rostered on for duty on Sunday 25 December 2016 due to rostering requirements in the Train Crew Enterprise Agreement. Christmas Day 2016 fell on the last Sunday of the year and many drivers had already worked the maximum 18 Sundays for the year specified in the Enterprise Agreement.

This factor, together with planned annual leave arrangements and compulsory book-offs to manage fatigue, meant that only 92 ordinary-hours drivers and 8 tutor drivers were available to be rostered for revenue services on Christmas Day with the remaining 115 of the 215 drivers required to service the half hourly Sunday timetable on Christmas Day would be required from the pool of drivers prepared to work on their designated leisure period day.

As indicated earlier, the rostering implications of Christmas Day falling on the last Sunday of the year was a predictable factor and there was awareness that there would be heavy reliance upon drivers to work designated leisure days. The difficulties associated with securing discretionary shifts, particularly in the context of train crew and rostering resources that had been stretched since October 2016, were under-estimated.

As indicated above, recruitment activities currently underway, including as part of the response to the Five Point Plan, will increase train crew numbers and consequently increase the number of ordinary time train crew available to be rostered (reducing reliance upon train crew accepting discretionary shifts).

Higher than anticipated leisure day unavailability

Queensland Rail has historically operated a train crewing model that relies upon train crew working some of their designated leisure period days to meet timetabled services. The Train Crew Enterprise Agreement prescribes a process for train crew to provide forward notification of their preferences in relation to working those leisure days. The Enterprise Agreement confirms that an employee's agreement to taking such additional work is at the discretion of the train crew employee. The reliance on train crew working designated leisure days is significant on Sundays and it is not unusual for a majority of rosters for a normal Sunday timetable to be filled by drivers who are on their designated leisure day.

For Christmas Day on Sunday 25 December 2016, a higher than anticipated number of drivers who had previously indicated willingness to be considered to work their block leisure period day indicated they were not willing to work on Christmas Day. 59 of the 295 drivers on a designated

leisure day on 25 December 2016 ended up working their designated leisure day on 25 December 2016. Queensland Rail accepts it is a matter for each employee in their discretion as to whether they accept a shift on a designated leisure day, or not, and Queensland Rail makes no criticism of any of its drivers in this regard.

Queensland Rail recognises that many of its train crew (drivers and guards) have worked designated leisure periods over recent months to assist with the service difficulties encountered since October 2016.

Timing of notification of unplanned absences for Christmas Day

Queensland Rail received notification from 10 drivers on 24 December 2016 that they were not available to work on 25 December 2016 due to the need to take sick leave.

While 10 notifications is not out of the ordinary (with a total of 27 drivers ultimately advising of their unscheduled absence for 25 December 2016), the receipt of those notifications within a short timeframe on 24 December 2016, when work was already underway to alter existing job cards to address existing unfilled shifts due to the reduced number of available drivers willing to work their designated leisure day, meant that Queensland Rail was not able to manage the impact of those notifications in an effective way.

Limited rostering system flexibility to respond in current environment

Existing rostering systems and processes are currently under considerable pressure due to the need to manually manage timetable and job card changes since October 2016. This situation has stretched rostering resources and required significant additional work to address the impact of crewing shortfalls on timetabled services.

Significant manual intervention is required to remove and reallocate train crew job cards when train crew unavailability arises. This is a complex and time-consuming task with many inter-related and inter-dependent components. Despite the best efforts of the relevant personnel, the timeframes associated with the completion of those manual tasks are measured in days, not hours, given the complexities of removing job cards from the system. This is not conducive to being able to identify affected services in a short timeframe which inhibits the provision of timely notice to customers in relation to service cancellations.

Improvements associated with the introduction of the new Workforce Management System are likely to assist in managing these issues.

Key Learnings

The key learnings arising from the cancellations on 25 December 2016 are below.

Timeliness of notification to customers

Improvements must be identified to provide more timely notification to customers of the impact of service cancellations. The current rostering and train crew issues facing the organisation have heavily constrained our ability to provide timely information about which particular services are affected by cancellations. This means we have not been able to provide appropriate and timely notifications and our customers have been inconvenienced as a result. The current rostering system constraints which have arisen since October 2016 and require significant manual intervention will improve to some extent which current roster optimisation processes are finalised.

There is also a need to develop a workable contingency timetable for downgrade of services on any given day in the event of train crew unavailability or service interruptions, so communications can be given to customers in a more timely manner about when their next train service will arrive. Queensland Rail has not yet progressed such contingency planning for the 7 November 2016 timetable given the resources required to perform those tasks have been utilised in responding to day to day operational matters. There is also limited flexibility for contingency planning with the current train crew resource numbers and the requirement to service the 7 November 2016 timetable.

Earlier publication of public holiday and major event rosters

As indicated earlier, consideration will be given to the possibility of providing additional time (beyond the existing 58 hour roster notification) for pre-publication of the roster for public holidays and major events, with potentially one week's notice of the roster to ensure adequate time to ensure allocation of train crew to meet the timetabled services.

More timely communication with train crew about availability

There is a need for a more efficient notification system to improve the timeliness of communication with train crew in relation to rostering matters (including confirmation of acceptance or rejection of leisure day shifts). This would enable more timely decision making regarding the necessity for any service alterations which, in turn, would allow earlier communications with customers.

There is also the need to have a more effective method within rostering systems of forwarding warning about mounting train crew unavailability (planned or unplanned unavailability).

Timetabled service offering on Christmas Day

The timetabled services for Christmas Day 2016 were set as part of the 7 November 2016 timetable which was urgently prepared to address service shortfalls arising from the introduction of Redcliffe Peninsula Line services. The timetable for Christmas Day reflected the usual Sunday timetable, resulting half hourly services for all lines except Doomben.

This service offering for Christmas Day may need to be reviewed as patronage data for Christmas Day suggests patronage is generally around 60% lower than for a normal Sunday.

Consideration was given in early December 2016 to whether the Christmas Day timetable should be altered to provide less frequent (hourly) services. A decision was made at that time to continue with the provision of the full Sunday timetable (half hourly services) on Christmas Day.

A review of Christmas Day patronage data for the past five years will now be undertaken to enable assessment of whether Queensland Rail should reduce its service offering to a frequency less than half hourly for future Christmas Day timetables given the reduced customer loads anticipated on that day.

Closing

This Report has been prepared to address your request for an urgent, comprehensive brief into the circumstances that led to the 25 December 2016 service cancellations. If you require further information in relation to the factors that led to the cancellations, please do not hesitate to contact me.

Any further learnings identified by Queensland Rail as we review the Christmas Day cancellations will be incorporated into the program of work being undertaken by the Response and Recovery Project.

Yours sincerely

[redacted]

A/Chief Executive Officer
3 January 2017

Attachment A

[redacted]

Subject: FW: List: 25 December 2016 Cancellations
Attachments: Sunday 25 December 2016 Cancellations.docx

Begin forwarded message:

From: "[redacted] <[redacted]@qr.com.au>
Date: 24 December 2016 at 3:56:11 pm AEST
To: [redacted] " [redacted]@ministerial.qld.gov.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]@ministerial.qld.gov.au" [redacted]@ministerial.qld.gov.au>, Translink Media <Translink.Media@translink.com.au>, [redacted]@translink.com.au" [redacted]@translink.com.au>
Cc: "[redacted]" <[redacted]@qr.com.au>, "[redacted] <[redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>
Subject: List: 25 December 2016 Cancellations

Hi all,

Please see the start of tomorrow's cancellations list, which will be 150 services. RMC is working on the next available service and the remainder of the list but Translink team, wanted to send to you asap so that Stellar can get a start for the work required on the journey planner for tomorrow. Terribly sorry to be the bearer of bad news. I'm drafting a statement which we'll have for consideration asap.

Thank you, [redacted]

Monday to Thursday Day of Operation – Altered Running

Sunday 25 December 2016 – Christmas Day

Compiled 15:00 Saturday 24 December 2016

Broken down into peak periods (customer impact, not contractual)

Train No.	Time	From	To	Status	Service Prior	Next Service
Ipswich – Central						
TL07	10:37	Ipswich	Central	Cancelled		
TL09	12:07	Ipswich	Central	Cancelled		
T127	13:07	Ipswich	Central	Cancelled		
Central – Nambour						
TL07	11:37	Central	Nambour	Cancelled		
TL09	13:07	Central	Nambour	Cancelled		
T127	14:07	Central	Caboolture	Cancelled		
Springfield Central to Brisbane Central						

10:09	1Y23	Springfield Central	Central	Cancelled		
11:09	1Y27	Springfield Central	Central	Cancelled		
11:39	1Y29	Springfield Central	Central	Cancelled		
14:39	1Y41	Springfield Central	Central	Cancelled		
Brisbane Central to Springfield Central						
09:13	1K16	Central	Springfield Central	Cancelled		
09:44	1K18	Central	Springfield Central	Cancelled		
10:23	1K20	Central	Springfield Central	Cancelled		
12:33	1K30	Central	Springfield Central	Cancelled		
14:13	1K36	Central	Springfield Central	Cancelled		
14:43	1K38	Central	Springfield Central	Cancelled		
15:43	1K42	Central	Springfield Central	Cancelled		
Central to Kippa-Ring						
06:50	1Y07	Central	Kippa-Ring	Cancelled		
07:20	1Y09	Central	Kippa-Ring	Cancelled		
10:52	1Y23	Central	To Bowen Hills only	Cancelled		

11:52	1Y27	Central	Kippa-Ring	Cancelled		
12:22	1Y29	Central	Kippa-Ring	Cancelled		
15:22	1Y41	Central	Kippa-Ring	Cancelled		
Kippa-Ring to Central						
08:16	1K16	Kippa-Ring	Central	Cancelled		
08:47	1K18	Kippa-Ring	Central	Cancelled		
09:26	1K20	Kippa-Ring	Central	Cancelled		
11:36	1K30	Kippa-Ring	Central	Cancelled		
13:16	1K36	Kippa-Ring	Central	Cancelled		
13:46	1K38	Kippa-Ring	Central	Cancelled		
14:46	1K42	Kippa-Ring	Central	Cancelled		
Cleveland to Central						
10:39	1A29	Cleveland	Central	Cancelled		
12:09	1A35	Cleveland	Central	Cancelled		
13:39	1A41	Cleveland	Central	Cancelled		
14:09	1A43	Cleveland	Central	Cancelled		

14:39	1A45	Cleveland	Central	Cancelled		
Central to Shorncliffe						
11:43	1A29	Central	Shorncliffe	Cancelled		
13:13	1A35	Central	Shorncliffe	Cancelled		
14:43	1A41	Central	Shorncliffe	Cancelled		
15:13	1A43	Central	Shorncliffe	Cancelled		
15:43	1A45	Central	Shorncliffe	Cancelled		
Varsity Lakes to Brisbane Central						
07:40	TP15	Varsity Lakes	South Brisbane	Cancelled		
08:10	TP17	Varsity Lakes	South Brisbane	Cancelled		
10:40	TP27	Varsity Lakes	South Brisbane	Cancelled		
11:40	TP31	Varsity Lakes	Central	Cancelled		
12:10	TP33	Varsity Lakes	Central	Cancelled		
13:40	TP39	Varsity Lakes	Central	Cancelled		
14:10	TP41	Varsity Lakes	Central	Cancelled		
14:40	TP43	Varsity Lakes	Central	Cancelled		

Central to Brisbane Domestic Airport						
08:59	TP15	Central	Airport	Cancelled		
09:29	TP17	Central	Airport	Cancelled		
11:59	TP27	Central	Airport	Cancelled		
12:59	TP31	Central	Airport	Cancelled		
13:29	TP33	Central	Airport	Cancelled		
14:59	TP39	Central	Airport	Cancelled		
15:29	TP41	Central	Airport	Cancelled		
15:59	TP43	Central	Airport	Cancelled		
Brisbane Domestic Airport to Central						
10:34	TG24	Airport	Central	Cancelled		
13:34	TG36	Airport	Central	Cancelled		
14:04	TG38	Airport	Central	Cancelled		
Central to Gold Coast						
10:59	TG24	Central	Gold Coast	Cancelled		
13:59	TG36	Central	Gold Coast	Cancelled		

14:29	TG38	Central	Gold Coast	Cancelled		
Petrie to Central						
08:56	T520	Petrie	Central	Cancelled		
10:26	T526	Petrie	Central	Cancelled		
Central to Ipswich						
09:31	T520	Central	Ipswich	Cancelled		
10:51	T526	Central	Ipswich	Cancelled		
Beenleigh to Central						
08:18	1E19	Beenleigh	Central	Cancelled		
12:48	1E37	Beenleigh	Central	Cancelled		
14:18	1E43	Beenleigh	Central	Cancelled		
Central to Ferny Grove						
09:26	1E19	Central	Beenleigh	Cancelled		
13:56	1E37	Central	Beenleigh	Cancelled		
15:26	1E43	Central	Beenleigh	Cancelled		
Ferny Grove to Central						

10:32	1728	Ferny Grove	Central	Cancelled		
Central to Beenleigh						
11:04	1728	Central	Beenleigh	Cancelled		
Shorncliffe to Central						
12:39	1836	Shorncliffe	Central	Cancelled		
13:39	1840	Shorncliffe	Central	Cancelled		
14:09	1842	Shorncliffe	Central	Cancelled		

Attachment B

[redacted]

Subject: FW: Service cancellations Sunday 25 December 2016
Attachments: Train Cancellations 25.12.2016.pdf; ATT00001.htm

Begin forwarded message:

From: "[redacted]" [redacted]@qr.com.au>
To: "[redacted]" [redacted]@ministerial.qld.gov.au>, "[redacted]" [redacted]@ministerial.qld.gov.au>
Cc: "Queensland Rail Media" <QueenslandRailMedia@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, [redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>
Subject: Fwd: Service cancellations Sunday 25 December 2016

H[redacted] and [redacted]

Please see attached the updated list of cancellations for Christmas Day. They have been provided to TransLink so they can be published on the website.

