# Report on Transport 2017

15 DECEMBER 2017

# THE ROLE OF THE AUDITOR-GENERAL

The roles and responsibilities of the Auditor-General, and hence the Audit Office, are set out in the *Public Finance and Audit Act 1983*.

Our major responsibility is to conduct financial or 'attest' audits of State public sector agencies' financial statements. We also audit the Total State Sector Accounts, a consolidation of all agencies' accounts.

Financial audits are designed to add credibility to financial statements, enhancing their value to end-users. Also, the existence of such audits provides a constant stimulus to agencies to ensure sound financial management.

Following a financial audit the Audit Office issues a variety of reports to agencies and reports periodically to parliament. In combination these reports give opinions on the truth and fairness of financial statements, and comment on agency compliance with certain laws, regulations and government directives. They may comment on financial prudence, probity and waste, and recommend operational improvements.

We also conduct performance audits. These examine whether an agency is carrying out its activities effectively and doing so economically and efficiently and in compliance with relevant laws. Audits may cover all or parts of an agency's operations, or consider particular issues across a number of agencies.

As well as financial and performance audits, the Auditor-General carries out special reviews and compliance engagements.

Performance audits are reported separately, with all other audits included in one of the regular volumes of the Auditor-General's Reports to Parliament – Financial Audits.

GPO Box 12
Sydney NSW 2001

The Legislative Assembly
Parliament House
Sydney NSW 2000

The Legislative Council
Parliament House
Sydney NSW 2000

In accordance with section 52A of the *Public Finance and Audit Act 1983*, I present a report titled **Transport 2017**

**Margaret Crawford**
Auditor-General
15 December 2017

audit.nsw.gov.au

# contents

**Transport 2017**

# Section one

# Transport 2017

This report analyses the financial reporting and controls and service delivery of agencies within the Transport cluster for the year ended 30 June 2017.

# Executive summary

## 1. Financial reporting and controls

| | |
|---|---|
| **Audit opinions** | Unqualified audit opinions were issued for all agencies' financial statements. |
| **Early close** | Early close procedures continue to facilitate timely preparation of financial statements and completion of audits, but agencies can improve their asset revaluation processes. The revaluations were not completed by the early close deadline. |
| **Key audit matters** | The cluster corrected the value of rail tunnels and earthworks by recording an additional $8.5 billion in infrastructure assets. |
| **Passenger revenue and patronage** | Revenue increased by seven per cent at a similar rate to patronage. Opal fare structure changes came into effect on 5 September 2016. Continued rises in patronage can increase pressure on public transport punctuality. |
| **Negative balances on Opal Cards** | There was $2.6 million in revenue not collected during 2016–17 financial year through negative balance Opal Cards. This represents 0.2 per cent of total annual passenger revenue. Transport advise the cumulative balance of negative balance Opal Cards is $4.2 million as at 30 June 2017.<br><br>**Recommendation:** Transport for NSW (TfNSW) should implement measures to prevent loss of revenue from passengers tapping off with negative balance Opal Cards. |
| **Investment in infrastructure** | Agencies spent $8.5 billion on assets in 2016–17 and have contractual capital commitments of $11.3 billion over the next five years. |
| **Internal controls** | IT systems user access administration remains an area of weakness. |

## 2. Service delivery

| | |
|---|---|
| **Punctuality** | According to Transport data, average punctuality is above target for Sydney Trains, Ferries and Light Rail, but below target for NSW Trains services. State Transit Authority of NSW (STA) is not meeting punctuality targets. STA continued working with TfNSW on delivering improved punctuality. |
| **Public transport capacity** | Passenger crowding is above benchmark for many morning peak suburban rail services, as indicated by Transport data. Eleven of the 14 bus contract regions had full buses. |
| **Bus crowding** | There are no target measures on crowding for bus operators in any contract region.<br><br>**Recommendation:** TfNSW should develop target measures on crowding for bus operators in all contract regions and publish the results. |
| **Customer satisfaction** | Surveys conducted by Transport indicate customer satisfaction exceeded target for all modes of public transport. |

# 1. Financial reporting and controls

## Unqualified audit opinions were issued for all agencies' financial statements

Unqualified audit opinions were issued on the 2016–17 financial statements of all agencies in the Transport cluster.

## The cluster corrected the value of rail tunnels and earthworks for an additional $8.5 billion

The accounting standards require all infrastructure assets to be valued and recorded in the financial statements. Some rail tunnels and earthworks have never been valued by TfNSW and Rail Corporation NSW (RailCorp). These include the City Circle, the country regional network, and other tunnels and earthworks built before year 2000.

TfNSW and RailCorp (and previous agencies) did not account for these assets as they believed that their value could not be reliably measured. This year an independent valuer was engaged to perform a comprehensive valuation. The methodology used demonstrated that the assets could have been reliably reflected in earlier financial statements. TfNSW and RailCorp recorded an additional $8.5 billion to correct the value of infrastructure assets at 1 July 2016.

## Timely completion of asset valuations can be improved

Asset valuations are complex. The transport cluster has a large, geographically dispersed asset base, requiring significant resources, judgement and estimation techniques to determine fair values. Although most agencies complied with the Treasury's early close procedures, opportunities exist for further improvements to asset revaluation processes.

TfNSW completed the valuation of buses under finance lease and revaluation of country regional network infrastructure assets after the early close deadline. RailCorp also completed the valuation of its pre-2000 tunnels and earthworks after the early close deadline. The draft results of the revaluations were provided to the Audit Office after 30 June 2017 when the valuations were complete. The main reason for the delays was that the valuation of the tunnels and earthworks required significant effort to determine an appropriate valuation methodology.

## Passenger revenue and patronage increased

Public transport passenger revenue increased by $93 million (seven per cent) in 2016–17, and patronage increased by 49 million (seven per cent) across all modes of transport. There were some changes in the method of calculating reported patronage between 2015–16 and 2016–17. If the methods had been consistent, the patronage increase would be lower at 6.5 per cent. The Opal fare structure changed from September 2016 to allow a transfer discount between modes of transport and replaced free trips after eight journeys with half price trips.

## $2.6 million in Revenue not collected during 2016–17 through negative balance Opal cards

The number of Opal cards with negative balances increased from 363,000 during 2015–16 (negative $1.3 million) to 776,771 (negative $2.6 million) during 2016–17. Transport advise the cumulative balance of negative balance Opal Cards is $4.2 million as at 30 June 2017. During 2016–17, 5.9 million Opal Cards were issued, an increase from 4.1 million cards issued in 2015–16.

If a passenger's card has a minimum value when they tap on they will be able to tap off and the card will go into a negative balance. Revenue from unregistered Opal cards with negative balances cannot be recovered unless the passenger tops-up the card. The total balance of lost revenue will continue to grow if passengers discard unregistered cards without paying for the remaining negative balance.

**Recommendation**

> TfNSW should implement measures to prevent loss of revenue from passengers tapping off with negative balance Opal Cards.

**IT systems user access administration remains an area of weakness**

We identified six moderate and eight low risk issues related to user access systems administration across four agencies. This included inadequate review of highly privileged/super user account transactions and user access reviews not being performed. These weaknesses increase the risk of users having excessive or unauthorised access to critical financial systems and information.

# 2.    Service delivery

**Average punctuality is above target for Sydney Trains, Ferries and Light Rail, but below target for NSW Trains services**

Meeting punctuality targets is a continuing challenge for NSW Trains' intercity services. Data provided by Transport indicate intercity services achieved an average punctuality performance of 88.8 per cent, which was below the target of 92 per cent. After reaching its punctuality target in 2015–16 for the first time in 13 years, NSW Trains regional services achieved an average of 75 per cent punctuality in 2016–17, which was below the target of 78 per cent.

**STA not meeting punctuality targets**

Three KPIs measure punctuality performance for all operators. They are to meet 95 per cent of the punctuality target at the start, middle and end of the trip. Financial penalties can be imposed on private bus operators if they do not meet punctuality targets at the start of the trip, but not if the middle or end of trip targets are not met. No financial penalties can be imposed on STA for poor punctuality performance.

In 2015–16, we recommended that TfNSW should include financial penalties for not meeting each punctuality KPI in future contracts with bus operators. Transport advised that they are implementing the recommendation for the start point of trip KPI as part of the contract renewals with STA. Contract renewal is underway for STA Contract Regions Seven (North Sydney, Chatswood, Macquarie Park, Epping, Ryde and Parramatta), Region Eight (Palm Beach, Brookvale, Manly, Mosman and North Sydney) and Region Nine (Bondi Junction, Randwick, Maroubra, Botany, Mascot and Surry Hills).

**Eleven of the 14 bus contract regions had full buses**

Contract structures in place with the bus operators encourage the Operators to self-report overcrowding information (bus full on route) each month. There are now real-time transport mobile applications available to see how full a bus is before it arrives. However, there are no target measures on crowding for bus operators in any contract regions. Also, the crowding information is not published for buses in any contract region.

In our last two Transport Reports we recommended TfNSW develop target measures on crowding for its bus operators in all regions.

**Recommendation**

> Repeat Issue: TfNSW should develop target measures on crowding for bus operators in all contract regions and publish the results.

**Surveys conducted by Transport indicate customer satisfaction exceeded target for all modes of public transport**

Between November 2012 and May 2017, the Transport Customer Satisfaction Index (TCSI) showed overall customer satisfaction with all public transport modes improved ten percentage points on a patronage-weighted basis (from 79 per cent to 89 per cent). Customers on ferries continued to be most satisfied, followed by those on Light Rail. Sydney Trains and NSW Trains had fewer complaints in 2016–17.

# 1. Introduction

This report provides Parliament and other users of Transport cluster agencies' financial statements with audit results, observations, conclusions and recommendations in the following areas:

- Financial reporting and controls
- Service delivery.

## 1.1 Snapshot of the Transport cluster

TfNSW is the lead agency in the Transport cluster. It is responsible for the coordination, funding allocation, policy and planning and other delivery functions for transport services.

TfNSW is controlled by the Department of Transport (the Department). The Department does not control the Independent Transport Safety Regulator, Office of Transport Safety Investigations or Port Authority of New South Wales.
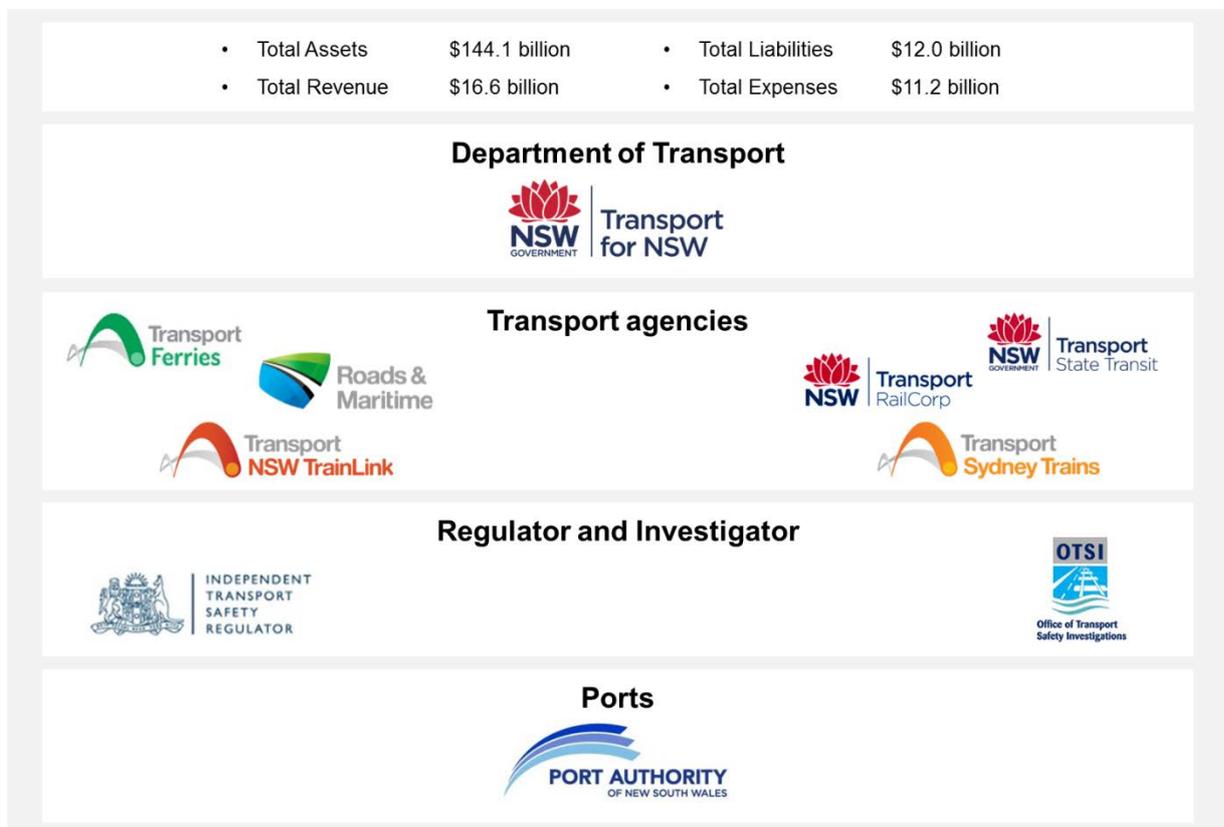


Notes:

1    TfNSW includes Transport Service of New South Wales (Transport Service).

2    All NSW TrainLink services are provided by the NSW Government through an overarching entity: NSW Trains.

3    Total revenue and expenses exclude gains and losses.

4    Pursuant to the *Transport Administration Amendment (Independent Transport Safety Regulator) Act 2017*, the Independent Transport Safety Regulator (ITSR) was abolished on 31 March 2017.

# 1.2　Operational snapshot

| Bus [a] | Ferries [b] | Rail [c] | Road [d] |
|---|---|---|---|
| **Passenger journeys** 315 million** | **Passenger journeys** 16.0 million** | **Passenger journeys** 386 million** | **Registered vehicles** 6.4 million** |
| **Passenger revenue** $409 million* | **Passenger revenue** $50.0 million* | **Passenger revenue** $896 million* | **Collections** $3.6 billion* |
| **Operating expenses** $1.7 billion* | **Operating expenses** $117 million* | **Operating expenses** $4.5 billion* | **Operating expenses** $1.1 billion* |
| **Government funding** $411 million* | **Government funding** $117 million* | **Government funding** $2.1 billion* | **Government funding** $5.7 billion* |
| **Net Assets** $374 million* | **Net Assets** $174 million* | **Net Assets** $34.6 billion* | **Net Assets** $84.2 billion* |
| **Cost recovery from users** 24%** | **Cost recovery from users** 43%** | **Cost recovery from users** 20%** | |

Notes:

a　Bus passenger journeys, passenger revenue and government funding include STA and private bus operators. Operating expenses are made up of bus contract payments by TfNSW to bus operators. Net assets relate to STA only.

b　Operating expenses are ferry contract payments by TfNSW to a private ferry operator and Sydney Ferries' operating expenditure. Net assets relate to Sydney Ferries only.

c　Rail excludes Light Rail results (10.0 million passenger journeys, $11.0 million passenger revenue, $33.0 million operating expenses). Government funding includes cash equity injections. Operating expenses exclude inter-rail transactions.

d　Collections consists of license and registration fees, stamp duty, motor vehicle weight tax, and fines and other revenue collected by RMS from road users which is predominantly paid to the Treasury.

*　Source: Transport agencies' financial statements (audited).

**　Source: Information from transport agencies (unaudited).

# 1.3　Changes to the cluster

The Transport cluster was impacted by the *Transport Administration Amendment (Independent Transport Safety Regulator) Act 2017*. Effective from 1 April 2017, the responsibility and function of the Independent Transport Safety Regulator (ITSR) was transferred to the Office of the National Rail Safety Regulator (ONRSR).

# 2. Financial reporting and controls

Confidence in public sector decision-making and transparency is enhanced when financial reporting is accurate and timely. Appropriate financial controls help ensure the efficient and effective use of resources and administration of agency policies.

This chapter outlines our audit observations, conclusions or recommendations related to financial reporting and controls of Transport cluster agencies for 2016–17.

| Observation | Conclusion or recommendation |
|---|---|
| **Quality of financial reporting** | |
| **Unqualified opinions were issued for all agencies' financial statements.** | Unqualified audit opinions were issued on the 2016–17 financial statements of all agencies in the Transport cluster. Agencies complied with the new disclosure requirements required under accounting standard AASB 124 'Related Party Disclosures'. |
| **Old tunnels and earthworks valued.** | The cluster corrected the value of rail tunnels and earthworks by recording an additional $8.5 billion in infrastructure assets. |
| **Timeliness of financial reporting** | |
| **Most agencies complied with the statutory timeframes for completion of early close procedures and preparation and audit of financial statements.** | Early close procedures continue to facilitate timely preparation of financial statements and completion of audits, but agencies can make further improvement in the revaluation process. |
| **TfNSW and RailCorp completed asset revaluations after the early close deadline.** | While all revaluation matters were resolved and corrected, completing the revaluation process earlier would enable more timely review, identification and resolution of matters. |
| **Passenger revenue, patronage and cost recovery** | |
| **Revenue increased by 7 per cent at a similar rate to patronage.** | Public transport passenger revenue increased by $93 million (seven per cent) in 2016–17, and patronage increased by 49 million (seven per cent) across all modes of transport. There were some changes in the method of calculating reported patronage between 2015–16 and 2016–17. If the methods had been consistent, the patronage increase would be 6.5 per cent. Opal fare structure changes came into effect on 5 September 2016. |
| **Value of negative balance Opal Cards doubled since last year.** | There was $2.6 million in revenue not collected during 2016–17 financial year through negative balance Opal Cards. This represents 0.2 per cent of total annual passenger revenue. Transport advise the cumulative balance of negative balance Opal Cards is $4.2 million as at 30 June 2017. <br><br>**Recommendation:** TfNSW should implement measures to prevent the loss of revenue from passengers tapping off with negative balance Opal cards. |
| **The overall cost recovery from users of public transport increased slightly to 21.3 per cent.** | Cost of service per passenger journey for buses and ferries decreased. Revenue per passenger journey for all modes remained fairly stable. |

| Observation | Conclusion or recommendation |
|---|---|
| **Investment in Infrastructure** | |
| **There was a significant investment in transport assets in 2016–17.** | Agencies spent $8.5 billion on assets in 2016–17, including $3.8 billion on rail systems and $3.8 billion on road and maritime infrastructure systems. |
| **Transport cluster have capital commitment of $11.3 billion over the next five years.** | The transport cluster has significant contractual commitments over the next five years on rail and road infrastructure projects. |
| **Internal controls** | |
| **User access administration over systems remains an area of weakness.** | We identified six moderate and eight low risk issues related to user systems access administration across four agencies. This included review of highly privileged/super user account transactions not performed effectively and user access reviews not performed. These weaknesses increase the risk of users having excessive or unauthorised access to critical financial systems and information. |

## 2.1 Quality of financial reporting

### Audit opinions

**Unqualified audit opinions were issued for all agencies' financial statements**

Unqualified audit opinions were issued on the 2016–17 financial statements of all agencies in the Transport cluster.

In 2015–16, we reported one significant matter relating to the impairment of leased buses. TfNSW recognised an impairment loss of $179 million against the carrying value of the bus fleet leased from STA. We recommended management assess whether this impairment has implications for the value of the bus fleet leased from private operators. In 2016–17 management conducted a revaluation of finance leased buses which considered impairment implications resulting in a decrease in value of $168 million for the bus fleet leased from private operators.

### Key audit matters

**The cluster corrected the value of rail tunnels and earthworks for an additional $8.5 billion**

The accounting standards require all infrastructure assets to be valued and recorded in the financial statements. Some rail tunnels and earthworks have never been valued by TfNSW and RailCorp. These include the City Circle, the country regional network, and other tunnels and earthworks built before year 2000.

TfNSW and RailCorp (and previous agencies) did not account for these assets as they believed their value could not be reliably measured. This year an independent valuer was engaged to perform a comprehensive valuation. The methodology used demonstrated that the assets could have been reliably reflected in earlier financial statements. TfNSW and RailCorp recorded an additional $8.5 billion to correct the value of infrastructure assets at 1 July 2016.

In addition, a physical inspection of a sample of assets identified significant variations in TfNSW's database used in the initial valuation to support the existence and condition of earthworks in the country regional network. In response to the identified variations, the final valuation was revised. The process encountered significant data accuracy challenges and several changes were required to arrive at a reasonable and acceptable valuation.

**Agencies materially complied with the disclosure requirements for related parties**

For the first time, not-for-profit public sector agencies were required to include disclosures about related party relationships and transactions in their financial statements. Agency financial statements disclosed the:

- compensation paid to their key management personnel
- nature of related party relationships
- amount and nature of their related party transactions, outstanding balances and
- commitments and outstanding balances (including commitments).

Agencies complied with the disclosure requirements.

## 2.2   Timeliness of financial reporting

**Cluster agencies' financial statements were submitted on time**

Most Transport cluster agencies submitted financial statements on time in accordance with Treasury Circular TC 17–06 'Agency Guidelines for the 2016–17 Mandatory Annual Returns to Treasury'. TfNSW and RailCorp received an extension from the Treasury to formally submit the financial statements by 11 August 2017. The Treasury extended TfNSW and RailCorp's deadline for submitting the 2016–17 financial statements in order to address complex issues relating to the valuation of tunnels and earthworks. Timely and accurate financial reporting is essential for effective decision making, timely management of public funds and enhancing public accountability.

Treasury Circular 16–13 'Agency guidelines for the 2016–17 Mandatory Early Close' limited the mandatory early close procedures to non-financial asset valuations and proforma financial statements. Completion of early close procedures helps to resolve potential issues before the end of the financial year.

The Treasury encouraged agencies to maintain the disciplines implemented over the last few years and recommended they complete the additional good practice procedures listed in the circular. Except for the matters referred to below, agencies substantially complied with the Treasury's early close procedures. All agencies submitted proforma financial statements on time.

| Cluster agencies | Timeliness of financial reporting and audit reporting | | | Management Letter Findings | | | | |
|---|---|---|---|---|---|---|---|---|
| | Early close procedures | Financial statements | Audit Report | High | Moderate | Low | Total | Repeat^ |
| **Cluster lead entity** | | | | | | | | |
| Department of Transport | ✅ | ✅ | ✅ | -- | -- | -- | -- | -- |
| Transport for NSW | * | ✅* | ✅ | -- | 10 | 7 | 17 | 2 |
| **Transport service providers** | | | | | | | | |
| NSW Trains | ✅ | ✅ | ✅ | -- | 2 | 3 | 5 | 2 |
| RailCorp | * | ✅* | ✅ | -- | 4 | 7 | 11 | -- |
| Roads and Maritime Services | ✅ | ✅ | ✅ | -- | 4 | 6 | 10 | 3 |
| State Transit Authority | ✅ | ✅ | ✅ | -- | -- | 2 | 2 | -- |
| Sydney Ferries | ✅ | ✅ | ✅ | -- | -- | -- | -- | -- |
| Sydney Trains | ✅ | ✅ | ✅ | -- | 3 | 6 | 9 | 3 |

| Cluster agencies | Timeliness of financial reporting and audit reporting | | | Management Letter Findings | | | | |
|---|---|---|---|---|---|---|---|---|
| | Early close procedures | Financial statements | Audit Report | High | Moderate | Low | Total | Repeat^ |
| **Other agencies** | | | | | | | | |
| Independent Transport Safety Regulator | N/A** | ✓ | ** | -- | -- | -- | -- | -- |
| Office of Transport Safety Investigations | ✓*** | ✓ | ✓ | -- | -- | -- | -- | -- |
| Port Authority of New South Wales | ✓ | ✓ | ✓ | -- | 1 | 1 | 2 | 1 |
| Transport Service of New South Wales | ✓ | ✓ | ✓ | -- | -- | -- | -- | -- |

✓    Statutory reporting deadline was met.