Thanks,

[redacted]

[redacted]
Senior Media Adviser
Queensland Rail
[redacted]

Begin forwarded message:

From: "[redacted]" [redacted]@qr.com.au>
To: "Queensland Rail Media" <QueenslandRailMedia@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "PDL RMC Day Of Operations Coordinator" <PDLRMCDayOfOperationsCoordinator@qr.com.au>, "PDL RMC CCOs - Customer Communication Officers" <PDLRMCCCOs-CustomerCommunicationOfficers@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>, "[redacted]" [redacted]@qr.com.au>
Subject: Service cancellations Sunday 25 December 2016

All

Please see attached cancellations for Christmas day 2016.

Regards

[redacted]
Team Leader RMC Communications
Rail Management Centre,
Mayne, Qld 4006
[redacted]
[redacted]@qr.com.au
queenslandrail.com.au
facebook.com/queenslandrail
twitter.com/queenslandrail

Monday to Thursday Day of Operation – Altered Running

Sunday 25 December 2016 – Christmas Day

Compiled 00:30 Sunday 25 December 2016

Time	Train No.	From	To	Status	Service Prior	Next Service
Ipswich – Central						
10:37	TL07	Ipswich	Central	Cancelled	10:07 (1119)	11:07 (T121)
12:01	TL09	Ipswich	Central	Cancelled	11:37 (1123)	12:37 (1125)
13:07	T127	Ipswich	Central	Cancelled	12:37 (1125)	13:37 (1L11)
15:07	1L13	Ipswich	Central	Cancelled	14:37 (T131)	17:31 (T139)
15:37	T109	Ipswich	Central	Cancelled	14:37 (T131)	17:31 (T139)
16:07	1135	Ipswich	Central	Cancelled	14:37 (T131)	17:31 (T139)
16:37	TL15	Ipswich	Central	Cancelled	14:37 (T131)	17:31 (T139)
17:07	1137	Ipswich	Central	Cancelled	14:37 (T131)	17:31 (T139)
22:06	1153	Ipswich	Central	Cancelled	21:07 (T149)	22:37 (T001)

Central – Nambour						
11:37	TL07	Central	Nambour	Cancelled	11:22 (1Y25)	12:07 (T121)
14:07	T127	Central	Caboolture	Cancelled	13:52 (1Y35)	14:22 (1Y37)
16:07	1135	Central	Petrie	Cancelled	15:52 (1Y43)	16:52 (1Y47)
16:37	T109	Central	Petrie	Cancelled	15:52 (1Y43)	16:51 (1Y47)
17:07	1135	Central	Petrie	Cancelled	16:52 (1Y47)	18:37 (T139)
17:37	TL15	Central	Petrie	Cancelled	16:51 (1Y47)	18:37 (T139)
18:07	1137	Central	Petrie	Cancelled	16:51 (1Y47)	18:37 (T139)
Springfield Central to Brisbane Central						
10:09	1Y23	Springfield Central	Central	Cancelled	09:39 (1Y21)	10:39 (1Y25)
10:40	1Y25	Springfield Central	Central	Cancelled	09:39 (1Y21)	12:10 (1Y31)
11:09	1Y27	Springfield Central	Central	Cancelled	10:39 (1Y25)	12:10 (1Y31)
11:39	1Y29	Springfield Central	Central	Cancelled	10:39 (1Y25)	12:10 (1Y31)
13:39	1Y37	Springfield Central	Central	Cancelled	13:09 (1Y35)	14:09 (1Y35)
14:39	1Y41	Springfield Central	Central	Cancelled	14:09 (1Y39)	15:09 (1Y43)
15:09	1Y43	Springfield Central	Central	Cancelled	14:09 (1Y39)	16:07 (1Y47)

15:39	1Y45	Springfield Central	Central	Cancelled	15:52 (1Y43)	16:09 (1Y47)
16:39	1Y49	Springfield Central	Central	Cancelled	16:09 (1Y47)	18:39 (1Y57)
17:09	1Y51	Springfield Central	Central	Cancelled	16:09 (1Y47)	18:39 (1Y57)
17:39	1Y53	Springfield Central	Central	Cancelled	16:09 (1Y47)	18:39 (1Y57)
18:09	1Y55	Springfield Central	Central	Cancelled	16:09 (1Y47)	18:39 (1Y57)
19:39	1Y61	Springfield Central	Central	Cancelled	19:09 (1Y51)	20:39 (1Y65)
20:09	1Y63	Springfield Central	Central	Cancelled	19:37 (1Y61)	20:39 (1Y65)
10:39	1Y65	Springfield Central	Central	Cancelled	19:09 (1Y59)	22:39 (1Y73)
21:09	1Y67	Springfield Central	Central	Cancelled	20:39 (1Y65)	22:39 (1Y73)
21:39	1Y69	Springfield Central	Central	Cancelled	20:39 (1Y65)	22:39 (1Y73)
22:09	1Y71	Springfield Central	Central	Cancelled	20:39 (1Y65)	22:39 (1Y73)
Brisbane Central to Springfield Central						
09:13	1K16	Central	Springfield Central	Cancelled	08:43 (1K14)	11:13 (1K24)
09:44	1K18	Central	Springfield Central	Cancelled	08:43 (1K14)	11:13 (1K24)
10:23	1K20	Central	Springfield Central	Cancelled	08:43 (1K14)	11:13 (1K24)
10:43	1K22	Central	Springfield Central	Cancelled	08:43 (1K14)	11:13 (1K24)

12:33	1K30	Central	Springfield Central	Cancelled	12:13 (1K28)	13:13 (1K32)
13:43	1K34	Central	Springfield Central	Cancelled	13:32 (1K32)	15:13 (1K40)
14:13	1K36	Central	Springfield Central	Cancelled	13:13 (1K32)	15:13 (1K40)
14:43	1K38	Central	Springfield Central	Cancelled	13:13 (1K32)	15:13 (1K40)
15:43	1K42	Central	Springfield Central	Cancelled	15:13 (1K40)	17:43 (1K50)
16:13	1k44	Central	Springfield Central	Cancelled	15:13 (1K40)	17:43 (1K50)
16:43	1K46	Central	Springfield Central	Cancelled	15:13 (1K40)	17:43 (1K50)
17:13	1K48	Central	Springfield Central	Cancelled	15:13 (1K40)	17:43 (1K50)
18:43	1K54	Central	Springfield Central	Cancelled	18:03 (1K52)	19:03 (1K56)
19:43	1K58	Central	Springfield Central	Cancelled	19:03 (1K56)	21:03 (1K64)
20:13	1K60	Central	Springfield Central	Cancelled	19:03 (1K56)	21:03 (1K64)
20:43	1K62	Central	Springfield Central	Cancelled	19:03 (1K56)	21:03 (1K64)
22:03	1K68	Central	Springfield Central	Cancelled	21:43 (1K66)	Nil
Central to Kippa-Ring						
06:50	1Y07	Central	Kippa-Ring	Cancelled	06:22 (1Y05)	08:22 (1Y13)
07:20	1Y09	Central	Kippa-Ring	Cancelled	06:22 (1Y05)	08:22 (1Y13)

07:52	1Y11	Central	Kippa-Ring	Cancelled	06:22 (1Y05)	08:22 (1Y13)
10:52	1Y23	Central	Kippa-Ring	Cancelled	10:22 (1Y21)	11:22 (1Y25)
11:52	1Y27	Central	Kippa-Ring	Cancelled	11:22 (1Y25)	12:52 (1Y31)
12:22	1Y29	Central	Kippa-Ring	Cancelled	11:22 (1Y25)	12:52 (1Y31)
14:52	1Y39	Central	Kippa-Ring	Cancelled	14:22(1Y37)	15:52 (1Y43)
15:22	1Y41	Central	Kippa-Ring	Cancelled	14:22 (1Y37)	15:52 (1Y43)
16:22	1Y45	Central	Kippa-Ring	Cancelled	15:52 (1Y43)	16:52 (1Y47)
17:02	1Y49	Central	Kippa-Ring	Cancelled	16:52 (1Y47)	19:22 (1Y57)
17:52	1Y51	Central	Kippa-Ring	Cancelled	16:52 (1Y47)	19:22 (1Y57)
18:22	1Y53	Central	Kippa-Ring	Cancelled	16:52 (1Y47)	19:22 (1Y57)
18:52	1Y55	Central	Kippa-Ring	Cancelled	16:52 (1Y47)	19:22 (1Y57)
20:52	1Y63	Central	Kippa-Ring	Cancelled	20:22 (1Y61)	21:22 (1Y65)
21:22	1Y65	Central	Kippa-Ring	Cancelled	20:22 (1Y61)	22:52 (1Y71)
21:52	1Y67	Central	Kippa-Ring	Cancelled	20:22 (1Y61)	22:52 (1Y71)
22:22	1Y69	Central	Kippa-Ring	Cancelled	20:22 (1Y61)	22:52 (1Y71)
22:52	1Y71	Central	Kippa-Ring	Cancelled	20:22 (1Y61)	22:52 (1Y71)

Kippa-Ring to Central						
08:16	1K16	Kippa-Ring	Central	Cancelled	07:46 (1K14)	09:46 (1K22)
08:47	1K18	Kippa-Ring	Central	Cancelled	07:46 (1K14)	09:46 (1K22)
09:26	1K20	Kippa-Ring	Central	Cancelled	07:46 (1K14)	09:46 (1K22)
11:36	1K30	Kippa-Ring	Central	Cancelled	11:16 (1K28)	12:16 (1K32)
13:16	1K36	Kippa-Ring	Central	Cancelled	12:46 (1K34)	14:16 (1K40)
13:46	1K38	Kippa-Ring	Central	Cancelled	12:46 (1K34)	14:16 (1K40)
14:46	1K42	Kippa-Ring	Central	Cancelled	14:16 (1K40)	17:16 (1K52)
15:16	1K44	Kippa-Ring	Central	Cancelled	14:16 (1K40)	17:16 (1K52)
15:46	1K46	Kippa-Ring	Central	Cancelled	14:16 (1K40)	17:16 (1K52)
16:16	1K48	Kippa-Ring	Central	Cancelled	14:16 (1K40)	17:16 (1K52)
16:46	1K50	Kippa-Ring	Central	Cancelled	14:16 (1K40)	17:16 (1K52)
17:46	1K54	Kippa-Ring	Central	Cancelled	17:16 (1K52)	18:16 (1K56)
18:46	1K58	Kippa-Ring	Central	Cancelled	18:16 (1K56)	20:16 (1K64)
19:16	1K60	Kippa-Ring	Central	Cancelled	18:16 (1K56)	20:16 (1K64)
19:46	1K62	Kippa-Ring	Central	Cancelled	18:16 (1K56)	20:16 (1K64)

Cleveland to Central						
10:39	1A29	Cleveland	Central	Cancelled	10:09 (1A27)	11:39 (1A33)
11:09	1A31	Cleveland	Central	Cancelled	10:09 (1A27)	11:39 (1A33)
12:09	1A35	Cleveland	Central	Cancelled	11:39 (1A33)	12:39 (1A37)
13:39	1A41	Cleveland	Central	Cancelled	13:09 (1A39)	15:09 (1A47)
14:09	1A43	Cleveland	Central	Cancelled	13:09 (1A39)	15:09 (1A47)
14:39	1A45	Cleveland	Central	Cancelled	13:09 (1A39)	15:09 (1A47)
15:39	1A49	Cleveland	Central	Cancelled	15:09 (1A47)	16:09 (1A51)
17:39	1A57	Cleveland	Central	Cancelled	17:09 (1A55)	18:09 (1A59)
18:39	1A61	Cleveland	Central	Cancelled	18:09 (1A59)	19:09 (1A63)
20:39	1A69	Cleveland	Central	Cancelled	20:09 (1A67)	21:09 (1A71)
21:39	1A73	Cleveland	Central	Cancelled	21:09 (1A71)	22:09 (1A11)
Central to Cleveland						
06:43	1810	Central	Cleveland	Cancelled	06:11 (1808)	07:17 (1812)
09:17	1820	Central	Cleveland	Cancelled	08:47 (1818)	10:17 (1824)
09:47	1822	Central	Cleveland	Cancelled	08:47 (1818)	10:17 (1824)

10:47	1826	Central	Cleveland	Cancelled	10:17 (1830)	11:17 (1828)
12:17	1832	Central	Cleveland	Cancelled	11:47 (1830)	13:47 (1838)
13:29	1834	Manly	Cleveland	Cancelled	12:29 (1830)	14:29 (1838)
13:17	1836	Central	Cleveland	Cancelled	12:47	13:47 (1838)
14:17	1840	Central	Cleveland	Cancelled	13:47 (1838)	15:17 (1844)
16:17	1848	Central	Cleveland	Cancelled	15:47 (1846)	16:47 (1850)
17:17	1852	Central	Cleveland	Cancelled	16:47 (1850)	17:47 (1854)
19:17	1860	Central	Cleveland	Cancelled	18:47 (1858)	19:47 (1862)
20:17	1864	Central	Cleveland	Cancelled	19:47 (1862)	20:47 (1866)
Central to Shorncliffe						
09:13	1A19	Central	Shorncliffe	Cancelled	08:43 (1A19)	09:43 (1A21)
11:43	1A29	Central	Shorncliffe	Cancelled	11:11 (1A27)	12:11 (1A31)
12:13	1A31	Central	Shorncliffe	Cancelled	11:11 (1A27)	13:41 (1A37)
12:43	1A33	Central	Shorncliffe	Cancelled	11:13 (1A27)	13:43 (1A37)
13:13	1A35	Central	Shorncliffe	Cancelled	12:11 (1A31)	13:41 (1A37)
14:43	1A41	Central	Shorncliffe	Cancelled	14:11 (1A39)	16:11 (1A47)

15:13	1A43	Central	Shorncliffe	Cancelled	14:11 (1A39)	16:11 (1A47)
15:43	1A45	Central	Shorncliffe	Cancelled	14:11 (1A39)	16:11 (1A47)
17:43	1A53	Central	Shorncliffe	Cancelled	17:13 (1A51)	18:13 (1A55)
19:43	1A61	Central	Shorncliffe	Cancelled	19:11 (1A59)	20:11 (1A63)
21:43	1A69	Central	Shorncliffe	Cancelled	21:11 (1A67	22:11 (1A71)
22:43	1A73	Central	Shorncliffe	Cancelled	22:09 (1A71)	Nil
Shorncliffe to Central						
10:09	1826	Shorncliffe	Central	Cancelled	09:39 (1824)	10:39 (1826)
12:09	1834	Shorncliffe	Central	Cancelled	11:39 (1832)	13:09 (1838)
13:39	1840	Shorncliffe	Central	Cancelled	13:09 (1838)	14:39 (1844)
14:09	1842	Shorncliffe	Central	Cancelled	13:09 (1838)	14:39 (1844)
15:39	1848	Shorncliffe	Central	Cancelled	15:09 (1846)	17:09 (1854)
16:39	1852	Shorncliffe	Central	Cancelled	15:09 (1846)	17:09 (1854)
18:39	1860	Shorncliffe	Central	Cancelled	18:09 (1858)	19:09 (1862)
20:39	1868	Shorncliffe	Central	Cancelled	22:09 (1866)	21:09 (1870)
22:39	1R04	Shorncliffe	Central	Cancelled	22:09 (1874)	23:09 (1R60)

23:39	1R74	Shorncliffe	Central	Cancelled	23:09 (1R60)	Nil
Varsity Lakes to Brisbane Central						
06:40	TP11	Varsity Lakes	Central	Cancelled	06:10 (TP09)	07:10 (TP13)
07:40	TP15	Varsity Lakes	Central	Cancelled	07:10 (TP13)	08:40 (TP19)
10:40	TP27	Varsity Lakes	Central	Cancelled	10:10 (TP25)	11:10 (TP29)
11:40	TP31	Beenleigh	Central	Cancelled	11:10 (TP29)	12:40 (TP35)
12:10	TP33	Varsity Lakes	Central	Cancelled	11:10 (TP29)	12:40 (TP35)
14:10	TP41	Varsity Lakes	Central	Cancelled	13:10 (TP37)	15:10 (TP45)
14:40	TP43	Varsity Lakes	Central	Cancelled	13:10 (TP37)	15:10 (TP45)
15:40	TP47	Varsity Lakes	Central	Cancelled	15:10 (TP45)	16:40 (TP51)
16:10	TP49	Varsity Lakes	Central	Cancelled	15:10 (TP45)	16:40 (TP51)
17:40	TP55	Varsity Lakes	Central	Cancelled	17:10 (TP53)	18:40 (TP59)
18:10	TP57	Varsity Lakes	Central	Cancelled	17:40 (TP55)	18:40 (TP55)
19:40	TP63	Varsity Lakes	Central	Cancelled	19:10 (TP61)	20:10 (TP65)
20:40	TM01	Varsity Lakes	Central	Cancelled	20:10 (TP65)	21:10 (TM03)

Central to Brisbane Domestic Airport						
07:59	TP11	Central	Airport	Cancelled	07:31 (TP09)	08:09 (TP13)
08:59	TP15	Central	Airport	Cancelled	08:09 (TP13)	09:59 (TP19)
10:01	TP19	Central	Bowen Hills	Cancelled	19:31 (TP17)	15:31 (TP21)
11:59	TP27	Central	Airport	Cancelled	11:29 (TP25)	12:29 (TP29)
12:59	TP31	Central	Airport	Cancelled	12:29 (TP29)	13:59 (TP35)
13:29	TP33	Central	Airport	Cancelled	12:29 (TP29)	13:59 (TP35)
15:29	TP41	Central	Airport	Cancelled	14:29 (TP37)	16:29 (TP45)
16:01	TP43	Central	Airport	Cancelled	14:29 (TP37)	16:29 (TP45)
17:31	TP49	Central	Airport	Cancelled	16:59 (TP47)	18:29 (TP53)
18:01	TP51	Central	Airport	Cancelled	16:59 (TP47)	18:29 (TP53)
21:31	TP65	Central	Airport	Cancelled	20:59 (TP63)	Nil
Brisbane Domestic Airport to Central						
08:34	TG16	Airport	Fortitude Valley	Cancelled	08:04 (TG14)	09:04 (TG18)
09:34	TG20	Airport	Central	Cancelled	09:04 (TG18)	10:04 (TG28)
10:34	TG24	Airport	Central	Cancelled	10:04 (TG22)	11:04 (TG26)

12:34	TG32	Airport	Central	Cancelled	12:04 (TG30)	13:04 (TG34)
13:34	TG36	Airport	Central	Cancelled	13:04 (TG34)	14:34 (TG40)
14:04	TG38	Airport	Central	Cancelled	13:04 (TG34)	14:34 (TG40)
16:06	TG46	Airport	Central	Cancelled	15:04 (TG42)	17:04 (TG50)
16:34	TG48	Airport	Central	Cancelled	15:04 (TG42)	17:04 (TG50)
18:04	TG54	Airport	Central	Cancelled	17:34 (TG52)	19:04 (TG58)
18:34	TG56	Airport	Central	Cancelled	17:34 (TG52)	19:04 (TG58)
22:04	TG70	Airport	Central	Cancelled	21:34 (TG68)	Nil
Central to Varsity Lakes						
05:58	TG04	Central	Varsity Lakes	Cancelled	Nil	06:29 (TG06)
10:29	TG22	Central	Varsity Lakes	Cancelled	09:59 (TG20)	10:59 (TG24)
13:20	TG30	Beenleigh	Varsity Lakes	Cancelled	12:50 (TG28)	14:20 (TG34)
12:59	TG32	Central	Varsity Lakes	Cancelled	12:29 (TG30)	13:29 (TG34)
13:59	TG36	Central	Varsity Lakes	Cancelled	13:29 (TG34)	14:59 (TG90)
14:29	TG38	Central	Varsity Lakes	Cancelled	13:29 (TG34)	14:59 (TG90)
15:59	TG44	Central	Varsity Lakes	Cancelled	15:29 (TG34)	16:59 (TG48)

10:59	TG24	Central	Varsity Lakes	Cancelled	10:28 (TG22)	11:28 (TG26)
13:59	TG36	Central	Varsity Lakes	Cancelled	13:28 (TG30)	14:58 (TG40)
14:29	TG38	Central	Varsity Lakes	Cancelled	13:28 (TG30)	14:58 (TG40)
15:59	TG44	Central	Varsity Lakes	Cancelled	15:28 (TG42)	16:58 (TG40)
16:29	TG46	Central	Varsity Lakes	Cancelled	15:28 (TG42)	16:58 (TG48)
17:59	TG52	Central	Varsity Lakes	Cancelled	17:28 (TG50)	18:28 (TG54)
18:59	TG56	Central	Varsity Lakes	Cancelled	18:28 (TG56)	19:28 (TG58)
22:29	TG70	Central	Varsity Lakes	Cancelled	21:28 (TG68)	Nil
22:59	TG72	Central	Varsity Lakes	Cancelled	21:28 (TG68)	Nil
Petrie to Central						
08:56	T520	Petrie	Central	Cancelled	08:26 (1518)	09:26 (T522)
10:26	T526	Petrie	Central	Cancelled	09:56 (1524)	10:56 (1528)
13:56	T540	Petrie	Central	Cancelled	13:26 (1538)	14:26 (T542)
17:56	1556	Petrie	Central	Cancelled	17:26 (T554)	18:26 (T558)
20:26	1566	Petrie	Central	Cancelled	19:56 (T564)	20:56 (T568)
21:26	1570	Petrie	Central	Cancelled	20:56 (T568)	22:26 (1508)

21:56	T504	Petrie	Central	Cancelled	20:56 (T568)	22:26 (1508)
Central to Ipswich						
09:31	T520	Central	Ipswich	Cancelled	09:01 (1518)	10:01 (T522)
12:42	T530	Redbank	Ipswich	Cancelled	12:12 (1523)	13:12 (1532)
		Redbank	Ipswich	Cancelled	13:31 (1536)	15:01 (1542)
10:51	T526	Central	Ipswich	Cancelled	10:31 (1524)	11:31 (1528)
14:31	T540	Central	Ipswich	Cancelled	14:01 (1538)	15:01 (1542)
15:31	T544	Central	Ipswich	Cancelled	15:01 (1542)	16:01 (1546)
21:01	1566	Central	Ipswich	Cancelled	20:33 (1564)	21:31 (T568)
22:01	1570	Central	Ipswich	Cancelled	21:33 (T568)	22:37 (T504)
Beenleigh to Central						
08:18	1E19	Beenleigh	Central	Cancelled	07:48 (1E17)	08:48 (1E21)
12:48	1E37	Beenleigh	Central	Cancelled	12:18 (1E35)	13:18 (1E39)
14:18	1E43	Beenleigh	Central	Cancelled	13:48 (1E41)	15:18 (1E47)
14:48	1E45	Beenleigh	Central	Cancelled	13:48 (1E41)	15:18 (1E47)
17:48	1E57	Beenleigh	Central	Cancelled	17:18 (1E53)	18:18 (1E59)

19:18	1E63	Beenleigh	Central	Cancelled	18:48 (1E61)	19:48 (1E65)
20:48	1E69	Beenleigh	Central	Cancelled	20:18 (1E67)	21:48 (1E73)
21:18	1E71	Beenleigh	Central	Cancelled	20:18 (1E67)	21:48 (1E73)
Central to Beenleigh						
16:04	1748	Central	Beenleigh	Cancelled	15:34 (1746)	16:34 (1750)
17:04	1752	Central	Beenleigh	Cancelled	16:34 (1750)	17:34 (1754)
19:04	1760	Central	Beenleigh	Cancelled	18:34 (1758)	20:04 (1764)
19:34	1762	Central	Beenleigh	Cancelled	18:34 (1758)	20:04 (1764)
20:34	1766	Central	Beenleigh	Cancelled	20:04 (1764)	21:04 (1768)
Central to Ferny Grove						
09:26	1E19	Central	Ferny Grove	Cancelled		
13:56	1E37	Central	Ferny Grove	Cancelled	13:26 (1E35)	14:56 (1E41)
14:26	1E39	Central	Ferny Grove	Cancelled	13:26 (1E35)	14:56 (1E41)
15:26	1E43	Central	Ferny Grove	Cancelled	14:26 (1E41)	15:56 (1E45)
16:26	1E47	Central	Ferny Grove	Cancelled	15:56 (1E45)	16:56 (1E49)
19:56	1E57	Central	Ferny Grove	Cancelled	18:26 (1E55)	19:26 (1E59)