\*    Treasury Circular TC 17–06 'Agency Guidelines for the 2016–17 Mandatory Annual Returns to Treasury' required entities to submit their year-end information to the Treasury and its financial statements to the Audit Office on 24 July 2017. These entities submitted draft financial statements and supporting working papers to the audit team on 24 July 2017. These entities received an extension from the Treasury to formally submit the financial statements by 11 August 2017. The statutory reporting deadline for the submission of financial statements was 11 August 2017.

    TfNSW did not complete the valuation of finance lease buses and revaluation of country regional network infrastructure assets by the early close deadline. RailCorp did not complete the valuation of its pre-2000 tunnels and earthworks by the early close deadline.

\*\*    Early Close not applicable because agency was abolished at end of March 2017 and obtained exemption from the Treasury for not performing early close procedures.

    The Audit Office did not issue the opinion on the ITSR financial statements by the statutory deadline.

\*\*\*    In accordance with TC 16–13, Audit Office determined that limited audit procedures were appropriate at Early Close. The audit team, in consultation with management, determined audit procedures would be limited to performing a review of the proforma financial statements.

^    Repeat management letter findings have been classified within the 'High', 'Moderate' and 'Low' columns and form part of the total.

## Timely completion of asset valuations can be improved

Asset valuations are complex. The transport cluster has a large, geographically dispersed asset base, requiring significant resources, judgement and estimation techniques to determine fair values. Although most agencies complied with the Treasury's early close procedures, opportunities exist for further improvements to asset revaluation processes.

The Treasury Policy Paper TPP14–01 provides guidance to agencies to help manage the revaluation process. Some exceptions to this guidance was noted in the current year. TfNSW completed the valuation of buses under finance lease and revaluation of country regional network infrastructure assets after the early close deadline. RailCorp also completed the valuation of its pre-2000 tunnels and earthworks after the early close deadline. The draft results of the revaluations were provided to the Audit Office after 30 June 2017 when the valuations were complete. The main reason for the delays was that the valuation of the tunnels and earthworks required significant effort to determine an appropriate valuation methodology.

Asset revaluations are successful when:

- revaluation projects commence early enough to obtain the results and update the early close proforma financial statements, fixed asset register and general ledger
- all assets are identified, recorded and reconciled before being provided to the valuer and the valuation methodology is agreed and documented
- quality work papers are prepared setting out management's proposed accounting treatments, judgements and assumptions
- management engage with the valuers and interrogate the valuation results with scepticism
- valuation issues are resolved before preparing the year-end financial statement.

## 2.3    Financial sustainability

**NSW Trains and OTSI require a letter of financial support to continue as a going concern**

NSW Trains and OTSI required letters of financial support so they could prepare financial statements on a going concern basis. Previously, we recommended these entities explore strategies to make them financially sustainable and not require reliance on letters of financial support.

NSW Trains and OTSI had negative equity positions of $64.1 million and $55,000 respectively at 30 June 2017. These entities receive grants from TfNSW on a year on year basis.

## 2.4    Passenger revenue and patronage

**Transport agencies revenue growth and patronage increased**

Public transport passenger revenue increased by $93 million (seven per cent) in 2016–17, and patronage increased by 49 million (seven per cent) across all modes of transport. There were some changes in the method of calculating reported patronage between 2016–17 and 2015–16. If the methods had been consistent, the patronage increase would be 0.7 per cent lower at 6.5 per cent.

TfNSW advises that the use of Opal cards enables individual public transport trips to be counted more accurately and consistently than in the past.

The continuing rise in patronage can increase pressure on public transport punctuality.

Rail continues to be the most used mode of public transport earning 65 per cent of total passenger revenue in both 2015–16 and 2016–17. It also accounted for 53 per cent of total public transport patronage in 2016–17. Revenue per trip decreased in all modes except for Rail, where there was a slight increase. This is likely due to Opal fare structure changes from 5 September 2016.

**Passenger revenue and patronage by transport mode:**

| | Passenger revenue[****] | | Movement | Patronage[*****] | | Movement |
|---|---|---|---|---|---|---|
| **Year ended 30 June** | **2017** | **2016** | | **2017** | **2016** | |
| **Mode of public transport** | **$m** | **$m** | **%** | **million trips** | **million trips** | **%** |
| Rail | 896 | 829 | 8.1 | 385.9 | 362.9 | 6.3 |
| Buses[*] | 409 | 383 | 6.8 | 315.5 | 290.3 | 8.7 |
| Ferries[**] | 50 | 49 | 2.0 | 16.0 | 15.4 | 3.9 |
| Light rail[***] | 11 | 12 | (8.3) | 10.0 | 9.7 | 3.1 |
| **Total passenger revenue and patronage from public transport** | **1,366** | **1,273** | **7.3** | **727.5** | **678.3** | **7.2** |

\*    Passenger revenue for STA and private bus operators. There was a minor change in method of calculating bus patronage between 2016 and 2017.

\*\*    Passenger revenue did not include Newcastle Ferries.

\*\*\*    There was a minor change in method of calculating light rail patronage between 2016 and 2017.

\*\*\*\*    Source: Financial statements (audited).

\*\*\*\*\*    Source: Information from Transport (unaudited).

**$2.6 million in revenue not collected during 2016–17 through negative balance Opal cards**

## Recommendation

**TfNSW should implement measures to prevent loss of revenue from passengers tapping off with negative balance Opal cards.**

The number of Opal cards with negative balances increased from 363,000 during 2015–16 (negative $1.3 million) to 776,771 (negative $2.6 million) during 2016–17. While this represents less than 0.2 per cent (0.1 per cent) of total annual passenger revenue during 2016–17, the total balance of lost revenue will continue to grow over time. TfNSW advise the cumulative balance of negative balance Opal Cards is $4.2 million as at 30 June 2017. During 2016–17, 5.9 million Opal Cards were issued, an increase from 4.1 million cards issued in 2015–16.

If a passenger's card has the minimum value when they tap on they will be able to tap off and the card will go into a negative balance. Revenue from unregistered Opal cards with negative balances cannot be recovered unless the passenger tops-up the card.

### TfNSW estimate 22 million trips taken by fare evading passengers

TfNSW estimate that over 22 million trips have been taken by fare evading passengers during 2016–17 across all transport modes. The fare evasion estimate on the Sydney Trains network was 9.7 million trips and 9.4 million trips on buses.

TfNSW conduct fare compliance surveys twice a year (May and November). TfNSW estimates that revenue loss due to issues with fare compliance continues to fall from $120 million in 2012 to $81 million in 2016–17.

### Opal fare structure changes

In May 2016, the Independent Pricing and Regulatory Tribunal (IPART) released a report with recommendations to improve fare integration and the financial sustainability of the public transport network.

The NSW Government adopted some of IPART's recommendations which include:

- introducing a $2 'transfer discount' for adult Opal card customers ($1 for concessions) every time they change modes of transport during a single journey
- changing the Opal Travel Reward to provide a 50 per cent discount on all journeys after eight paid journeys in a week.

The changes commenced on 5 September 2016. Transport advised that the fare structure change does not appear to have impacted overall public transport usage.

From 1 August 2016 paper tickets were no longer sold, with all customers now requiring an Opal card or single use ticket. On Sydney Trains for example, revenue through Opal cards made up 99.5 per cent of all passenger revenue during 2016–17, compared to 85.3 per cent in 2015–16.

Due to increased passenger use of Opal card during 2016–17, and the introduction of the 50 per cent discount, Opal revenue earned per day of the week changed considerably. Data provided by Transport indicate that while average Opal revenue on Monday to Thursdays increased by between 17 and 25 per cent, average Opal revenue on Fridays increased by 62 per cent, Saturdays increased by 78 per cent and Sundays by 108 per cent.

Data provided by Transport indicate nearly 155 million free or half price trips, valued at $301 million were provided by transport operators during 2016–17, $22 million less than 2015–16. The table below shows free trips and half price trips taken by mode of transport in 2016–17, and free trips in 2015–16 and 2014–15.

**Free and discounted trips by mode**

| | Number | | | Total Opal free and discounted trips | | Percentage of Total Opal Trips |
|---|---|---|---|---|---|---|
| Year ended 30 June | 2017 Free trips | 2017 Half price trips | 2017 Total | 2016 | 2015 | 2017 |
| Mode of public transport | '000 | '000 | '000 | '000 | '000 | % |
| Rail | 45,254 | 40,396 | 85,650 | 80,006 | 45,381 | 23.3 |
| Light Rail | 1,599 | 934 | 2,533 | 2,681 | 879 | 27.6 |
| Bus | 34,204 | 25,894 | 60,098 | 56,413 | 25,440 | 21.8 |
| Ferry | 5,923 | 732 | 6,655 | 5,828 | 2,750 | 43.2 |
| **Total** | 86,980 | 67,956 | 154,936 | 144,928 | 74,450 | 23.2 |

Source: Transport (unaudited).

Passengers travelled for free after the daily and weekly fare caps were reached for the whole of 2016–17. Up until 4 September 2017, passengers also travelled for free after eight trips.

# 2.5 Cost recovery from public transport users

**Cost recovery has increased slightly**

Between 2015–16 and 2016–17, the overall cost recovery from public transport users increased from 20.6 per cent to 21.3 per cent. This is calculated based on revenue from customers and the cost to government of providing services. Cost recoveries for different modes of transport are shown below.

**Cost recovery**

| | Rail | | Buses | | Ferries | |
|---|---|---|---|---|---|---|
| Year ended 30 June | 2017 | 2016 | 2017 | 2016 | 2017 | 2016 |
| Cost of services per passenger journey ($) | 11.8 | 11.7 | 5.4 | 6.0 | 7.3 | 8.4 |
| Passenger revenue per passenger journey ($) | 2.3 | 2.3 | 1.3 | 1.3 | 3.1 | 3.2 |
| Net cost per passenger journey ($)[*] | 9.5 | 9.4 | 4.1 | 4.7 | 4.2 | 5.2 |
| **Cost recovery from users (%)** | **19.7** | **19.6** | **24.0** | **21.9** | **42.9** | **37.8** |

\* The net cost per passenger journey represents the amount subsidised by taxpayers through government contributions, less any other revenue sources.

Source: Passenger information from Transport (unaudited).

Bus and ferry cost of services per passenger journey decreased while rail remained stable. Passenger revenue per passenger journey was stable for all transport modes. As a result, cost recovery from users increased in 2016–17 compared to the prior year.

## 2.6 Analysis of financial information

### Department of Transport consolidation

The Department is a not-for-profit NSW Government entity which controls all transport agencies in the Transport cluster, except ITSR, OTSI and Port Authority of New South Wales. The controlled entities are consolidated in the financial statements of the Department.

The Department's abridged consolidated financial statements are shown below. Additional financial information on agencies in the Transport cluster appears in Appendix Four.

**Abridged income statement**

| Year ended 30 June | 2017 | 2016 | Increase / (decrease) | Increase / (decrease) |
|---|---|---|---|---|
| | $m | $m | $m | % |
| Employee related expenses | 2,965 | 2,940 | 25 | 0.9 |
| Depreciation and amortisation | 3,157 | 3,007 | 150 | 5.0 |
| Grants and subsidies | 747 | 638 | 109 | 17.1 |
| Finance costs | 335 | 327 | 8 | 2.4 |
| Other expenses | 3,878 | 3,734 | 144 | 3.9 |
| **Total expenses** | **11,082** | **10,646** | **436** | **4.1** |
| Appropriations | 11,088 | 10,068 | 1,020 | 10.1 |
| Grants and contributions | 2,720 | 1,357 | 1,363 | 100.4 |
| Sale of goods and services | 2,109 | 1,996 | 113 | 5.7 |
| Investment income | 156 | 157 | (1) | (0.6) |
| Other revenue | 375 | 418 | (43) | (10.3) |
| **Total revenue** | **16,448** | **13,996** | **2,452** | **17.5** |
| Other losses | (651) | (416) | (235) | 56.5 |
| Net result | **4,715** | **2,934** | **1,781** | **60.7** |
| Total other comprehensive income | 1,702 | 784 | 918 | 117.1 |
| **Total comprehensive income** | **6,417** | **3,718** | **2,699** | **72.6** |

Source: Department of Transport Financial statements (audited).

#### Appropriations and government contributions increased to fund infrastructure projects

Grants and contributions increased from $1.4 billion in 2015–16 to $2.7 billion in 2016–17. The variation is mainly due to increase in the grants received for Sydney Metro City and Southwest project ($1.0 billion).