21:56	1E69	Central	Ferny Grove	Cancelled	21:26 (1E67)	22:26 (1E71)
Ferny Grove to Central						
10:32	1728	Ferny Grove	Central	Cancelled	10:02 (1726)	11:02 (1730)
12:02	1734	Ferny Grove	Central	Cancelled	11:32 (1702)	13:02 (1738)
12:32	1736	Ferny Grove	Central	Cancelled	11:32 (1702)	13:02 (1738)
15:32	1748	Ferny Grove	Central	Cancelled	15:02 (1746)	16:02 (1750)
16:32	1752	Ferny Grove	Central	Cancelled	16:02 (1750)	17:02 (1754)
17:32	1756	Ferny Grove	Central	Cancelled	17:02 (1754)	18:02 (1758)
20:02	1766	Ferny Grove	Central	Cancelled	19:32 (1764)	20:32 (1768)
23:02	1R54	Ferny Grove	Central	Cancelled	22:32 (1R02)	Nil
Central to Beenleigh						
06:34	1710	Central	Beenleigh	Cancelled	06:04 (1708)	07:04 (1712)
08:04	1716	Central	Beenleigh	Cancelled	07:34 (1714)	08:34 (1718)
11:04	1728	Central	Beenleigh	Cancelled	10:34 (1726)	11:34 (1730)
12:34	1734	Central	Beenleigh	Cancelled	12:04 (1732)	13:34 (1738)
13:04	1736	Central	Beenleigh	Cancelled	12:04 (1732)	13:34 (1738)

18:04	1756	Central	Beenleigh	Cancelled	17:34 (1754)	18:34 (1758)
Shorncliffe to Central						
12:39	1836	Shorncliffe	Central	Cancelled	11:39 (1832)	13:09 (1838)
13:39	1840	Shorncliffe	Central	Cancelled	13:09 (1835)	14:39 (1844)
14:09	1842	Shorncliffe	Central	Cancelled	13:09 (1838)	14:39 (1844)
Ipswich to Rosewood						
09:35	V160	Ipswich	Rosewood	Delayed 30 mins	09:05 (J608)	10:05 (J610)
Rosewood to Ipswich						
09:05	U509	Rosewood	Ipswich	Cancelled	08:35 (J505)	09:35 (J509)

Attachment C

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 17:16
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 17:15 - Sunday 25 December 2016

---Queensland Rail Commercial in Confidence---

The 16:46 Kippa-Ring to Springfield Central service 1K50 has been cancelled. This means that the 18:39 Springfield Central to Kippa-Ring service 1Y57 will also not operate.

Customers from the Kippa-Ring line wishing to travel to Springfield Central will connect with an Ipswich train at Petrie travelling through to Darra to connect with a service to Kippa-Ring.

Customers from Springfield Central to Kippa-Ring will connect with a Caboolture service at Darra to travel through to Petrie. From Petrie, they will connect with a shuttle service to Kippa-Ring.

The crew from 1Y57 will operate a shuttle between Petrie and Kippa-Ring until 20:00 tonight.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 4:55 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 16:55 - Sunday 25 December 2016

---Commercial in Confidence---

Kippa-Ring to Springfield Central service 1K46 is in the Milton – Auchenflower area at the moment. This service will continue to Springfield Central.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 4:39 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 16:38 - Sunday 25 December 2016

---Commercial in Confidence---

The 16:09 Cleveland to Shorncliffe service 1A51 will terminate at South Brisbane at 17:03 and turn back at 1850 to Cleveland.

Passengers from 1A51 will connect with Ferny Grove service 1E51 at South Brisbane in order to travel into the city.

Passengers in the city for the Cleveland line are to board Varsity Lakes service TG48 departing Central at 16:59 and connect with the next Cleveland service at South Brisbane on Platform 2.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 4:01 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 16:00 - Sunday 25 December 2016

A shuttle bus is in place between Darra and Springfield Central to fill any gaps between rail services.

A bus has been sourced from the Petrie to Gympie North closure in order to assist as a shuttle between Petrie and Kippa-Ring.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 3:41 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 15:41 - Sunday 25 December 2016

There is a two and a half hour space in between trains on the Petrie to Kippa-Ring corridor at the moment.

As as-required crew is being driven to Kippa Ring to access units in order to operate a shuttle service from Kippa-Ring to Petrie and back until the next scheduled service can operate.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 3:36 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 15:36 - Sunday 25 December 2016

Station staff on the Ipswich line please note that Ipswich service 1544 will form the Rosewood shuttle 1624.

Ipswich service 1546 will finish at Ipswich and run empty to Redbank and stow there.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 3:08 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 15:07 - Sunday 25 December 2016

Out at Rosewood, shuttle service U523 will stow at Ipswich at 16:26 due to a unit fault.

To accommodate customers, Ipswich service 1546 will take over as a six car shuttle from Ipswich to Rosewood as 1624.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 2:57 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 14:57 - Sunday 25 December 2016

As previously mentioned, a fresh turnout for Springfield Central has been arranged to depart on time from Roma Street at 15:48.

This service will depart from platform 7.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 2:54 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 14:53 - Sunday 25 December 2016

The 14:56 Petrie to Ipswich service T544 will now operate all station inbound.

Similarly, the 15:26 Petrie to Ipswich service 1546 will also stop at all stations inbound.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 2:47 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 14:46 - Sunday 25 December 2016

We have a crew but no units for the 15:09 Springfield Central to Kippa-Ring service, 1Y43, due to the shuffling of available crews and units today. A fresh turnout for 1Y43 will be arranged at Roma Street for 15:48.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 2:38 PM

To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 14:37 - Sunday 25 December 2016

The 18:10 Varsity Lakes to Brisbane Domestic Airport has been reinstated. This service will form Varsity Lakes service TG62 from the airport at 20:07 and if all goes well with that it will become TM07 from Varsity Lakes at 22:10 back to the shed.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 2:31 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 14:30 - Sunday 25 December 2016

The 15:16 Kippa-Ring to Springfield Central service will terminate at Petrie at 15:31. This train will form 1K46 from Petrie at 16:02 and operate through to Springfield Central.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 2:27 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 14:27 - Sunday 25 December 2016

Station staff please note there is an Airtrain, TP41, on its way inbound from Beenleigh stopping all stations to the airport to accommodate passengers on the Beenleigh line wishing to travel inbound. This service has just departed Beenleigh.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 1:58 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 13:57 - Sunday 25 December 2016

The following rail services have been reinstated. Would station staff please note -

The 14:10 Varsity Lakes to Brisbane Airport service TP41 will now operate however due to units and crew placement, this service is likely to originate from **Beenleigh** today and operate as scheduled to the airport.

The return service, TG46, will depart Brisbane Domestic Airport at 16:04 and operate as scheduled to Varsity Lakes.

For Shorncliffe, service 1A39 is currently in the Park Road- South Bank area and will operate through to Shorncliffe. This service will return from Shorncliffe as 1846 at 15:09.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 1:45 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 13:42 - Sunday 25 December 2016

The 13:46 Kippa-Ring to Springfield Central service 1K38 has been reinstated and will depart Kippa-Ring on time.

Station staff please note that as this was originally delated from the system today the Customer Communications Officers are unable to change the status of the PIDS.

Buses are now on site on the Shorncliffe line.

Regards

[redacted]

From: RMC Control Communications
Sent: Sunday, 25 December 2016 1:24 PM
To: RMC Control Communications; PDL QLD Rail Email List
Subject: Service update 13:23 - Sunday 25 December 2016

Good afternoon

Rail services on the Shorncliffe line are being replaced with two shuttle buses at Northgate and two at Shorncliffe.

Shuttle buses are expected to commence from Northgate and Shorncliffe from 13:30.

These shuttle buses will not operate to a timetable. They will continue to operate back and forth stopping at all stations.

The last rail service to Shorncliffe (1A27) departed Central at 11:00 and the last inbound service from Shorncliffe (1834) commenced at 12:10.

I have no information at this stage on tomorrow's service level.

Kind regards

QueenslandRail

[redacted]
Team Leader RMC Communications
Level 2, Rail Management Centre
Mayne, QLD
[redacted]
[redacted]@qr.com.au
queenslandrail.com.au
facebook.com/queenslandrail
twitter.com/queenslandrail

Attachment D

Incident/Accident Identification Details

Number: IR16-27645 **Date:** 25/12/2016 **Time:** 23:59 **hrs**

Incident Classification and Status Details

Severity:	Severity 1	**Status:**	Complete
Category:	Train Crewing	**Network Control Complete:**	☑
Type:	Train Crew Incident		
Sub-Type:	Traincrew Incident	**Contains Sensitive Information:**	☐

Incident Overview Details

Control Board:	Mayne Brisbane Suburban		
Location From:	Citytrain Network Wide	**Location From Corridor:**	Citytrain Network Wide
Location To:		**Location To Corridor:**	
KM:		**QT Number:**	
SPAD Distance:		**PW Number:**	
SPAD Verified By:		**Operator:**	Queensland Rail Operator

Summary: Delays and alterations/cancellations due to limited Train Crew availability.

Details:

Delays and alterations/cancellations due to limited Train Crew availability.

Rothwell
At 10:19 hours, 1Y17 arrived Kippa Ring 4 minutes late
1Y17 delayed 2 minutes Rothwell to Kippa-Ring crossing 1K24
Preference was given to 1K24 ex Kippa Ring due to 1Y17 being 2 minutes late ex Kallangur due to train crew availability and cancellations.

Delays and alterations:

TL07 cancelled Ipswich to Petrie.
TL15 cancelled Ipswich to Petrie.
T109 cancelled Ipswich to Petrie.
T127 cancelled Ipswich to Petrie.
1135 cancelled Ipswich to Petrie.
1137 cancelled Ipswich to Petrie.

1Y23 cancelled Springfield Central to Central.
1Y27 cancelled Springfield Central to Kippa-Ring.
1Y29 cancelled Springfield Central to Kippa-Ring.
1Y39 cancelled Springfield Central. to Kippa Ring
1Y37 cancelled Springfield Central to Kippa Ring
1Y41 cancelled Springfield Central to Kippa-Ring.
1Y45 cancelled Springfield Central to Kippa-Ring.
1Y49 cancelled Springfield Central to Kippa-Ring.
1Y51 cancelled Springfield Central to Kippa-Ring.
1Y53 cancelled Springfield Central to Kippa-Ring.
1Y55 cancelled Springfield Central to Kippa-Ring.
1Y63 cancelled Springfield Central to Kippa-Ring.

1Y65 cancelled Springfield Central to Kippa-Ring.
1Y67 cancelled Springfield Central to Kippa-Ring.
1Y69 cancelled Springfield Central to Kippa-Ring.
1Y71 cancelled Springfield Central to Kippa-Ring.

1Y07 cancelled Roma Street to Kippa-Ring.
1Y09 cancelled Roma Street to Kippa-Ring.
1Y11 cancelled Roma Street to Kippa-Ring.

1A29 cancelled Cleveland to Shorncliffe.
1A31 cancelled Cleveland to Shorncliffe.
1A33 cancelled Central to Shorncliffe.
1A35 cancelled Cleveland to Shorncliffe.
1A41 cancelled Cleveland to Shorncliffe.
1A43 cancelled Cleveland to Shorncliffe.
1A45 cancelled Cleveland to Shorncliffe.
1A49 cancelled Cleveland to Shorncliffe
1A39 delayed 4min Bowen Hills waiting crew
1A51 terminated South Brisbane cancelled to Shorncliffe
1A61 cancelled Cleveland to Shorncliffe.
1A69 cancelled Cleveland to Shorncliffe.
1A73 cancelled Cleveland to Shorncliffe.

TP11 cancelled Varsity Lakes to Domestic Airport.
TP15 cancelled Varsity Lakes to Domestic Airport.
TP27 cancelled Varsity Lakes to Domestic Airport.
TP31 cancelled Central to Domestic Airport.
TP33 cancelled Varsity Lakes to Domestic Airport.
TP41 cancelled Varsity Lakes to Domestic Airport.
TP43 cancelled Varsity Lakes to Domestic Airport.
TP47 cancelled Varsity Lakes to Domestic Airport.
TP49 cancelled Varsity Lakes to Domestic Airport.
TP55 cancelled Varsity Lakes to Domestic Airport

TM01 cancelled Varsity Lakes to Central.

1E19 cancelled Beenleigh to Ferny Grove.
1E37 cancelled Beenleigh to Central.
1E45 cancelled Beenleigh to Ferny Grove
1E43 cancelled Beenleigh to Ferny Grove.
1E57 cancelled Beenleigh to Ferny Grove.
1E69 cancelled Beenleigh to Ferny Grove.
1E25 cancelled Beenleigh to Ferny Grove.