Capital appropriations increased by $1.2 billion mainly to fund transport infrastructure projects.

Total other comprehensive income mainly increased due to the revaluation of rail infrastructure system assets of $1.4 billion and the adjustment to defined benefit superannuation schemes of $261 million.

Other losses of $652 million largely represent revaluation decrements on buses under finance lease and land and buildings, impairment losses on road infrastructure assets and losses on asset disposals during the year.

Depreciation and amortisation increased five per cent mainly because of increases in the carrying values of road and rail infrastructure assets.

**Abridged statement of financial position**

| At 30 June | 2017 $m | 2016 $m | Increase / (decrease) $m | Increase / (decrease) % |
|---|---|---|---|---|
| Current assets | 3,567 | 3,668 | (101) | (2.8) |
| Non-current assets | 139,994 | 123,338 | 16,656 | 13.5 |
| Total assets | 143,561 | 127,006 | 16,555 | 13.0 |
| Current liabilities | 4,188 | 4,483 | (295) | (6.6) |
| Non-current liabilities | 7,667 | 7,358 | 309 | 4.2 |
| Total liabilities | 11,855 | 11,841 | 14 | 0.1 |
| Net assets | 131,706 | 115,165 | 16,541 | 14.4 |

Source: Department of Transport Financial statements (audited).

**There was a significant investment in assets of $8.5 billion plus an accounting correction for earthworks and tunnel assets valued at $8.5 billion**

At 30 June 2017, non-current assets included $134 billion of property, plant and equipment. During the current year, agencies purchased $8.5 billion of assets, which included $3.8 billion for rail systems and $3.8 billion for roads and maritime infrastructure systems. Asset revaluations added $1.1 billion to asset values.

RailCorp and TfNSW recorded an additional $8.5 billion in total to correct the value of rail tunnels and earthworks at 1 July 2016 by adjusting the opening equity.



Property, plant and equipment increments ($ billion)

Total additions, $8.5

Total revaluation, $9.6
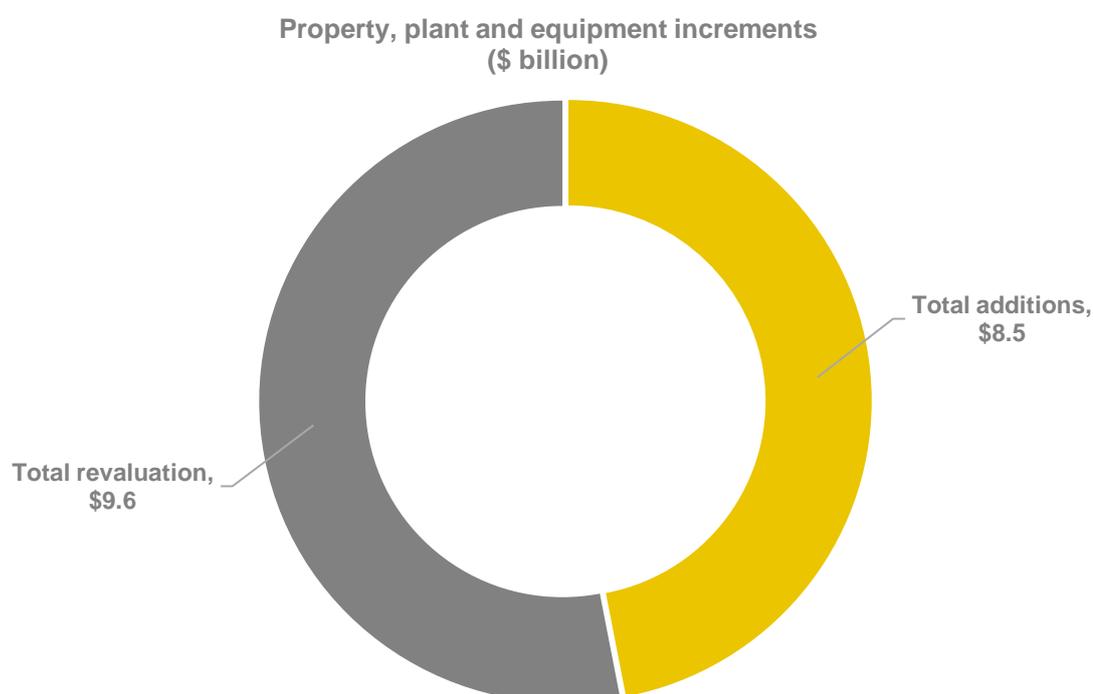
A restructuring of borrowings in RailCorp caused a transfer from current to non-current liabilities of approximately $570 million. This increase in non-current liabilities was partially offset by a reduction of $256 million in the superannuation liability.

**Other Financial Information**

As at 30 June 2017, Department of Transport has $11.3 billion in capital commitments over the next five years. This has increased from $6.3 billion in 2015–16. Capital commitments include contractual commitments transport agencies have entered into for various capital projects, including:

- $4.9 billion on TfNSW capital projects (Sydney Metro City and Southwest, Sydney Metro Northwest Private Partnership project and CBD Light Rail)
- $3.4 billion on RMS capital projects (largely on upgrades to Pacific Highway, Northern Beaches Hospital roadworks and M5 ancillary roadworks)
- $2.9 billion on TfNSW major rail projects (Sydney Metro Northwest, New Intercity Fleet and Sydney Growth Trains).

RMS has a number of compulsory property acquisition matters under litigation with an estimated contingent liability of $676 million (2016: $659 million). These amounts are net of any reimbursement from the Treasury Managed Fund (TMF).

## 2.7 Internal controls

Breakdowns and weaknesses in internal controls increase the risk of fraud and error. We report deficiencies in internal controls, matters of governance interest and unresolved issues identified to management and those charged with governance. We do this through our Management Letters, which include our observations, related implications, recommendations and risk ratings.

The table below summarises Management Letter issues across all Transport agencies by category and risk rating.

| Category | Risk rating | Issue |
|---|---|---|
| Information technology | 🟡 Moderate: 9 new, 2 repeat<br>✅ Low: 7 new, 3 repeat | The audits identified opportunities for agencies to improve information technology (IT) processes. We noted issues associated with:<br>• user access administration (further details below)<br>• password security policies and parameters<br>• system change management. |
| Governance and oversight | ✅ Low: 2 new, 1 repeat | The audits identified opportunities for agencies to improve governance and oversight processes. We noted issues associated with the Memorandum of Understanding between Transport cluster agencies and agencies operating with expired contracts. |
| Internal control deficiencies or improvements | 🟡 Moderate: 3 new, 1 repeat<br>✅ Low: 4 new | The audits identified opportunities for agencies to improve internal controls across key business processes, including asset management, journal approval processes, controls surrounding fare overrides and payroll management. |
| Noncompliance with key legislation or central agency policies | 🟡 Moderate: 4 new<br>✅ Low: 3 new, 4 repeat | The audits identified non-compliances with the:<br>• *Independent Commission Against Corruption Act 1988* (ICAC Act)<br>• NSW Government Policy on Official Travel within Australia and Overseas<br>• Treasury Circular 16-03 |

| Category | Risk rating | Issue |
|---|---|---|
| | | • NSW Transport Cluster Code of Conduct and Conflicts of Interest Policy.<br><br>The noncompliance with the ICAC Act relates to one agency only. Management believed the values involved were insignificant and did not report to ICAC. The agency is currently working with ICAC to develop a reporting guideline for incidents involving insignificant amounts. |
| Financial reporting | 🟡 Moderate: 5 new<br><br>✅ Low: 8 new | The audits identified opportunities for agencies to strengthen financial reporting. Areas of improvement include:<br><br>• improved processes around revaluations and completeness of databases used for valuations<br><br>• timely review of reconciliations and more prompt action to clear reconciling items or other unusual items<br><br>• implementing additional controls to prevent misstatements<br><br>• adequate disclosures in the financial statements<br><br>• allocation and capitalisation of project costs.<br><br>In section 1.2 of this report we noted that although mandatory early close procedures were performed opportunities for improvement were noted in the revaluation process. Agencies can reduce the number of management letter points in this category if they:<br><br>• plan early and fully complete all mandatory and recommended early close procedures by the due date<br><br>• address the actions identified in their early close letters before preparing the year-end financial statements. |

🔴 High risk from the consequence and/or likelihood of an event that has had, or may have a negative impact on the entity.

🟡 Moderate risk from the consequence and/or likelihood of an event that has had, or may have a negative impact on the entity.

✅ Low risk from the consequence and/or likelihood of an event that has had, or may have a negative impact on the entity.

## Information technology controls

### User access systems administration remains an area of weakness

We identified 14 management letter issues (6 moderate and 8 low risk) related to user access administration at TfNSW (7 issues), RailCorp (1 issue), Sydney Trains (2 issues) and RMS (4 issues). This included:

• review of highly privileged/super user account transactions not performed effectively

• user access reviews not performed

• terminated users not removed from the system in a timely manner.

These weaknesses increase the risk of users having excessive or unauthorised access to critical financial systems and information, which could compromise the integrity and security of financial data residing in these systems. We will revisit these access issues to ensure they are resolved in the new SAP ERP environment.

# 2.8 Transport Asset Holding Entity (TAHE)

**RailCorp will transition to TAHE**

RailCorp is expected to transition to TAHE from 1 July 2019. The transfer of public transport assets to TAHE is expected to occur over the next few years.

TAHE was announced in the 2015–16 State Budget. TAHE will be a dedicated asset manager to help streamline the delivery of public transport asset management. TAHE is expected to be a commercial for-profit Public Trading Entity that will provide a commercial return to its shareholders.

On 1 July 2017 amendments to the *Transport Administration Act 1988* made by Schedule 1 of the *Transport Administration Amendment (Transport Entities) Act 2017* were commenced. These amendments established Residual Transport Corporation and established Sydney Trains and NSW Trains as stand-alone entities. Previously Sydney Trains and NSW Trains were subsidiary corporations of RailCorp.

There are milestones planned for transferring assets to TAHE. Several working groups are considering different aspects of the TAHE transition including its status as a for-profit Public Trading Enterprise, which assets to transfer to TAHE, and which ones to retain in existing agencies.

# 3. Service delivery

Achievement of government outcomes can be improved through effective delivery of the right mix of services, whether from the public, private or not-for-profit sectors. Service delivery reform will be most successful if there is clear accountability for service delivery outcomes, decisions are aligned to strategic direction and performance is monitored and evaluated.

This chapter outlines our audit observations, conclusions or recommendations related to service delivery in the Transport cluster agencies for 2016–17.

| Observations | Conclusion or recommendation |
|---|---|
| **Punctuality** | |
| **Average punctuality is above target for Sydney Trains, but below target for NSW Trains services. Punctuality targets are not met by all bus operators.** | Meeting punctuality targets is a continuing challenge for NSW Trains' and STA bus services. |
| **The 2017 performance audit 'Passenger Rail Punctuality' reported that based on forecast patronage increases, rail agencies will find it hard to maintain punctuality after 2019 unless the capacity of the network to carry trains and people is increased significantly.** | The 2017 performance audit found that given the likely lead times involved with major infrastructure projects, there remains a significant risk of poor punctuality after 2019. Transport advised it is currently either delivering or planning rail network upgrades to address current growth and longer-term future demand. This includes investments such as procurement of suburban and intercity trains, Sydney Metro services and further timetable planning into the 2020s. |
| **After reaching its punctuality target in 2015–16 for the first time in 13 years, NSW Trains regional services was below the target in 2016–17.** | NSW Trains regional services achieved an average of 75 per cent punctuality in 2016–17, four per cent less than 2015–16. |
| **The bus contracts do not have an option to impose financial penalties on STA for poor punctuality performance.** | In 2015–16, we recommended TfNSW should consider including financial penalties for not meeting each punctuality KPI in future contracts with bus operators. An opportunity to implement the recommendation requires a contract renewal process to be finalised with STA, which did not occur during 2016–17. |
| **Public transport capacity** | |
| **There are no target measures on crowding for bus operators in any contract region.** | **Recommendation:** TfNSW should develop target measures on crowding for bus operators in all contract regions and publish the results. |
| **Customer Satisfaction** | |
| **Customers on ferries continued to be most satisfied, followed by those on light rail. Sydney Trains and NSW Trains had fewer complaints in 2016–17.** | Customer satisfaction exceeded target for all modes of transport. |
| **Project management** | |
| **Transport cluster manages many of the State high profile/high risk projects.** | Major Transport projects include WestConnex, Sydney Metro Northwest, Sydney Metro City and Southwest, Woolgoolga to Ballina - Pacific Highway upgrade, NorthConnex, CBD and South East Light Rail, and Newcastle Light Rail. |

| Observations | Conclusion or recommendation |
|---|---|
| **Safety performance** | |
| **Road fatalities decreased by eight per cent between July 2016 and June 2017, from 390 to 359 deaths.** | Road fatalities mainly involved speed, fatigue and vehicle occupants not wearing available restraints. |
| **Maintenance** | |
| **RMS' maintenance backlog of $3.7 billion is higher than the $3.4 billion reported in 2016.** | Transport cluster agencies manage $134 billion in property, plant and equipment. The total backlog maintenance of $4.1 billion at 30 June 2017 represents 3.1 per cent of those assets. |

# 3.1    Punctuality

Ensuring on-time running of public transport is a NSW Government State Priority. Public transport services in Sydney are crucial in getting customers to their destinations. Although Sydney is undergoing significant infrastructure construction, public transport services must continue to be punctual.

There are various mobile applications available to help the public with real time punctuality information. For details on these applications, refer to TfNSW's website at https://transportnsw.info/apps.

## Rail

A train service is punctual if it stops at all stations as specified in the timetable and arrives at its destination no later than the time shown in the timetable plus an on-time tolerance. The tolerance is five minutes for suburban services, six minutes for intercity services and 10 minutes for regional services.

The punctuality target is 92 per cent for suburban and intercity services and 78 per cent for regional services. The targets apply to trains arriving into Sydney CBD during the morning peak (6am to 10am) and departing Sydney CBD during the afternoon peak (3pm to 7pm).

The 2017 performance audit 'Passenger Rail Punctuality' found rail agencies are well placed to manage the forecast increase in passengers up to 2019. However, based on forecast patronage increases, the rail agencies will find it hard to maintain punctuality after 2019 unless the capacity of the network to carry trains and people is increased significantly. If recent higher than forecast patronage growth continues, the network may struggle to maintain punctuality before 2019.

Transport advised it is currently either delivering or planning rail network upgrades to address current growth and longer-term future demand. This includes investments such as procurement of suburban and intercity trains, Sydney Metro services and further timetable planning into the 2020s. The 2017 performance audit found that given the likely lead times involved with major infrastructure projects, there remains a significant risk of poor punctuality after 2019.

Performance results and targets for rail services are shown in the table below.

**Rail punctuality**

|  | Target | Actual | |
|---|---|---|---|
| Year ended 30 June | 2017 | 2017 | 2016 |
| Percentage punctuality | % | % | % |
| Sydney Trains Suburban | 92.0 | 93.4 | 94.2 |
| NSW Trains Intercity | 92.0 | 88.8 | 89.3 |
| NSW Trains Regional | 78.0 | 74.8 | 78.6 |

## Sydney Trains' average punctuality was above target in 2016–17

Data provided by Transport indicate Sydney Trains achieved an average punctuality performance of 93.4 per cent. This is above the target of 92 per cent but is slightly lower than its punctuality performance in 2015–16.

## NSW Trains' services punctuality was below target in 2016–17

Meeting punctuality targets is a continuing challenge for NSW Trains' intercity services. Data provided by Transport indicate intercity services achieved an average punctuality performance of 88.8 per cent which was below the target of 92 per cent. After reaching its punctuality target in 2015–16 for the first time in 13 years, NSW Trains regional services achieved an average of 75 per cent punctuality in 2016–17 which was below the target of 78 per cent.

Transport advises the key factors impacting punctuality included poor levels of reliability from the ageing intercity fleet and network incidents. NSW Trains is managing the New Intercity Fleet project to deliver more than 500 new carriages from 2019.

## Afternoon peak intercity services only met the punctuality target on 98 days in the year

Data provided by Transport indicate morning peak intercity services achieved an average punctuality performance of 93 per cent, which was above the target. Afternoon peak intercity services only achieved an average punctuality performance of 85 per cent. In 2016–17, afternoon peak intercity services did not achieve the punctuality target on most days. Afternoon peak intercity services did not achieve the punctuality target on 154 days (61 per cent) out of 252 weekdays in 2016–17, as shown below.



Peak surburban and intercity services performance
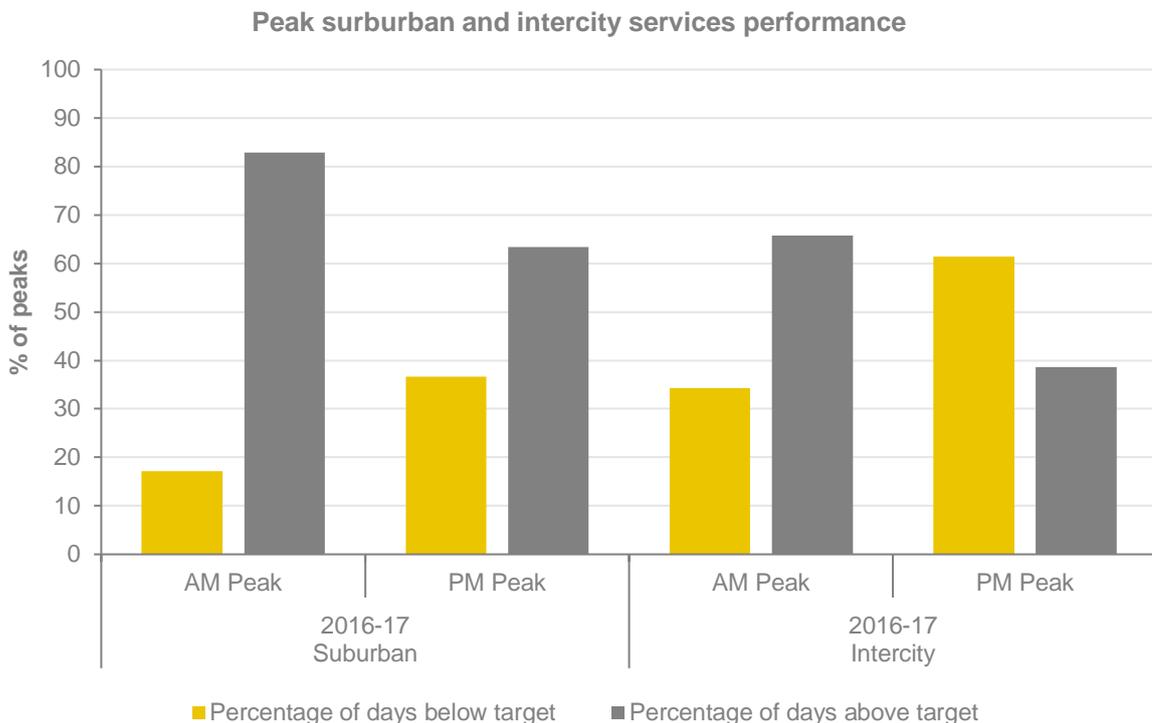
The chart below shows combined peak punctuality performance for the last two years for the 15 suburban and intercity services as a variation from the target.

**Peak punctuality performance by train line (variation to target)**
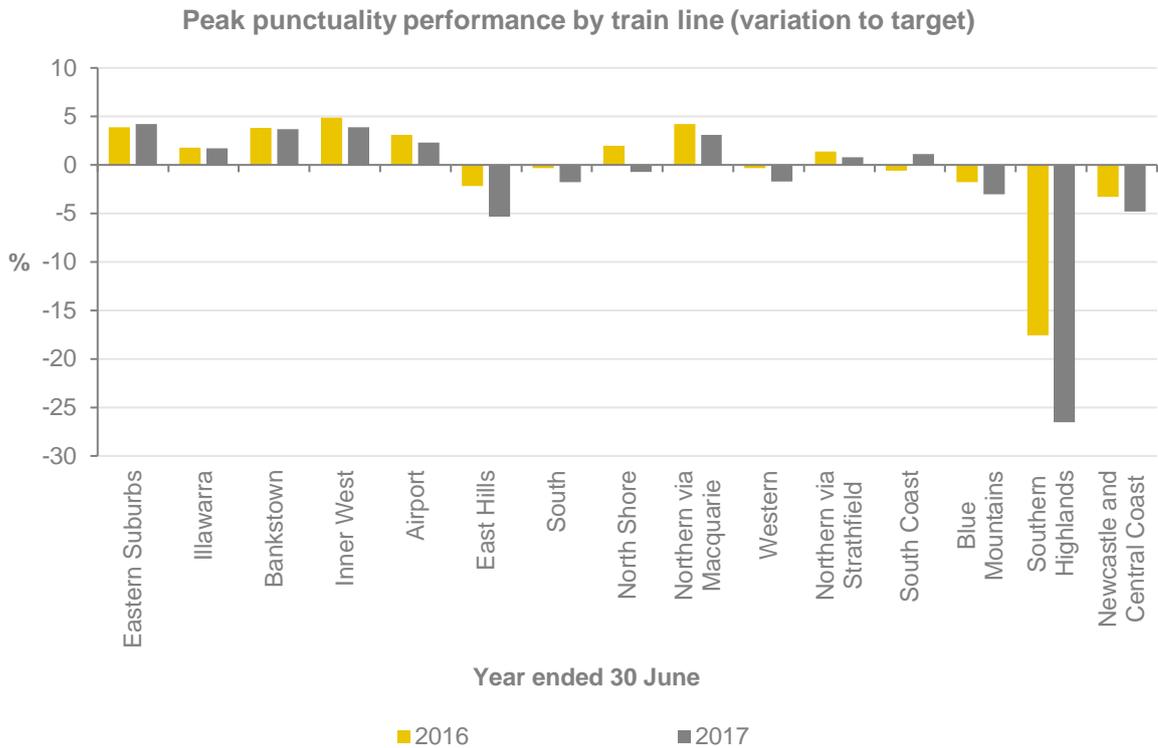


Source: Transport (unaudited).

Data provided by Transport indicate seven suburban and intercity rail lines did not achieve the punctuality target in 2016–17 and the punctuality performance of 13 rail lines fell compared to 2015–16. The Southern Highlands line had the largest fall in punctuality, decreasing from 74 to 66 per cent. The data shows the South Coast line recorded the largest improvement from 91 to 93 per cent.

# Buses

Three KPIs measure punctuality performance for all operators. They are to meet 95 per cent of the punctuality target at the start, middle and end of the trip.

Financial penalties can be imposed on private bus operators if they do not meet punctuality targets at the start of the trip, but not if the middle or end of the trip targets are not met. The bus contracts do not have an option to impose financial penalties on STA for poor punctuality performance.

In 2015–16, we recommended TfNSW should consider including financial penalties for not meeting each punctuality KPI in future contracts with bus operators. TfNSW advised that implementation of the recommendation for the start point of trip KPI is in progress as part of the contract renewals with STA. Contract renewal is underway for STA Contract Regions Seven (North Sydney, Chatswood, Macquarie Park, Epping, Ryde and Parramatta), Region Eight (Palm Beach, Brookvale, Manly, Mosman and North Sydney) and Region Nine (Bondi Junction, Randwick, Maroubra, Botany, Mascot and Surry Hills).

**STA is not meeting punctuality targets**

Data provided by Transport indicates STA has not met the punctuality target in any of its four metropolitan contracts for the last three years. STA is working with TfNSW on punctuality initiatives. In 2015, they established an On-Time Running Working Group to work collaboratively on delivering improved punctuality.

The chart below shows STA's punctuality performance for its four metropolitan contract regions compared to the target.