1K16 cancelled Kippa-Ring to Springfield Central.
1K18 cancelled Kippa-Ring to Springfield Central.
1K20 cancelled Kippa-Ring to Springfield Central.
1K22 cancelled Kippa-Ring to Springfield Central.
1K30 cancelled Kippa-Ring to Springfield Central.
1K36 cancelled Kippa-Ring to Springfield Central.

1K38 cancelled Kippa-Ring to Springfield Central.
1K42 cancelled Kippa Ring to Springfield Central.
1K46 cancelled Kippa-Ring to Central
1K44 terminated Petrie to form 1K46.
1K46 cancelled Kippa Ring to Petrie
1K44 cancelled Petrie to Springfield Central.
1K48 cancelled Kippa-Ring to Springfield Central.
1K50 cancelled Kippa Ring to Springfield Central.
1K54 cancelled Kippa-Ring to Springfield Central.
1K58 cancelled Kippa-Ring to Springfield Central.
1K60 cancelled Kippa-Ring to Springfield Central.
1K62 cancelled Kippa-Ring to Springfield Central.
1K34 terminated Central to form 1838.

1826 cancelled Shorncliffe to Cleveland.
1836 cancelled Shorncliffe to Cleveland.
1840 cancelled Shorncliffe to Cleveland.
1844 cancelled Shorncliffe to Bowen Hills.
1848 cancelled Shorncliffe to Central
1850 cancelled Shorncliffe to South Brisbane
1854 cancelled Shorncliffe to Bowen Hills
1852 cancelled Shorncliffe to Cleveland.
1858 cancelled Shorncliffe to Northgate.
1856 cancelled Shorncliffe to Bowen Hills.
1860 cancelled Shorncliffe to Cleveland.
2Y09 cancelled Kippa-Ring Yard to platform.
1910 cancelled Kippa-Ring to Central.
1R04 cancelled Shorncliffe to Central.
1R74 cancelled Shorncliffe to Central.
1834 terminated Manly and stowed

TG32 cancelled Domestic Airport to Varsity Lakes.
TG24 cancelled Domestic Airport to Varsity Lakes.
TG36 cancelled Domestic Airport to Varsity Lakes.
TG38 cancelled Domestic Airport to Varsity Lakes.
TG46 cancelled Domestic Airport to Varsity Lakes.
TG56 cancelled Domestic Airport to Varsity Lakes.
TG70 cancelled Domestic Airport to Varsity Lakes.

TG04 cancelled Central to Varsity Lakes.

1728 cancelled Ferny Grove to Beenleigh.
1734 cancelled Ferny Grove to Beenleigh.
1736 cancelled Ferny Grove to Beenleigh.
1748 cancelled Ferny Grove to Beenleigh.
1752 cancelled Ferny Grove to Beenleigh.
1754 cancelled Ferny Grove to Bowen Hills
1756 cancelled Ferny Grove to Beenleigh.
1766 cancelled Ferny Grove to Beenleigh.

T520 cancelled Central to Ipswich
T520 stopped all station Petrie to Central.
T526 cancelled Petrie to Ipswich.
T540 cancelled Petrie to Ipswich.
1556 cancelled Petrie to Ipswich.
1570 cancelled Petrie to Ipswich.
1508 delayed 4 minutes Roma Street
T554 cancelled Petrie to Ipswich.

1R54 cancelled Ferny Grove to Central.

U507 cancelled Rosewood to Ipswich.
1K34 terminated Central.
1K68 terminated Central.

1820 terminated Central formed 1Y17 to Kippa-Ring.
1822 terminated Central, formed TG20.
1832 terminated Central.
1842 cancelled Shorncliffe to Bowen Hills .

1864 terminated Central.

TG22 terminated Central.
TG30 terminated Central.
TG44 terminated Central.
TG36 terminated Central.
TG38 terminated Central.
TG48 cancelled Domestic Airport to Varsity Lakes
TG52 terminated Central.
TG72 terminated Central.

T504 cancelled Petrie to Central.

T530 terminated Redbank.

T544 terminated Central.

1710 terminated Central.
1716 terminated Central.
1760 terminated Central.
1762 terminated Central.

1K50 cancelled Kippa-Ring to Central.

1842 cancelled Shorncliffe to Central.
1844 cancelled Shorncliffe to Cleveland
1854 cancelled Shorncliffe to Bowen Hills.
1850 cancelled Shorncliffe to Cleveland
1852 cancelled Shorncliffe to Cleveland

1868 cancelled Shorncliffe to Central.

TG16 cancelled Domestic Airport to Fortitude Valley.
TG34 cancelled Domestic Airport to Varsity Lakes

TG20 cancelled Domestic Airport to Central.
TG30 terminated Beenleigh and stowed.
TG48 cancelled Domestic Airport to Central.
TG54 cancelled Domestic Airport to Central

1Y39 terminated Central.

1A19 terminated Central.
1A19 cancelled Central to Shorncliffe.
1A33 terminated Central.
1A43 cancelled ClevelaShorncliffe shorn
1A53 terminated Central.
1A55 terminated Northgate.

TP51 terminated Central.
TP65 terminated Central.

1E39 terminated Central.
1E47 terminated Central.
1E63 cancelled Beenleigh to Ferny Grove.

TL09 cancelled Ipswich to Central.
1L13 cancelled Ipswich to Central.
1153 cancelled Ipswich to Central.

1Y25 cancelled Springfield Central to Central.
1Y37 cancelled Springfield Central to Central.
1Y41 cancelled Springfield Central. to Kippa Ring
1Y43 cancelled Springfield Central to Kippa Ring
1Y61 cancelled Springfield Central to Central.

1A49 cancelled Cleveland to Central.
1A57 cancelled Cleveland to Central.
1A47 terminated Bowen Hills cancelled to Shorncliffe
1A53 terminated Bowen Hills to form 1554, cancelled to Shorncliffe.

TP47 cancelled Varsity Lakes to Central.
TP55 cancelled Varsity Lakes to Central.
TP57 cancelled Varsity Lakes to Central.
TP63 cancelled Varsity Lakes to Central.

TP19 cancelled Central to Bowen Hills.
1E47 cancelled Beenleigh to Ferny Grove.
1E45 cancelled Beenleigh to Central.
1E63 cancelled Beenleigh to Central.
1E71 cancelled Beenleigh to Central.

AG08 cancelled Robina to Varsity Lakes.
AG06 formed TP13 Varsity Lakes.
TL01 departed Ipswich 8 minutes late awaiting crew.
1105 delayed 5 minutes stopping all station Bowen Hills to Petrie.
1115 terminated at Central formed 1F15 to Electric Train Balloon.
TP17 delayed 11 minutes Roma Street, awaiting crew.
C007 cancelled Rosewood to Electric Train South.
TG22 departed Domestic Airport 5 minutes late due to late link TP17.
1724 delayed 4 minutes clear 1G20 Central
1522 delayed 5 minutes Petrie to Central stopping all stations
J610 departed 35 minutes late due to Job card issue
1524 delayed 5 minutes clear TG22 Eagle Junction to Bowen Hills.
1Y25 Cancelled Springfield Central to Kippa-Ring
1121 departed Ipswich 9 minutes late due to late link 1522.
J612 terminated Karrabin, formed U513.
J513 cancelled Rosewood to Karrabin.
J614 departed Ipswich 7 minutes late.
1123 departed Ipswich 8 minutes late due to late link 1524.
1119 travelled all stations Bowen Hills to Petrie.
1E33 cancelled Beenleigh to Ferny Grove
1P31 terminated Central formed, 1E35 to Ferny Grove.
J515 departed 3 minutes late due to late link J614.
1738 Cancelled Ferny Grove to Beenleigh
1832 delayed 5 minutes Eagle Junction for crew.
1A33 terminated Central, formed 1E37.
1E37 cancelled Beenleigh to Central
T534 Cancelled Petrie to Ipswich
T536 Cancelled Petrie to Ipswich
TG34 departed Domestic Airport 3 minutes late due large amount of passengers.
1838 cancelled Shorncliffe to Cleveland.
1125 delayed 6 minutes Central 1A37 convey passengers
1538 cancelled Petrie to Bowen Hills
1E39 terminated Kippa Ring to form 1842
1K36 delayed 6 minutes Kippa Ring to Central
terminated Corinda and formed 1Y39
1L11 delayed 4 minutes Fortitude Valley, ran all stops to Petrie
1Y39 departed Corinda 16 minutes late.
1844 departed Bowen Hills 5 minutes late.
1544 delayed 11 minutes Petrie to Central ran all stations.
1544 terminated Central to form 1Y43
1Y43 cancelled Springfield Central. to Central
1746 delayed 4 minuRoma Street Roma Street waiting crew

1546 delayed 8 minutes Petrie
1G44 delayed 4 minutes Bowen Hills., terminated South Brisbane.
1K46 departed Petrie 7 minutes late.
1131 ran all stops to Petrie delayed 7 minutes
1G48 departed DomestminutesAirport 11 min late.
1L13 delayed 10 minuNorthgPetries Northgate to pet sue to running all stops
1550 delayed 10 minutes Eagle Junction to Petrie due to running all stops
1552 delayed 8 minutes Petrie to Central due to running all stops
1Y47 delayed due to running all stops
1850 departed South Brisbane 24 minutes late
1F48 ran as a shuttle Kippa Ring to Petrie.
1F00 ran as a shuttle Kippa Ring to Petrie and back.
1Y53 formed 11F3 all stations to Petrie and turned back at 1560
1A55 formed 11F5 at Eagle Junction all stations to Zillmere and formed 1558
T139 delayed 6 minutes Bowen Hills waiting crew.
1E61 delayed 7 minutes Beenleigh waiting crew
1860 cancelled Shorncliffe to Cleveland
1A61 cancelled Cleveland to Shorncliffe
1K58 cancelled Kippa Ring To Springfield Central
1Y57 cancelled Springfield Central to Kippa-Ring
1760 cancelled Ferny Grove to Beenleigh
1A59 terminated Central and formed 1Y55, departed Central 22 minutes late.
1143 departed Ipswich 22 minutes late.
1K60 cancelled Kippa-Ring to Springfield Central
1762 terminated Roma Street, formed 2E71 Empty to Beenleigh
TG60 cancelled Brisbane Domestic Terminal to Varsity Lakes
1864 cancelled Shorncliffe to Cleveland
1L19 cancelled Ipswich to Petrie
1868 cancelled Shorncliffe to Bowen Hills
1E65 cancelled Beenleigh to Ferny Grove
1566 cancelled Bowen Hills to Ipswich, formed 1868
T133 departed Ipswich 5 minutes late.
TP65 cancelled Varsity Lakes to Airport
1Y63 cancelled Springfield Central to Kippa-Ring
1866 cancelled Shorncliffe to Bowen Hills
1Y55 terminated Petrie
1K64 cancelled Kippa-Ring to Petrie
1A63 terminated Roma Street, formed 1W63 to Northgate and formed 1870 at Northgate
1A65 terminated Bowen Hills
1E69 cancelled Beenleigh to Ferny Grove
1A69 cancelled Cleveland to Shorncliffe
TM01 cancelled Varsity Lakes to Bowen Hills
1Y67 cancelled Springfield Central to Kippa-Ring
T568 departed Petrie 10 minutes late.
1A73 cancelled Cleveland to Shorncliffe
1870 departed Northgate 4 minutes late connecting 1K68
1K66 delayed 3 minutes Virginia waiting platform Northgate.
1570 cancelled Petrie to Ipswich
1872 cancelled Shorncliffe to Bowen Hills

1151 cancelled Ipswich to Petrie
T149 terminated Bowen Hills and to Electric Train Depot
TG70 cancelled Airport to Varsity Lakes
1153 cancelled Ipswich to Roma Street
1K68 terminated Roma Street then to Electric Train South
1R04 cancelled Shorncliffe to Roma Street
TG72 cancelled Electric Train Flyover to Varsity Lakes
TM05 formed 1153 Roma Street.
20C6 formed 10C6 ex Northgate.