**STA contracts - punctuality (variation to target)**
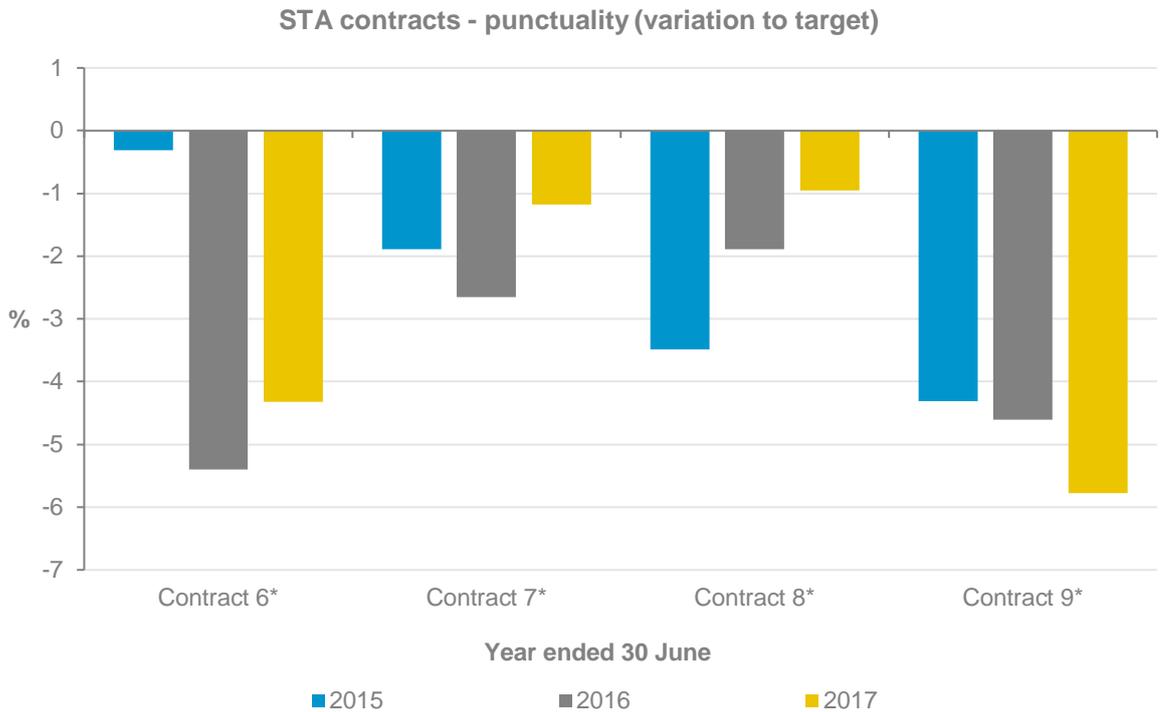


* For details of regions covered by each bus contact refer to Appendix five.
Source: Transport (unaudited).

Data provided by Transport indicate that except for Contract Region 14 (Chatswood, Belrose, Terrey Hills and St Ives) and Contract Region 15 (Campbelltown, Narellan and Camden), all other metropolitan contract regions managed by private bus operators met punctuality targets for the start of the trip in 2016–17. Transport collect the data based on a sample of start points based on observational surveys during the morning on selected weekdays. Transport advise that over the full period of the contract, both Contract Region 14 and Contract Region 15 met the punctuality KPI.

The chart below shows punctuality performance for the start of the trip by private bus operators for the last three years for metropolitan contract regions as a variation from target.

**Private bus operators metropolitan contracts - punctuality (variation to target)**



Year ended 30 June

■ 2015    ■ 2016    ■ 2017
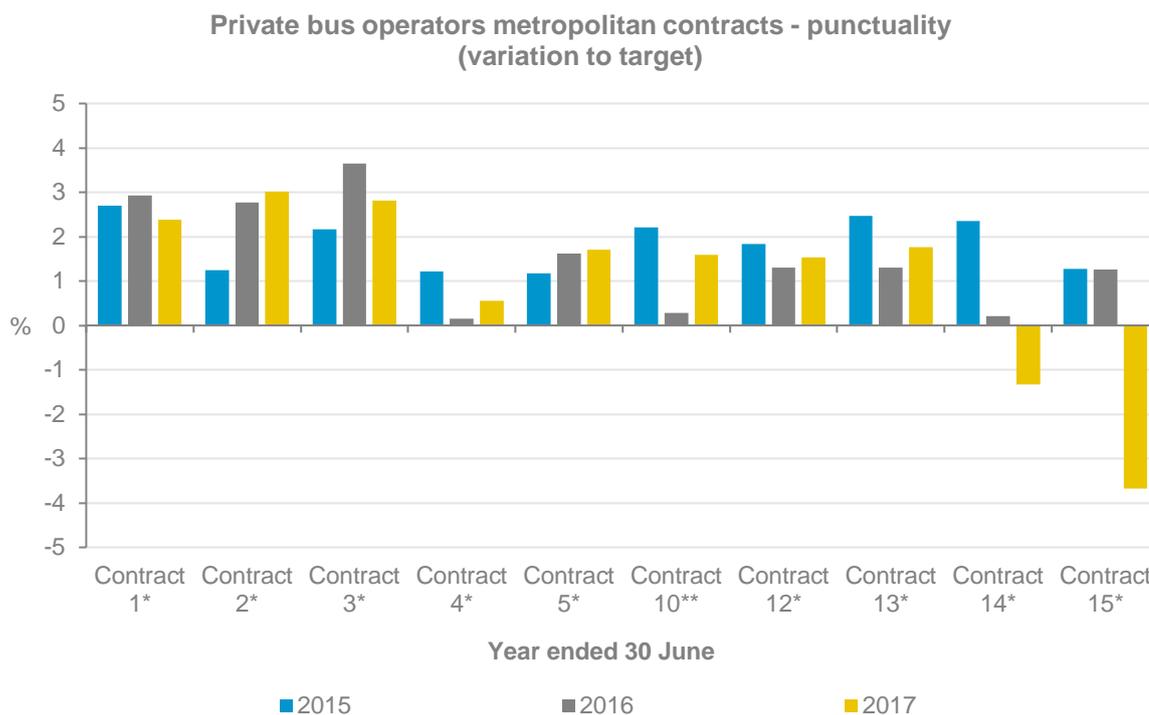
\*      For details of regions covered by each bus contact refer to Appendix five.

\*\*     Contract 11 routes were included in the new Contract 10 when it commenced on 1 January 2013.

Source: Transport (unaudited).

There are 14 contract regions in the Sydney metropolitan area and 12 contract regions in the outer metropolitan area. STA provides services in four metropolitan contract regions, operating as Sydney Buses, while all other contract regions are serviced by private operators. A private company was recently awarded a 10-year contract to operate Newcastle buses, originally run by STA, from 1 July 2017.

# Ferries

A ferry service is considered punctual if it departs from the service origin wharf within five minutes of the timetable. The target for all services is 98.5 per cent.

Data provided by Transport indicates punctuality performance for ferry services in all service areas has been above target for the past five years. In 2016–17, average performance in all areas was above 99 per cent.

# Light rail

Light rail services are considered punctual if they run within a two minute deviation of the planned frequency. The target for all services is 90 per cent.

Data provided by Transport indicate Inner West Light Rail line services' average punctuality performance was above target at 91 per cent in 2016–17. This line provides services across two fare zones, between Central and Dulwich Hill.

The CBD and South East Light Rail is a new light rail network for Sydney, currently under construction. The new line will extend from Circular Quay along George Street to Central Station and through Surry Hills to Moore Park. It will then proceed to Kensington and Kingsford via Anzac Parade and Randwick via Alison Road and High Street.

## 3.2 Fleet ageing and reliability

### Rail

Data provided by Transport indicates average monthly peak rail incidents increased six per cent from 56.4 in 2015–16 to 59.8 in 2016–17. However, 24 hour incidents dropped 21 per cent from 550 to 437. Transport advised that technical and non-technical initiatives that contributed to this included:

- target reliability growth plans for each fleet, identifying the systems and components with repeat failures and initiatives to eliminate or reduce them
- regular auditing of maintenance practices and actions in place to address issues
- dedicated depot based reliability engineers focusing on systematic reliability issues and depot reliability plans focusing on technical and non-technical issues.

Average monthly carriage failures fell nine per cent, from 140 carriages in 2015–16 to 128 carriages in 2016–17. The percentage of carriage failures to total carriages in operation dropped from seven per cent in 2016 to six per cent in 2017.

The chart below analyses the actual and targeted reported average monthly electric fleet failures over the last three years.

**Average monthly carriage failure**
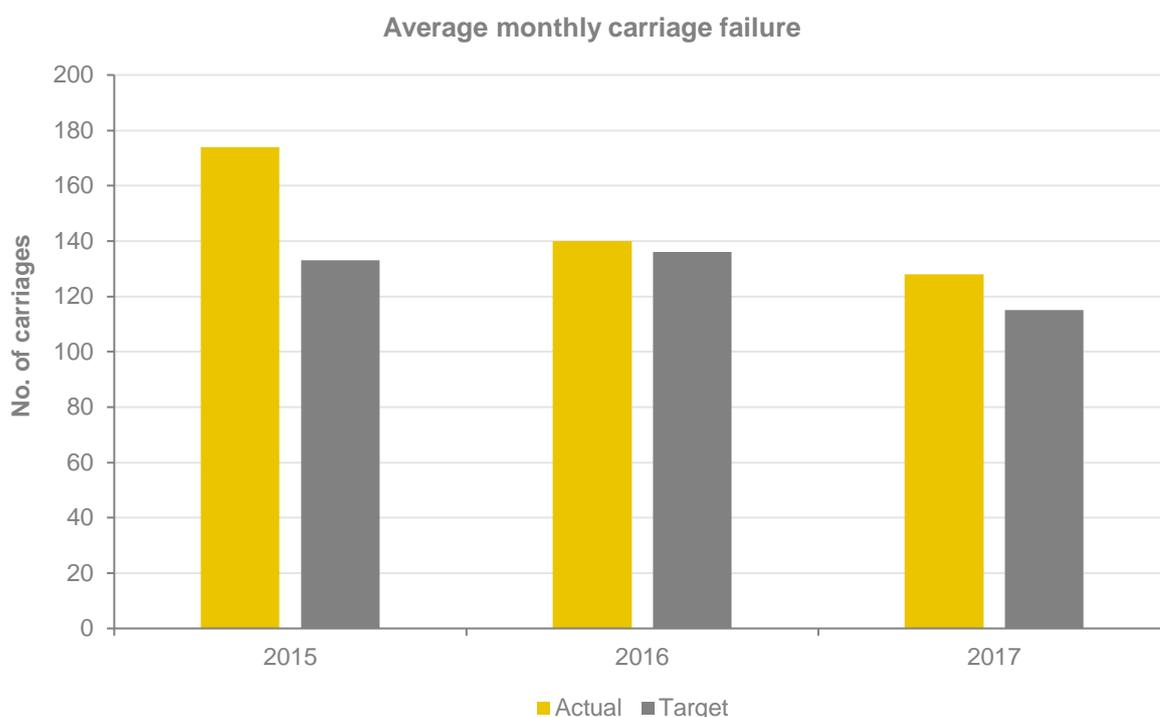


Note: Reported faults data includes incidents of graffiti and vandalism in gross numbers.
Source: Sydney Trains and NSW Trains (unaudited).

The average age of the electric fleet is 19 years with 52 per cent of the fleet over 20 years old and 28 per cent over 30 years.

A contract to build and maintain more than 500 new train carriages was awarded to RailConnect as part of the New Intercity Fleet project.

Transport advises that the NSW Government has ordered 24 new eight-car Waratah-style trains and announced in August 2017 it would replace all trains operating on the regional network including 60 XPT passenger cars (plus 19 diesel locomotives) and more than 50 XPLORER and Endeavour passenger cars. The new trains will come into service progressively, with the first trains anticipated to be delivered in the early 2020s.

## Buses

**Average bus fleet age of 10.3 years is lower than 12 year target**

In 2016–17, total bus numbers increased by 33 to 3,923 and the weighted average age increased from 10 to 10.3 years.

The Sydney Metropolitan Bus Service Contract (SMBSC) states that the bus fleet average age must not exceed 12 years. Older buses increase the risk of bus fleet failures and accidents, and impacts customer satisfaction. Transport advises all bus operators comply with their contracts except Contract Ten (Hurstville, Miranda, Menai, Bankstown, Caringbah, Cronulla and Kurnell) which has an average bus age of 12.4 years. Transport advised that there is a delay in the delivery of replacement buses for contract ten due to production issues with the bus manufacturer. TfNSW informed that two double deck buses commenced services in August and four double deck buses are expected to be delivered by December 2017 which is expected to bring the average age of buses in contract 10 under 12 years.

Data provided by Transport indicates there were seven reports of major defects (19 in 2015–16) and one reported major-grounded defect (one in 2015–16). Transport advises that defects were due to brake and axle issues.

Transport advised that the Northern Beaches B-Line program will provide a new fleet of double deck buses and bus stops with real-time service information. Services are expected to start running in November 2017 from Mona Vale to Wynyard. The project construction and roadwork is expected to be completed by 2019.

For bus contracts refer to Appendix Five.

## Ferries

Despite an average vessel age of 26.5 years, data provided by Transport indicates the number of ferry breakdowns fell from 275 in 2015–16 to 230 in 2016–17.

The table below shows engine hours, ferry breakdowns and mechanical failures per one thousand engine hours.

**Ferry breakdowns**

| Year ended 30 June | 2017 | 2016 |
|---|---|---|
| Engine hours | 99,675 | 100,206 |
| Breakdowns | 230 | 275 |
| Mechanical failures per 1,000 engine hours | 73 | 86 |

Source: TfNSW (unaudited).

Whilst engine hours remained relatively constant in 2016–17, mechanical failures fell 15 per cent per 1,000 engine hours.

The NSW Government invested in six new ferries, of which five are operating, for the cross-harbour route, operating between Cockatoo Island and Watsons Bay. New wharves such as Barangaroo Ferry Wharf started operating from May 2017.

# 3.3 Public transport capacity

## Rail

**Passenger crowding is above benchmark for many morning peak suburban services**

To measure crowding Sydney Trains uses a customer load benchmark of 135 per cent of seating capacity for each service. A load above the benchmark is the point beyond which customers experience crowding and service dwell times (duration of stops at stations) which can impact on-time-running. Opal data is now used to continuously estimate the customer load for all train services throughout the year replacing the previous surveys that were based on visual observation

performed twice per year (in March and September) for a limited number of services. For this reporting period TfNSW has supplied data from a new model that measures the customer load for all services, this model has replaced the previous surveys. To maintain historical consistency TfNSW provided unaudited data for services arriving at Central Station between 8am to 9am and departing between 5pm to 6pm on 5– 9 September 2016 and 20–24 March 2017.

A new timetable was implemented from Sunday 26 November 2017. A key benefit expected would be increased capacity, with more than 1,500 extra weekly train services.

Transport advises that 25 per cent of suburban services were above the customer load benchmark in the morning peak during the period 5–9 September 2016. The T1 Western line at Redfern had the highest number of services above the customer load benchmark at 50 percent of all services during the one hour peak. In the afternoon peak, six per cent of suburban services were above the customer load benchmark. Services on the T1 Western line at Redfern were the majority of these services.

Transport advises 41 per cent of suburban services were above the customer load benchmark in the morning peak during the period 20–24 March 2017. The lines with the highest number of services above the customer load benchmark were the T1 Western, T4 Illawarra, T2 Inner West lines. Of all services during the peak period T2 Inner West at Redfern had the highest average load of 164 per cent.

In the afternoon peak there were less crowding issues, with 12 per cent of suburban services above the customer load benchmark. The T1 Western line and the T1 Northern via Strathfield accounted for the majority of these services above the benchmark. Of all services during the peak period the T1 Northern via Strathfield had the highest average load of 139 per cent.

## Buses

**Customers can now use mobile applications to check capacity**

### Recommendation

**Repeat issue: TfNSW should develop target measures on crowding for bus operators in all regions and publish the results.**

There are no target measures on crowding for bus operators in any contract regions. Also, the crowding information is not published for buses in any contract region.

Since September 2016, bus customers can use mobile applications to see how full a bus is before it arrives. This gives them the option to board or wait for the next service. The applications use Opal data to give customers' smartphones live information about seating availability when planning trips.

TfNSW advises this data is also available from Opal and is used for service planning purposes as an input into determining where additional services are required. TfNSW is working to identify how Opal data can be used to report patronage and provide overcrowding analysis.

In our last two transport reports we recommended TfNSW develop target measures on crowding for its bus operators in all regions.

**Eleven of the 14 bus contract regions had full buses**

In line with 2015–16, TfNSW advises there were no capacity issues for Sydney metropolitan bus service contracts one (Blacktown, Penrith, Richmond and Windsor), five (Lakemba, Mortdale, Punchbowl and Roselands) and 15 (Campbelltown, Narellan and Camden) during 2016–17.

Bus operators reported close to 9,800 full buses during 2016–17. Forty-six per cent of these were in Contract Region 3 (Fairfield, Cabramatta, Liverpool and Wetherill Park) where reported full buses rose from 3,360 in 2015–16 to 4,513 in 2016–17. TfNSW advises that the T80 Parramatta to Liverpool service continues to operate to capacity. TfNSW advised double deck buses and shoulder peak services will be introduced in 2017–18 to support a more even spread of customers. Twenty-eight per cent of reported full buses related to Contract Region 4 (Blacktown, Rouse Hill,

Castle Hill, Dural and Parramatta), however the number of full buses reported decreased since last year. TfNSW advised that additional shoulder peak services on City and Macquarie Park routes are in operation, resulting in a more even spread of customers.

## Ferries

Transport advises that during the week surveyed, ferry services on key routes during the morning peak were below capacity.

## Light rail

TfNSW reported that crowding on light rail services was within target. Target crowding on light rail was reduced in 2016–17 from six people per square metre to four people.

# 3.4    Customer satisfaction

A NSW Premier's priority is to improve government services by improving customer satisfaction with key government services every year. TfNSW performs quarterly customer satisfaction surveys across transport modes. In May 2017, interviewers gathered information on satisfaction levels by surveying over 28,000 randomly selected customers on board all modes of public transport. TfNSW performs quarterly customer satisfaction surveys across transport modes.

Between November 2012 and May 2017, the Transport Customer Satisfaction Index (TCSI) showed overall customer satisfaction with all public transport modes improved ten percentage points on a patronage-weighted basis (from 79.4 per cent to 89.6 per cent). The TCSI measures the proportion of transport users partly satisfied to very satisfied with the overall service they received. The target benchmark is 85 per cent of customers satisfied.

**Overall customer satisfaction 2012–2017**
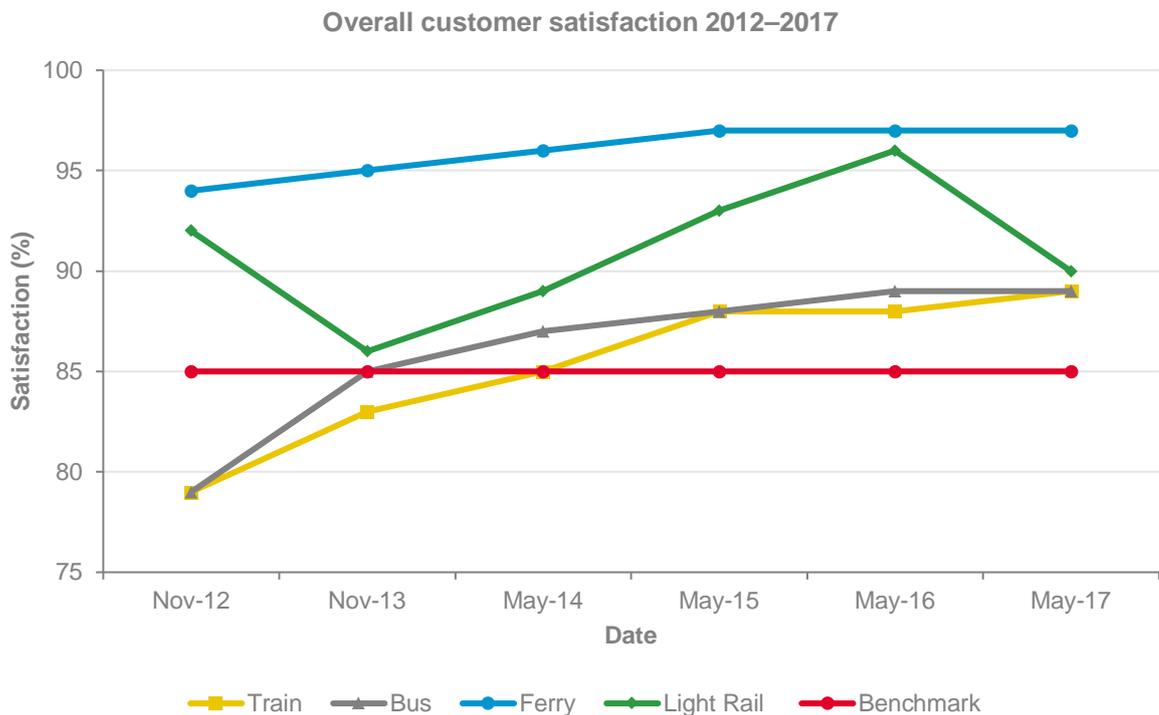


Source: Transport - Customer Satisfaction Index May 2017 (unaudited).

Customer Satisfaction is also regularly monitored by the Customer Service Commissioner.

The TCSI measures customer satisfaction with nine separate key drivers of service delivery. The common attribute with the highest dissatisfaction score across all transport modes is the availability of information about service delays. Dissatisfaction ranged from five per cent (Ferry) to 22 per cent (Bus).

The top three service attributes with the highest customer satisfaction and customer dissatisfaction from the May 2017 customer survey are shown below.

**Service attributes**

| Mode | Service attributes with the highest satisfaction | Service attributes with the highest dissatisfaction |
|---|---|---|
| **Train** | Ease of using my Opal card | Frequency of the train service |
| | Ease of accessing the train station | Time to connect to other transport services |
| | Feeling safe while on this train | Availability of information about service delays |
| **Bus** | Feeling safe while on this bus | Availability of information about service delays |
| | Ease of using my Opal card | Availability of next stop information on this bus |
| | Ease of getting on and off the bus | Frequency of this bus service |
| **Ferry** | This ferry being driven safely | Frequency of this ferry service |
| | Feeling safe while on this ferry | Availability of information about service delays |
| | Feeling safe at the ferry wharf | Ease of finding info (routes, stops, timetables) |
| **Light rail** | The light rail service being driven safely | Seat availability on this light rail service |
| | Cleanliness of the light rail station/stop | Personal space on this light rail service |
| | Cleanliness of the light rail service | Availability of information about service delays |

Source: Transport - Customer Satisfaction Index May 2017 (unaudited).

During 2016–17, the surveys conducted by TfNSW indicate ferry customers continued to be the most satisfied, followed by light rail customers. All modes of transport, except Light Rail, achieved equal or higher customer satisfaction since May 2016.

The results of customer satisfaction surveys are shown below.

**Customer satisfaction survey results**

| | May 2017 | May 2016 |
|---|---|---|
| Mode | Partially to very satisfied % | Partially to very satisfied % |
| **Train** | 89 | 88 |
| Sydney Trains | 90 | 88 |
| NSW Trains | 85 | 84 |
| **Light Rail** | 90 | 96 |
| **Bus** | 89 | 89 |
| **Ferry** | 97 | 97 |

Source: Transport (unaudited).

# Complaints

## Sydney Trains' and NSW Trains' complaints continued to fall in 2016–17

Data provided by Transport indicate Sydney Trains and NSW Trains' complaints fell by 13 per cent to 24,518.

Most complaints received in 2016–17 related to timeliness, which accounts for 24 per cent of all complaints in Sydney Trains, and 34 per cent in NSW Trains. Timeliness rose very slightly, two per cent and one per cent in both entities respectively. All other complaint categories (excluding 'ticketing' for NSW Trains) have fallen, the most notable change being 'timetables'. Transport advise a revised timetable, allowing for additional trains during major special events, contributed to this positive change. Other top complaints, common across Sydney Trains and NSW Trains, include comfort, information, staff/customer service and safety and security issues.

**Customer complaints for trains**



Source: Sydney Trains and NSW Trains (unaudited).

Total complaints received during the year, and per 100,000 passengers are shown below.