Taxi information:

Group	Time	No of Pax	Origin	Destination	Reason for
Robina	1430	2	Robina	Domestic Airport	Cancelled service
Robina	1619	1	Helensvale	Domestic Airport	Cancelled service
Robina	?	4	Varsity Lakes	Coomera station	Cancelled service
Robina	?	4	Varsity Lakes	South Brisbane station	Cancelled service
Beenleigh	?	2	Beenleigh Station	Domestic Airport	Cancelled services
Beenleigh	1448	1	Beenleigh Station	International Airport	Cancelled services
Manly	1115	?	Manly, Taxi #455	Wooloowin	Customer Arrived at wanting to travel to Station. Train 1A33 Central to Shorncliffe, cancelled Cleveland Doomben doesn't run & Train TP31 cancelle Airport.
Manly	1345	?	Manly, Taxi #B2233	Thornside, Birkdale, Ormiston, Cleveland	1834 terminated Man in Maxi to Thornside, Ormiston, & Clevelan
Manly	1345	?	Manly. Taxi #236	Birkdale	1834 terminated Man to Birkdale
Manly	1345	?	Manly, Taxi #2111	Roma St	No city Train until Tra 1458
Manly	1533	2	Manly, Taxi #478	Sunnybank	No city Train until Tra 1628
Manly	1533	3	Manly, Taxi #421	Central	No city Train until Tra 1628
Manly	1745	4	Manly, Taxi #583	Hemmant, Central	No city train until Trai 1828
Manly	1745	3	Manly, Taxi #476	Fortitude Valley	No city train until Trai 1828
Manly	1750	2	Manly, Taxi #421	Sandgate	No city train until Trai 1828
Ipswich	1516	4	Ipswich	Roma Street	Next service 1737hrs
Ipswich	1547	6	Ipswich	Roma Street	Next service 1737hrs
South Brisbane	850	3	South Brisbane	Airport	Cancelled TP15
South	1301	2	South	Airport	Cancelled TP31

Brisbane South	1630	1	Brisbane South	Deagon	Cancelled 1A51
Brisbane South	1750	3	Brisbane South	Airport	Cancelled TP51
Brisbane South	2122	1	Brisbane South	Airport	Cancelled TP65
Roma Street	0859	12	Roma St Station	9 - Domestic, 3 Inter (12)	Cancel Trains
Roma Street	1032	10	Roma St Station	9 - Domestic, 1 Inter (10)	Cancel Trains
Roma Street	1105	6	Roma St Station	Domestic Airport	Cancel Trains
Roma Street	1745	10	Roma St Station	8 - Dom, 2 Inter (10)	Cancel Trains
Roma Street	2140	3	Roma St Station	2 - Dom, 1 Inter (3)	Cancel Trains
Roma Street	2320	3	Roma St Station	1 X Goodna, 2 Ipswich	Cancel Trains
Roma Street	2335	1	Roma St Station	Beenleigh	Cancel Trains
Central	?	5	Central	Airport	TP11 Cancelled
Central	?	14	Central	Airport	TP15 and TP19 Canc
Central	?	1	Central	Springfield	1K16
Central	?	24	Central	Gold Coast	TG22
Central	?	8	Central	Airport	TP31 Tp33
Central	1445	1	Central	Bald Hills	Train Delays Ill passe
Central	1730	7	Central	Airport	TP49/TP47
Central	1730	22	Central	Caboolture / Redcliffe and	Shorncliffe lines
Central	2230	1	Central	Airport	Advised by CCO's to to cancellation on GC
Central	1900	2	Central	Indooroopilly/Riverview	Wheelchair customer waiting more than an
Fortitude Valley	0915	6	F/Valley	D/Airport	2 Airtrains cancelled
Fortitude Valley	1215	2	F/Valley	D/Airport	Airtrain cancelled
Fortitude Valley	1335	1	F/Valley	D/Airport	3 Airtrains cancelled
Fortitude Valley	1800	1	F/Valley	D/Airport	Airtrain cancelled
Bowen Hills	?	4	Bowen Hills	Caboolture	Cancelled Services wait
Bowen Hills	?	1	Bowen Hills	Carseldine	Cancelled Services wait
Bowen Hills	?	1	Bowen Hills	Strathpine	Cancelled Services wait
Bowen Hills	?	?	Bowen Hills	?	Cancelled Services
Bowen Hills	?	?	Bowen Hills	?	Cancelled Services
Bowen Hills	?	?	Bowen Hills	?	Cancelled Services
Bowen Hills	?	?	Bowen Hills	?	Cancelled Services

Bowen Hills	?	?	Bowen Hills	?	Cancelled Services
Bowen Hills	1708	2	Bowen Hills	Petrie	X401 cancelled. To bus, elderly couple
Bowen Hills	1730	1	Bowen Hills	Cannon Hill	1852 cancelled. No 1854/1856 available left
Bowen Hills	1752	9	Eagle Junction	Morayfield, Nambour, Caboolture, Landsborough	No service est 60min Maxi Taxi)
Bowen Hills	1912	2	Eagle Junction	Airport	No service 60 min
Bowen Hills	2147	2	Eagle Junction	Airport	Last service cancelle
Bowen Hills	2334	5	Bowen Hills	Albion	Family young kids, of wrong info at Roma
Petrie	0818	1	Petrie	Carseldine	beyond reasonable
Petrie	1000	1	Petrie	Burpengary	wheel chair
Petrie	1645	1	Petrie	Caboolture	wheel chair
Petrie	1000	1	Petrie	Maroochydore	no bus service to lan

Nil reports for taxi usage received from Corinda, Ferny Grove, Northgate, Caboolture, Nambour. Indooroopilly and Yee both unattended

Incident Management Personnel

Reporting Officers: [redacted]

Managers: [redacted]

Incident Commander:

Contact Phone Num:

Investigator:

Contact Phone Num:

Investigation Type:

On-Site Coordinator:

Contact Phone Num:

Officers Advised

Internal		External	
Dangerous Goods Officer	☐	Chief Gas Examiner	☐
Electric Control Officer	☐	Corporate Relations Media	☐
Infrastructure Representative	☐	DTMR Cat A	☐
Manager Environmental Services	☐	DTMR Cat B	☐
Manager Network Control	☐	DWHS	☐
Noise Protection Officer	☐	Electrical Authorities	☐
Rail Operator Representative	☐	Electricity Distribution Corporation	☐
RDC Officer	☐	EPA	☐
Regional Manager Network Infrastructure	☐	ES	☐
Regional Manager Network Operations	☐	QPS	☐
		QT-DO NOT USE	☐

Affected Services

Service ID	Service Date	Train Num	Origin	Dest	Operator	Status	Business Period	Cause	Run	Dwell	Total
1105	25/12/2016	1105	SFC	PET	PSG	Arrived	WO	INDIRECT	0m	1m	1m
1109	25/12/2016	T109	IPS	PET	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1109	25/12/2016	T109	IPS	PET	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1115	25/12/2016	1115	SFC	PET	PSG	Terminated	WO	DIRECT	0m	0m	0m
1119	25/12/2016	1119	IPS	PET	PSG	Arrived	WO	INDIRECT	0m	1m	1m
1123	25/12/2016	1123	IPS	PET	PSG	Arrived	WI	INDIRECT	0m	8m	8m
1123	25/12/2016	1123	IPS	PET	PSG	Arrived	WO	INDIRECT	0m	1m	1m
1125	25/12/2016	1125	IPS	PET	PSG	Arrived	WO	INDIRECT	0m	6m	6m
1127	25/12/2016	T127	IPS	PET	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1127	25/12/2016	T127	IPS	PET	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1129	25/12/2016	T129	IPS	PET	PSG	Arrived	WO	DIRECT	0m	1m	1m
1131	25/12/2016	T131	IPS	PET	PSG	Arrived	WO	DIRECT	3m	1m	4m
1137	25/12/2016	1137	IPS	PET	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1137	25/12/2016	1137	IPS	PET	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1139	25/12/2016	T139	IPS	PET	PSG	Arrived	WO	DIRECT	0m	6m	6m
1141	25/12/2016	1141	IPS	PET	PSG	Arrived	WI	DIRECT	0m	7m	7m
1141	25/12/2016	1141	IPS	PET	PSG	Arrived	WO	DIRECT	1m	0m	1m
1143	25/12/2016	T143	IPS	PET	PSG	Arrived	WI	DIRECT	0m	24m	24m
1143	25/12/2016	T143	IPS	PET	PSG	Arrived	WO	INDIRECT	0m	1m	1m
1147	25/12/2016	1147	IPS	PET	PSG	Arrived	WI	DIRECT	0m	8m	8m
1147	25/12/2016	1147	IPS	PET	PSG	Arrived	WO	INDIRECT	0m	1m	1m
1151	25/12/2016	T151	IPS	PET	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1151	25/12/2016	T151	IPS	PET	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1153	25/12/2016	1153	RST	PET	PSG	Arrived	WI	DIRECT	0m	0m	0m
1153	25/12/2016	1153	RST	PET	PSG	Arrived	WO	DIRECT	0m	8m	8m
1153	25/12/2016	1153	RST	PET	PSG	Arrived	WO	INDIRECT	0m	1m	1m
1504	25/12/2016	T504	PET	IPS	PSG	Arrived	WI	INDIRECT	0m	1m	1m
1524	25/12/2016	1524	PET	IPS	PSG	Arrived	WI	INDIRECT	0m	5m	5m
1524	25/12/2016	1524	PET	IPS	PSG	Arrived	WO	INDIRECT	0m	1m	1m
1534	25/12/2016	T534	PET	IPS	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1536	25/12/2016	T536	BHI	IPS	PSG	Arrived	WI	INDIRECT	0m	5m	5m
1536	25/12/2016	T536	BHI	IPS	PSG	Arrived	WO	INDIRECT	0m	2m	2m
1540	25/12/2016	T540	PET	IPS	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1540	25/12/2016	T540	PET	IPS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1546	25/12/2016	1546	PET	IPS	PSG	Arrived	WI	DIRECT	0m	8m	8m
1546	25/12/2016	1546	PET	IPS	PSG	Arrived	WO	DIRECT	0m	1m	1m
1552	25/12/2016	1552	PET	IPS	PSG	Arrived	WI	DIRECT	0m	1m	1m
1552	25/12/2016	1552	PET	IPS	PSG	Arrived	WO	DIRECT	0m	1m	1m
1554	25/12/2016	T554	PET	IPS	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1554	25/12/2016	T554	PET	IPS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1560	25/12/2016	1560	PET	IPS	PSG	Arrived	WI	DIRECT	0m	15m	15m
1560	25/12/2016	1560	PET	IPS	PSG	Arrived	WO	DIRECT	0m	1m	1m
1566	25/12/2016	1566	PET	IPS	PSG	Terminated	WI	DIRECT	0m	0m	0m
1566	25/12/2016	1566	PET	IPS	PSG	Terminated	WO	DIRECT	0m	0m	0m
1570	25/12/2016	1570	PET	IPS	PSG	Cancelled	WI	DIRECT	0m	0m	0m

1570	25/12/2016	1570	PET	IPS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1710	25/12/2016	1710	FYG	BNH	PSG	Terminated	WO	INDIRECT	0m	0m	0m
1724	25/12/2016	1724	FYG	BNH	PSG	Arrived	WO	INDIRECT	0m	6m	6m
1728	25/12/2016	1728	FYG	BNH	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1728	25/12/2016	1728	FYG	BNH	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1734	25/12/2016	1734	FYG	BNH	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1734	25/12/2016	1734	FYG	BNH	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1736	25/12/2016	1736	FYG	BNH	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1736	25/12/2016	1736	FYG	BNH	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1738	25/12/2016	1738	FYG	BNH	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1738	25/12/2016	1738	FYG	BNH	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1746	25/12/2016	1746	FYG	BNH	PSG	Arrived	WO	DIRECT	0m	4m	4m
1748	25/12/2016	1748	FYG	BNH	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1748	25/12/2016	1748	FYG	BNH	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1752	25/12/2016	1752	FYG	BNH	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1752	25/12/2016	1752	FYG	BNH	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1754	25/12/2016	1754	ETF	BNH	PSG	Arrived	WI	DIRECT	0m	0m	0m
1756	25/12/2016	1756	FYG	BNH	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1756	25/12/2016	1756	FYG	BNH	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1760	25/12/2016	1760	FYG	BNH	PSG	Terminated	WO	DIRECT	0m	0m	0m
1762	25/12/2016	1762	FYG	BNH	PSG	Terminated	WI	DIRECT	0m	4m	4m
1762	25/12/2016	1762	FYG	BNH	PSG	Terminated	WO	INDIRECT	0m	0m	0m
1764	25/12/2016	1764	FYG	BNH	PSG	Arrived	WO	DIRECT	0m	15m	15m
1766	25/12/2016	1766	ETF	BNH	PSG	Arrived	WI	DIRECT	0m	0m	0m
1774	25/12/2016	1774	ETF	BNH	PSG	Arrived	WI	DIRECT	0m	0m	0m
1820	25/12/2016	1820	SHC	CVN	PSG	Terminated	WO	DIRECT	0m	0m	0m
1822	25/12/2016	1822	SHC	CVN	PSG	Terminated	WO	DIRECT	0m	0m	0m
1826	25/12/2016	1826	SHC	CVN	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1826	25/12/2016	1826	SHC	CVN	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1832	25/12/2016	1832	SHC	CVN	PSG	Terminated	WO	DIRECT	0m	0m	0m
1832	25/12/2016	1832	SHC	CVN	PSG	Terminated	WI	INDIRECT	0m	5m	5m
1834	25/12/2016	1834	SHC	CVN	PSG	Terminated	WO	DIRECT	0m	0m	0m
1836	25/12/2016	1836	SHC	CVN	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1836	25/12/2016	1836	SHC	CVN	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1838	25/12/2016	1838	BNC	CVN	PSG	Arrived	WI	DIRECT	0m	0m	0m
1838	25/12/2016	1838	BNC	CVN	PSG	Arrived	WO	INDIRECT	0m	5m	5m
1840	25/12/2016	1840	SHC	CVN	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1840	25/12/2016	1840	SHC	CVN	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1842	25/12/2016	1842	BHI	CVN	PSG	Arrived	WI	DIRECT	0m	0m	0m
1844	25/12/2016	1844	BHI	CVN	PSG	Arrived	WI	DIRECT	0m	5m	5m
1848	25/12/2016	1848	SHC	CVN	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1848	25/12/2016	1848	SHC	CVN	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1850	25/12/2016	1850	SBE	CVN	PSG	Arrived	WI	DIRECT	0m	0m	0m
1850	25/12/2016	1850	SBE	CVN	PSG	Arrived	WO	DIRECT	0m	24m	24m
1852	25/12/2016	1852	SHC	CVN	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1852	25/12/2016	1852	SHC	CVN	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1854	25/12/2016	1854	ETF	CVN	PSG	Arrived		DIRECT	4m	4m	8m
1854	25/12/2016	1854	ETF	CVN	PSG	Arrived	WI	DIRECT	0m	0m	0m
1856	25/12/2016	1856	ETF	CVN	PSG	Arrived	WI	DIRECT	0m	0m	0m
1858	25/12/2016	T858	NTG	CVN	PSG	Arrived	WI	DIRECT	0m	0m	0m
1860	25/12/2016	1860	SHC	CVN	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1860	25/12/2016	1860	SHC	CVN	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1862	25/12/2016	1862	ETF	CVN	PSG	Arrived	WI	DIRECT	0m	0m	0m
1864	25/12/2016	1864	SHC	CVN	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1864	25/12/2016	1864	SHC	CVN	PSG	Cancelled	WO	DIRECT	0m	0m	0m

1866	25/12/2016	1866	ETF	CVN	PSG	Arrived	WI	INDIRECT	0m	0m	0m
1868	25/12/2016	1868	BHI	CVN	PSG	Arrived	NA	DIRECT	0m	0m	0m
1868	25/12/2016	1868	BHI	CVN	PSG	Arrived	WI	DIRECT	0m	0m	0m
1870	25/12/2016	1870	NTG	CVN	PSG	Arrived	WI	DIRECT	0m	0m	0m
1870	25/12/2016	1870	NTG	CVN	PSG	Arrived	WI	INDIRECT	0m	5m	5m
1872	25/12/2016	1872	ETF	CVN	PSG	Arrived	WI	DIRECT	0m	0m	0m
1910	25/12/2016	1910	KPR	ETS	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1914	25/12/2016	1914	KPR	ETS	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A05	25/12/2016	1A05	ETS	SHC	PSG	Arrived	WO	INDIRECT	0m	15m	15m
1A19	25/12/2016	1A19	CVN	SHC	PSG	Terminated	WO	DIRECT	0m	0m	0m
1A29	25/12/2016	1A29	CVN	SHC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A29	25/12/2016	1A29	CVN	SHC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1A31	25/12/2016	1A31	CVN	SHC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A31	25/12/2016	1A31	CVN	SHC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1A33	25/12/2016	1A33	CVN	SHC	PSG	Terminated	WO	INDIRECT	0m	0m	0m
1A35	25/12/2016	1A35	CVN	SHC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A35	25/12/2016	1A35	CVN	SHC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1A37	25/12/2016	1A37	CVN	SHC	PSG	Terminated	WO	INDIRECT	0m	0m	0m
1A39	25/12/2016	1A39	CVN	SHC	PSG	Arrived	WO	DIRECT	0m	3m	3m
1A41	25/12/2016	1A41	CVN	SHC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A41	25/12/2016	1A41	CVN	SHC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1A43	25/12/2016	1A43	CVN	SHC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A43	25/12/2016	1A43	CVN	SHC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1A45	25/12/2016	1A45	CVN	SHC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A45	25/12/2016	1A45	CVN	SHC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1A47	25/12/2016	1A47	CVN	SHC	PSG	Terminated	WO	DIRECT	0m	0m	0m
1A49	25/12/2016	1A49	CVN	SHC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A49	25/12/2016	1A49	CVN	SHC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1A51	25/12/2016	1A51	CVN	SHC	PSG	Terminated	WI	DIRECT	0m	0m	0m
1A51	25/12/2016	1A51	CVN	SHC	PSG	Terminated	WO	DIRECT	0m	0m	0m
1A53	25/12/2016	1A53	CVN	SHC	PSG	Terminated	WO	DIRECT	0m	0m	0m
1A55	25/12/2016	1A55	CVN	SHC	PSG	Terminated	WO	DIRECT	2m	0m	2m
1A57	25/12/2016	1A57	CVN	SHC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A57	25/12/2016	1A57	CVN	SHC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1A59	25/12/2016	1A59	CVN	SHC	PSG	Terminated	WI	DIRECT	0m	6m	6m
1A59	25/12/2016	1A59	CVN	SHC	PSG	Terminated	WO	DIRECT	0m	0m	0m
1A61	25/12/2016	1A61	CVN	SHC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A61	25/12/2016	1A61	CVN	SHC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1A63	25/12/2016	1A63	CVN	SHC	PSG	Terminated	WI	DIRECT	0m	0m	0m
1A63	25/12/2016	1A63	CVN	SHC	PSG	Terminated	WO	DIRECT	0m	0m	0m
1A65	25/12/2016	1A65	CVN	SHC	PSG	Terminated	WO	INDIRECT	0m	0m	0m
1A69	25/12/2016	1A69	CVN	SHC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1A69	25/12/2016	1A69	CVN	SHC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1A73	25/12/2016	1A73	CVN	SHC	PSG	Cancelled	WI	INDIRECT	0m	0m	0m
1A73	25/12/2016	1A73	CVN	SHC	PSG	Cancelled	WO	INDIRECT	0m	0m	0m
1E19	25/12/2016	1E19	BNH	FYG	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1E19	25/12/2016	1E19	BNH	FYG	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1E25	25/12/2016	1E25	BNH	FYG	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1E25	25/12/2016	1E25	BNH	FYG	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1E33	25/12/2016	1E33	BNH	FYG	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1E33	25/12/2016	1E33	BNH	FYG	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1E37	25/12/2016	1E37	RST	FYG	PSG	Arrived	WI	INDIRECT	0m	0m	0m

1E39	25/12/2016	1E39	BNH	FYG	PSG	Terminated	WO	DIRECT	0m	0m	0m
1E43	25/12/2016	1E43	BNH	FYG	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1E43	25/12/2016	1E43	BNH	FYG	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1E45	25/12/2016	1E45	BNH	FYG	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1E45	25/12/2016	1E45	BNH	FYG	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1E47	25/12/2016	1E47	BNH	FYG	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1E47	25/12/2016	1E47	BNH	FYG	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1E57	25/12/2016	1E57	BNH	FYG	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1E57	25/12/2016	1E57	BNH	FYG	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1E61	25/12/2016	1E61	BNH	FYG	PSG	Arrived	WI	DIRECT	0m	7m	7m
1E63	25/12/2016	1E63	BNC	FYG	PSG	Arrived	WI	DIRECT	0m	0m	0m
1E63	25/12/2016	1E63	BNC	FYG	PSG	Arrived	WO	DIRECT	0m	1h 36m	1h 36m
1E65	25/12/2016	1E65	BNH	FYG	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1E65	25/12/2016	1E65	BNH	FYG	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1E69	25/12/2016	1E69	BNH	FYG	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1E69	25/12/2016	1E69	BNH	FYG	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K16	25/12/2016	1K16	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K16	25/12/2016	1K16	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K18	25/12/2016	1K18	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K18	25/12/2016	1K18	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K20	25/12/2016	1K20	KPR	SFC	PSG	Cancelled	WI	INDIRECT	0m	0m	0m
1K20	25/12/2016	1K20	KPR	SFC	PSG	Cancelled	WO	INDIRECT	0m	0m	0m
1K22	25/12/2016	1K22	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K22	25/12/2016	1K22	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K30	25/12/2016	1K30	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K30	25/12/2016	1K30	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K32	25/12/2016	1K32	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K32	25/12/2016	1K32	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K34	25/12/2016	1K34	KPR	SFC	PSG	Terminated	WI	DIRECT	0m	5m	5m
1K34	25/12/2016	1K34	KPR	SFC	PSG	Terminated	WO	DIRECT	0m	0m	0m
1K36	25/12/2016	1K36	PET	SFC	PSG	Terminated	WO	DIRECT	0m	0m	0m
1K36	25/12/2016	1K36	PET	SFC	PSG	Terminated	WI	INDIRECT	0m	1m	1m
1K42	25/12/2016	1K42	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K42	25/12/2016	1K42	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K44	25/12/2016	1K44	KPR	SFC	PSG	Terminated	WI	DIRECT	0m	0m	0m
1K44	25/12/2016	1K44	KPR	SFC	PSG	Terminated	WO	DIRECT	0m	0m	0m
1K46	25/12/2016	1K46	PET	SFC	PSG	Arrived	WI	DIRECT	0m	7m	7m
1K46	25/12/2016	1K46	PET	SFC	PSG	Arrived	WO	DIRECT	0m	1m	1m
1K48	25/12/2016	1K48	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K48	25/12/2016	1K48	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K50	25/12/2016	1K50	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K50	25/12/2016	1K50	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K52	25/12/2016	1K52	KPR	SFC	PSG	Arrived	WO	DIRECT	0m	4m	4m
1K54	25/12/2016	1K54	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K54	25/12/2016	1K54	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K56	25/12/2016	1K56	KPR	SFC	PSG	Arrived	WI	INDIRECT	0m	1m	1m
1K58	25/12/2016	1K58	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K58	25/12/2016	1K58	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K60	25/12/2016	1K60	KPR	SFC	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1K60	25/12/2016	1K60	KPR	SFC	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1K64	25/12/2016	1K64	PET	SFC	PSG	Arrived	WI	DIRECT	0m	0m	0m
1K66	25/12/2016	1K66	KPR	SFC	PSG	Arrived	WI	INDIRECT	0m	4m	4m
1K68	25/12/2016	1K68	KPR	SFC	PSG	Terminated	WO	DIRECT	0m	0m	0m
1R04	25/12/2016	1R04	SHC	ETS	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1R74	25/12/2016	1R74	SHC	ETS	PSG	Cancelled	WI	INDIREC	0m	0m	0m