**Total complaints received**

| Year ended 30 June | 2017 | 2016 | 2017 | 2016 |
|---|---|---|---|---|
| Mode | Number of complaints | Number of complaints | Complaints per 100,000 passengers | Complaints per 100,000 passengers |
| **Rail** | 24,518 | 28,260 | 6.4 | 7.8 |
| Sydney Trains | 16,653 | 19,076 | 4.9 | 5.9 |
| NSW Trains | 7,860 | 9,184 | 17.4 | 22.8 |
| **Light Rail** | 709 | 612 | 7.1 | 6.3 |
| **Bus** | 50,495 | 57,196 | 16.0 | 19.7 |
| **Ferry** | 334 | 368 | 2.1 | 2.4 |

Source: Transport (unaudited).

Complaints from bus passengers decreased 12 per cent to 50,495, a 19 per cent decrease per 100,000 passengers.

Complaints from ferry passengers decreased nine per cent to 334, a slight decrease in complaints per 100,000 passengers. This is primarily due to a decrease in complaints related to 'poor customer services' and 'services departing ahead of schedule'. Ferries continued to have the lowest percentage of complaints to total passenger numbers.

# 3.5 Project management

**Transport cluster manages many of the State high profile/high risk projects**

Infrastructure NSW issued the Infrastructure Investor Assurance Framework (the framework) in 2016. The framework is designed to ensure the State's capital projects are effectively developed and delivered on time, on budget and in accordance with the government's objectives. The framework has four Tiers with different levels of reporting and minimum mandatory gateway reviews. Tier 1 – High Profile/High Risk Projects attract the highest level of reporting and assurance. The Transport cluster manages many of the Tier 1 projects reported and monitored under the framework.

The 2016–17 capital budget for the Transport cluster was $7.4 billion ($5.7 billion in 2015–16) with $4.2 billion allocated to major road projects and $0.8 billion to minor works and capital maintenance.

Major revisions to transport project budgets and/or completion dates since original expectations are summarised below.

**Major Transport projects**

| Projects | Original completion year | Forecast completion year | Original budget ($) | Revised budget ($) |
|---|---|---|---|---|
| WestConnex | 2023 | 2023 | 14.9 billion* | 16.8 billion |
| Sydney Metro Northwest | 2019 | 2019 | 8.3 billion | 8.3 billion |
| Sydney Metro City and Southwest | 2024 | 2024 | 11.5 billion to 12.5 billion | 11.5 billion to 12.5 billion |
| Woolgoolga to Ballina - Pacific Highway upgrade | 2020 | 2020 | 4.1 billion | 4.1 billion |
| NorthConnex | 2019 | 2019 | 3.0 billion | 3.0 billion |
| CBD and South East Light Rail | 2019 | 2019 | 1.6 billion | 2.1 billion |
| Newcastle Light Rail | 2018 | 2019 | 255 million | 290 million |
| Parramatta Light Rail | 2023 | 2023 | 3.4 billion | 3.4 billion |

\* Budget Paper 2014–15 refers to a capital cost of $11.5 billion in 2012 dollars ($14.9 billion in nominal outturn costs).

Source: Transport (unaudited).

# WestConnex

WestConnex is an integrated public transport and critical road infrastructure solution that will be delivered in three stages:

- Stage one: M4 widening
- Stage two: double road capacity along the M5 East corridor and underground tunnels running between St Peters and Kingsgrove
- Stage three: M4 to M5 link.

Although TfNSW expect this project to be completed on schedule in mid-2023, there were two budget revisions since 2014. The project budget was increased to $15.4 billion in May 2015 and a further increase of $1.4 billion in October 2015 due to changes to the scope of work. Transport advises the changes include an extension of stage three to Anzac Bridge, Victoria Road and the future connection of the Western Harbour Tunnel and Beaches Link.

The Audit Office has included an audit on Westconnex in the 2018–20 forward performance audit program.

Below is the development map.
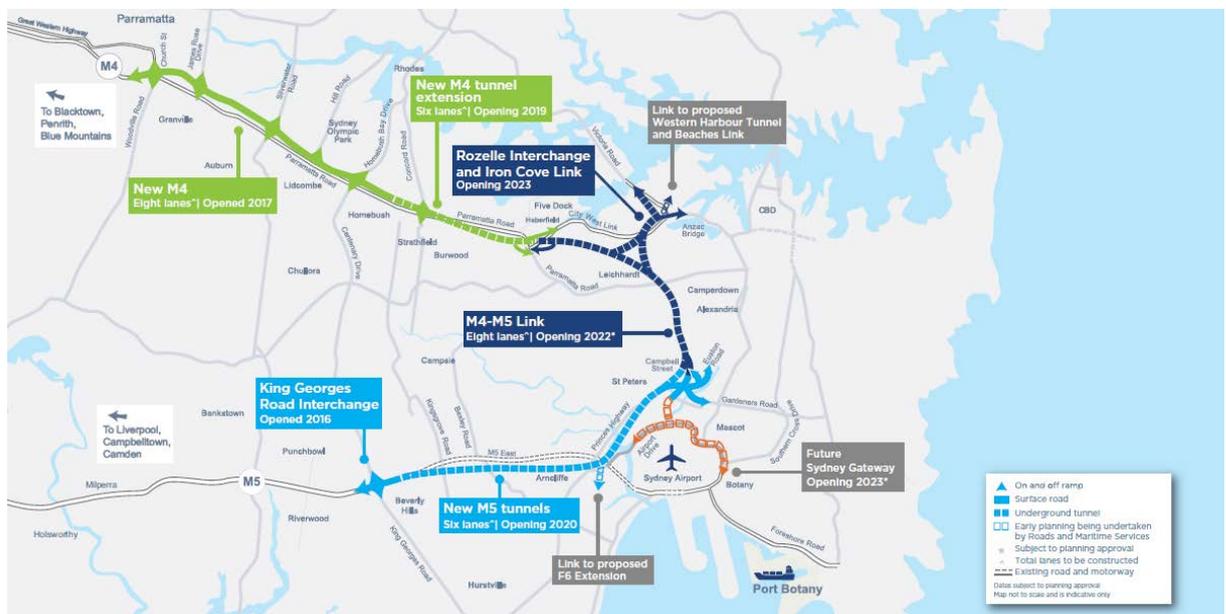


Source: WestConnex (https://www.westconnex.com.au/resources) (unaudited).

# Sydney Metro Northwest and Sydney Metro City and Southwest

Sydney Metro Northwest, formerly the Northwest Rail Link, is the first stage of Sydney Metro and will be the first fully-automated metro rail system in Australia. Sydney Metro Northwest will deliver eight new railway stations, 4,000 commuter car parking spaces to Sydney's growing North West and a 'turn up and go' services with a train every four minutes in the peak.

Sydney Metro City and Southwest is the second stage. This is a 30 km extension of metro rail from the end of Sydney Metro Northwest at Chatswood, through new CBD stations and south west to Bankstown.
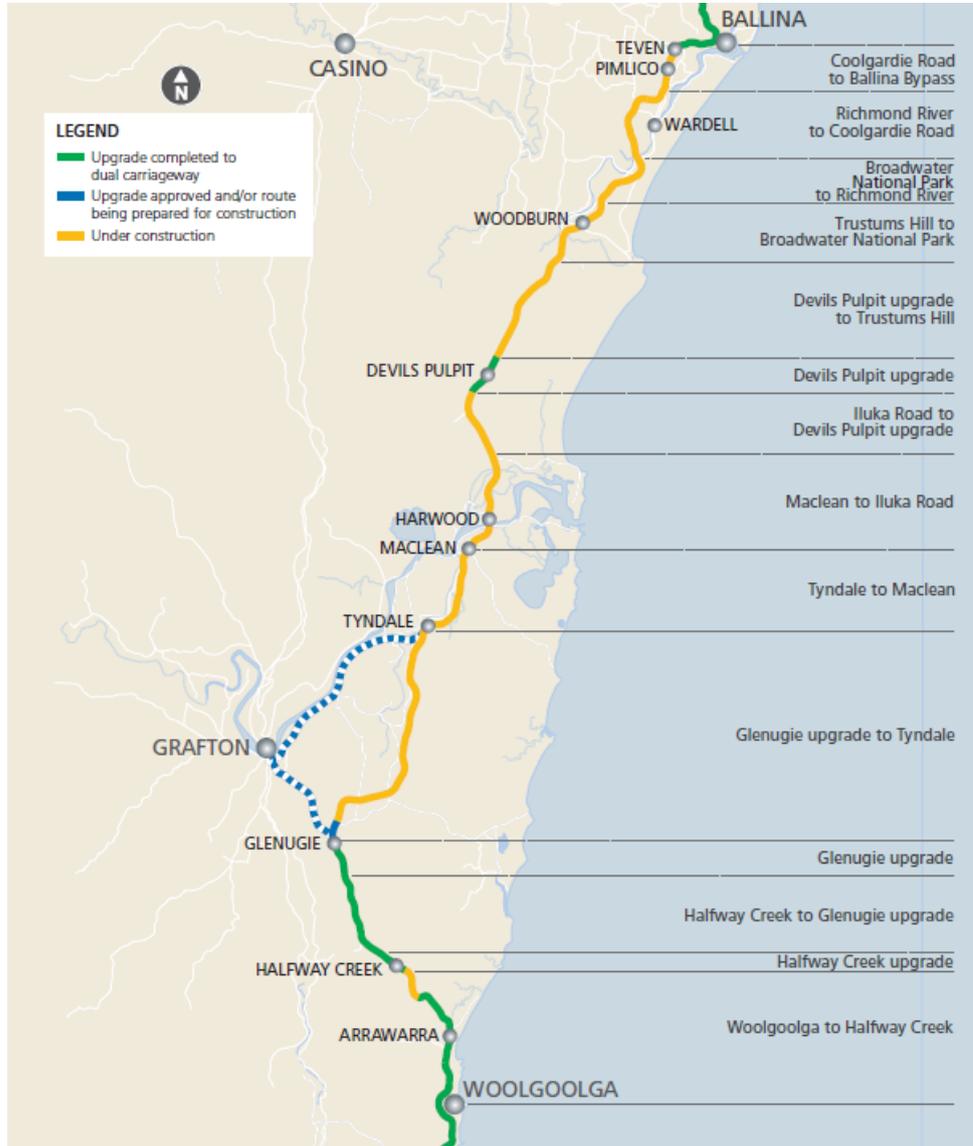
Below is the development map.



Source: Sydney Metro (https://www.sydneymetro.info/) (unaudited).

# Woolgoolga to Ballina - Pacific Highway upgrade

The Woolgoolga to Ballina project is part of Pacific Highway upgrade project. It will provide a four lane divided road from Hexham to Queensland. The Woolgoolga to Ballina project involves upgrading about 155 kilometres of highway. The project starts approximately six kilometres north of Woolgoolga (north of Coffs Harbour) and ends approximately six kilometres south of Ballina.

Below is the development map.



Source: Roads and Maritime Services (http://www.rms.nsw.gov.au/projects/northern-nsw/woolgoolga-to-ballina/about-this-project.html) (unaudited).

# NorthConnex

NorthConnex will provide twin motorway tunnels around nine kilometres in length. It will link the M1 Pacific Motorway at Wahroonga to the Hills M2 Motorway at West Pennant Hills. Major construction work started in June 2015, and is expected to complete in December 2019.

The original budget of the project is $3.0 billion with $992 million funded by the NSW and Australian Governments and the rest by the private sector.

The Audit Office completed a performance audit in 2017 on 'NorthConnex'. The audit found that the processes used to assess NorthConnex adequately considered value for money for taxpayers.

Below is the development map.



Source: Roads and Maritime Services (http://www.rms.nsw.gov.au/projects/key-build-program/building-sydney-motorways/northconnex/index.html) (audited).

# CBD and South East Light Rail

The CBD and South East Light Rail is a 12-kilometre route that will connect passengers from Circular Quay to Randwick and Kingsford. It features 19 stops designed to service major transport hubs and create easy interchange points with buses, trains, ferries and the Inner West Light Rail. The original budget for the project was $1.6 billion and this was revised upwards by $549 million in December 2014 mostly due to mispricing and omissions in the business case.

The Audit Office completed a performance audit in 2016 on the 'CBD and South East Light Rail Project'.

Below is the development map.