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1Y07	25/12/2016	1Y07	ETS	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y09	25/12/2016	1Y09	ETS	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y11	25/12/2016	1Y11	ETS	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y17	25/12/2016	1Y17	RST	KPR	PSG	Arrived		INDIREC T	0m	4m	4m
1Y17	25/12/2016	1Y17	RST	KPR	PSG	Arrived	NA	INDIREC T	0m	0m	0m
1Y17	25/12/2016	1Y17	RST	KPR	PSG	Arrived	WO	INDIREC T	3m	0m	3m
1Y23	25/12/2016	1Y25	ETS	KPR	PSG	Arrived	WI	DIRECT	0m	0m	0m
1Y23	25/12/2016	1Y25	ETS	KPR	PSG	Arrived	WO	DIRECT	0m	2m	2m
1Y23	25/12/2016	1Y25	ETS	KPR	PSG	Arrived		INDIREC T	0m	51m	51m
1Y25	25/12/2016	1Y25	SFC	KPR	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1Y25	25/12/2016	1Y25	SFC	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y27	25/12/2016	1Y27	SFC	KPR	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1Y27	25/12/2016	1Y27	SFC	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y29	25/12/2016	1Y29	SFC	KPR	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1Y29	25/12/2016	1Y29	SFC	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y37	25/12/2016	1Y37	SFC	KPR	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1Y37	25/12/2016	1Y37	SFC	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y39	25/12/2016	1Y39	CQD	KPR	PSG	Terminated	WI	DIRECT	17m	0m	17m
1Y39	25/12/2016	1Y39	CQD	KPR	PSG	Terminated	WO	DIRECT	0m	0m	0m
1Y41	25/12/2016	1Y41	SFC	KPR	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1Y41	25/12/2016	1Y41	SFC	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y43	25/12/2016	1Y43	BNC	KPR	PSG	Arrived	WI	DIRECT	0m	0m	0m
1Y45	25/12/2016	1Y45	SFC	KPR	PSG	Arrived	WO	DIRECT	0m	3m	3m
1Y49	25/12/2016	1Y49	SFC	KPR	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1Y49	25/12/2016	1Y49	SFC	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y51	25/12/2016	1Y51	SFC	KPR	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1Y51	25/12/2016	1Y51	SFC	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y53	25/12/2016	1Y53	SFC	KPR	PSG	Terminated	WI	DIRECT	0m	5m	5m
1Y53	25/12/2016	1Y53	SFC	KPR	PSG	Terminated	WO	DIRECT	2m	0m	2m
1Y53	25/12/2016	1Y53	SFC	KPR	PSG	Terminated	WO	INDIREC T	0m	0m	0m
1Y55	25/12/2016	1Y55	BNC	KPR	PSG	Terminated	WO	DIRECT	0m	11m	11m
1Y55	25/12/2016	1Y55	BNC	KPR	PSG	Terminated	WO	INDIREC T	0m	22m	22m
1Y57	25/12/2016	1Y57	PET	KPR	PSG	Arrived	WI	DIRECT	0m	0m	0m
1Y57	25/12/2016	1Y57	PET	KPR	PSG	Arrived	WO	DIRECT	0m	0m	0m
1Y61	25/12/2016	1Y61	SFC	KPR	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1Y61	25/12/2016	1Y61	SFC	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y63	25/12/2016	1Y63	SFC	KPR	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1Y63	25/12/2016	1Y63	SFC	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y65	25/12/2016	1Y65	SFC	KPR	PSG	Arrived	WO	INDIREC T	0m	2m	2m
1Y67	25/12/2016	1Y67	SFC	KPR	PSG	Cancelled	WI	DIRECT	0m	0m	0m
1Y67	25/12/2016	1Y67	SFC	KPR	PSG	Cancelled	WO	DIRECT	0m	0m	0m
1Y71	25/12/2016	1Y71	SFC	KPR	PSG	Arrived	WO	DIRECT	2m	0m	2m
20C6	25/12/2016	20C6	PET	ETS	PSG	Arrived		INDIREC T	0m	6m	6m
2D03	25/12/2016	2D03	IPS	RDK	PSG	Cancelled	NA	INDIREC T	0m	0m	0m
2Y09	25/12/2016	2Y09	KPR	KPR	PSG	Cancelled	NA	INDIREC T	0m	0m	0m
A0C2	25/12/2016	A0C2	PET	ETS	PSG	Cancelled	NA	INDIREC T	0m	0m	0m
A0C4	25/12/2016	A0C4	PET	ETS	PSG	Cancelled	NA	INDIREC T	0m	0m	0m
AG05	25/12/2016	AG05	VYS	ROB	PSG	Cancelled	NA	INDIREC T	0m	0m	0m

AG07	25/12/2016	AG07	VYS	ROB	PSG	Cancelled	NA	INDIRECT	0m	0m	0m
C007	25/12/2016	C007	IPS	ETS	PSG	Cancelled	NA	DIRECT	0m	0m	0m
T001	25/12/2016	T001	IPS	ETB	PSG	Arrived	WI	DIRECT	0m	4m	4m
T121	25/12/2016	T121	IPS	PET	PSG	Terminated	WI	INDIRECT	0m	5m	5m
T133	25/12/2016	T133	IPS	PET	PSG	Arrived	WI	DIRECT	0m	5m	5m
T135	25/12/2016	1135	IPS	PET	PSG	Cancelled	WI	DIRECT	0m	0m	0m
T135	25/12/2016	1135	IPS	PET	PSG	Cancelled	WO	DIRECT	0m	0m	0m
T149	25/12/2016	T149	IPS	PET	PSG	Terminated	WO	DIRECT	0m	0m	0m
T508	25/12/2016	1508	PET	IPS	PSG	Arrived	WO	DIRECT	0m	4m	4m
T520	25/12/2016	1520	PET	IPS	PSG	Terminated	WO	DIRECT	0m	0m	0m
T520	25/12/2016	1520	PET	IPS	PSG	Terminated	WI	INDIRECT	0m	1m	1m
T522	25/12/2016	1522	PET	IPS	PSG	Arrived	WI	INDIRECT	0m	1m	1m
T522	25/12/2016	1522	PET	IPS	PSG	Arrived	WO	INDIRECT	0m	1m	1m
T526	25/12/2016	T526	PET	IPS	PSG	Cancelled	WI	DIRECT	0m	0m	0m
T526	25/12/2016	T526	PET	IPS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
T532	25/12/2016	1532	PET	IPS	PSG	Arrived	WI	INDIRECT	0m	3m	3m
T538	25/12/2016	1538	ETB	IPS	PSG	Arrived	WI	INDIRECT	0m	0m	0m
T544	25/12/2016	1544	PET	IPS	PSG	Terminated	WI	DIRECT	0m	1m	1m
T544	25/12/2016	1544	PET	IPS	PSG	Terminated	WO	DIRECT	0m	0m	0m
T556	25/12/2016	1556	PET	IPS	PSG	Cancelled	WI	DIRECT	0m	0m	0m
T556	25/12/2016	1556	PET	IPS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
T558	25/12/2016	T558	ZLL	IPS	PSG	Arrived	WI	DIRECT	0m	9m	9m
T558	25/12/2016	T558	ZLL	IPS	PSG	Arrived	WO	INDIRECT	0m	2m	2m
T562	25/12/2016	T562	PET	IPS	PSG	Arrived	WI	DIRECT	0m	1m	1m
T562	25/12/2016	T562	PET	IPS	PSG	Arrived	WO	DIRECT	0m	1m	1m
T568	25/12/2016	T568	PET	IPS	PSG	Arrived	WI	DIRECT	0m	10m	10m
T568	25/12/2016	T568	PET	IPS	PSG	Arrived	WO	DIRECT	0m	1m	1m
T568	25/12/2016	T568	PET	IPS	PSG	Arrived	WI	INDIRECT	0m	4m	4m
TG04	25/12/2016	TG04	ETF	VYS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TG16	25/12/2016	1G16	BRC	VYS	PSG	Arrived	AIR	INDIRECT	0m	0m	0m
TG20	25/12/2016	1G20	BNC	VYS	PSG	Arrived	AIR	DIRECT	0m	0m	0m
TG20	25/12/2016	1G20	BNC	VYS	PSG	Arrived	WO	INDIRECT	0m	8m	8m
TG22	25/12/2016	TG22	BDT	VYS	PSG	Terminated	AIR	INDIRECT	0m	5m	5m
TG22	25/12/2016	TG22	BDT	VYS	PSG	Terminated	WO	INDIRECT	0m	0m	0m
TG24	25/12/2016	TG24	BDT	VYS	PSG	Arrived	AIR	INDIRECT	0m	3m	3m
TG30	25/12/2016	TG30	BDT	VYS	PSG	Terminated	WO	DIRECT	0m	0m	0m
TG32	25/12/2016	TG32	BDT	VYS	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TG32	25/12/2016	TG32	BDT	VYS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TG34	25/12/2016	TG34	BDT	VYS	PSG	Arrived	AIR	INDIRECT	0m	3m	3m
TG36	25/12/2016	TG36	BDT	VYS	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TG36	25/12/2016	TG36	BDT	VYS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TG38	25/12/2016	TG38	BDT	VYS	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TG38	25/12/2016	TG38	BDT	VYS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TG44	25/12/2016	1G44	BDT	VYS	PSG	Terminated	AIR	DIRECT	0m	3m	3m
TG44	25/12/2016	1G44	BDT	VYS	PSG	Terminated	WO	DIRECT	0m	0m	0m
TG48	25/12/2016	TG48	BDT	VYS	PSG	Arrived	AIR	DIRECT	0m	15m	15m
TG52	25/12/2016	TG52	ETF	VYS	PSG	Arrived	AIR	DIRECT	0m	0m	0m

TG54	25/12/2016	TG54	BDT	VYS	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TG54	25/12/2016	TG54	BDT	VYS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TG56	25/12/2016	TG56	BDT	VYS	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TG56	25/12/2016	TG56	BDT	VYS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TG60	25/12/2016	TG60	BDT	VYS	PSG	Cancelled	AIR	INDIRECT	0m	0m	0m
TG60	25/12/2016	TG60	BDT	VYS	PSG	Cancelled	WO	INDIRECT	0m	0m	0m
TG70	25/12/2016	TG70	BDT	VYS	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TG70	25/12/2016	TG70	BDT	VYS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TG72	25/12/2016	TG72	ETF	VYS	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TL01	25/12/2016	TL01	IPS	PET	PSG	Arrived	WI	DIRECT	0m	8m	8m
TL07	25/12/2016	TL07	IPS	PET	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TL07	25/12/2016	TL07	IPS	PET	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TL09	25/12/2016	1L09	RST	PET	PSG	Arrived	WI	DIRECT	0m	0m	0m
TL09	25/12/2016	1L09	RST	PET	PSG	Arrived	WI	INDIRECT	0m	7m	7m
TL09	25/12/2016	1L09	RST	PET	PSG	Arrived	WO	INDIRECT	1m	0m	1m
TL11	25/12/2016	1L11	IPS	PET	PSG	Arrived	WO	DIRECT	0m	4m	4m
TL13	25/12/2016	1L13	IPS	PET	PSG	Arrived	WO	DIRECT	1m	0m	1m
TL15	25/12/2016	TL15	IPS	PET	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TL15	25/12/2016	TL15	IPS	PET	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TL17	25/12/2016	TL17	IPS	PET	PSG	Arrived	WO	DIRECT	0m	1m	1m
TL19	25/12/2016	1L19	IPS	PET	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TL19	25/12/2016	1L19	IPS	PET	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TM01	25/12/2016	TM01	VYS	ETF	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TM05	25/12/2016	TM05	VYS	ETF	PSG	Terminated	NA	DIRECT	0m	0m	0m
TP11	25/12/2016	TP11	VYS	BDT	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TP11	25/12/2016	TP11	VYS	BDT	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TP15	25/12/2016	TP15	VYS	BDT	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TP15	25/12/2016	TP15	VYS	BDT	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TP17	25/12/2016	TP17	VYS	BDT	PSG	Arrived	AIR	INDIRECT	1m	0m	1m
TP17	25/12/2016	TP17	VYS	BDT	PSG	Arrived	WI	INDIRECT	0m	11m	11m
TP19	25/12/2016	TP19	VYS	BDT	PSG	Arrived	AIR	INDIRECT	0m	1m	1m
TP27	25/12/2016	TP27	VYS	BDT	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TP27	25/12/2016	TP27	VYS	BDT	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TP33	25/12/2016	TP33	VYS	BDT	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TP33	25/12/2016	TP33	VYS	BDT	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TP41	25/12/2016	TP41	BNH	BDT	PSG	Arrived	WI	DIRECT	0m	0m	0m
TP43	25/12/2016	1P43	BNC	BDT	PSG	Arrived	AIR	DIRECT	17m	1m	18m
TP43	25/12/2016	1P43	BNC	BDT	PSG	Arrived	WI	DIRECT	0m	0m	0m
TP47	25/12/2016	TP47	VYS	BDT	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TP47	25/12/2016	TP47	VYS	BDT	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TP49	25/12/2016	TP49	VYS	BDT	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TP49	25/12/2016	TP49	VYS	BDT	PSG	Cancelled	WI	DIRECT	0m	0m	0m
TP51	25/12/2016	TP51	VYS	BDT	PSG	Terminated	AIR	DIRECT	0m	0m	0m
TP55	25/12/2016	TP55	VYS	BDT	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TP55	25/12/2016	TP55	VYS	BDT	PSG	Cancelled	WO	DIRECT	0m	0m	0m
TP65	25/12/2016	TP65	VYS	BDT	PSG	Cancelled	AIR	DIRECT	0m	0m	0m
TP65	25/12/2016	TP65	VYS	BDT	PSG	Cancelled	WI	DIRECT	0m	0m	0m
U507	25/12/2016	U507	RSW	IPS	PSG	Cancelled	WI	DIRECT	0m	0m	0m
U511	25/12/2016	JJ11	RSW	IPS	PSG	Arrived	WI	INDIRECT	0m	27m	27m
U513	25/12/2016	J513	KRA	IPS	PSG	Arrived	WI	INDIRECT	0m	7m	7m
U515	25/12/2016	J515	RSW	IPS	PSG	Arrived	WI	INDIRECT	0m	3m	3m

U610	25/12/2016	J610	IPS	RSW	PSG	Arrived	WO	INDIREC T 2m	44m	46m
U612	25/12/2016	J612	IPS	RSW	PSG	Terminated	WO	INDIREC T 0m	39m	39m
U614	25/12/2016	J614	IPS	RSW	PSG	Arrived	WO	INDIREC T 0m	8m	8m

Total Delays: 12h 36m

Response Details

Ambulance ☐

Fire Department ☐

Police ☐

State Emergency Service ☐

Police Report Num:

Media Contact:

DG On Train: ☐

DG Involved:

Risk Of More Damage:

Breath/Drug Test Details

Breath Test Required: ☐

Breath Test Conducted: ☐

Breath Test Positive: ☐

Drug Test Required: ☐

Comments: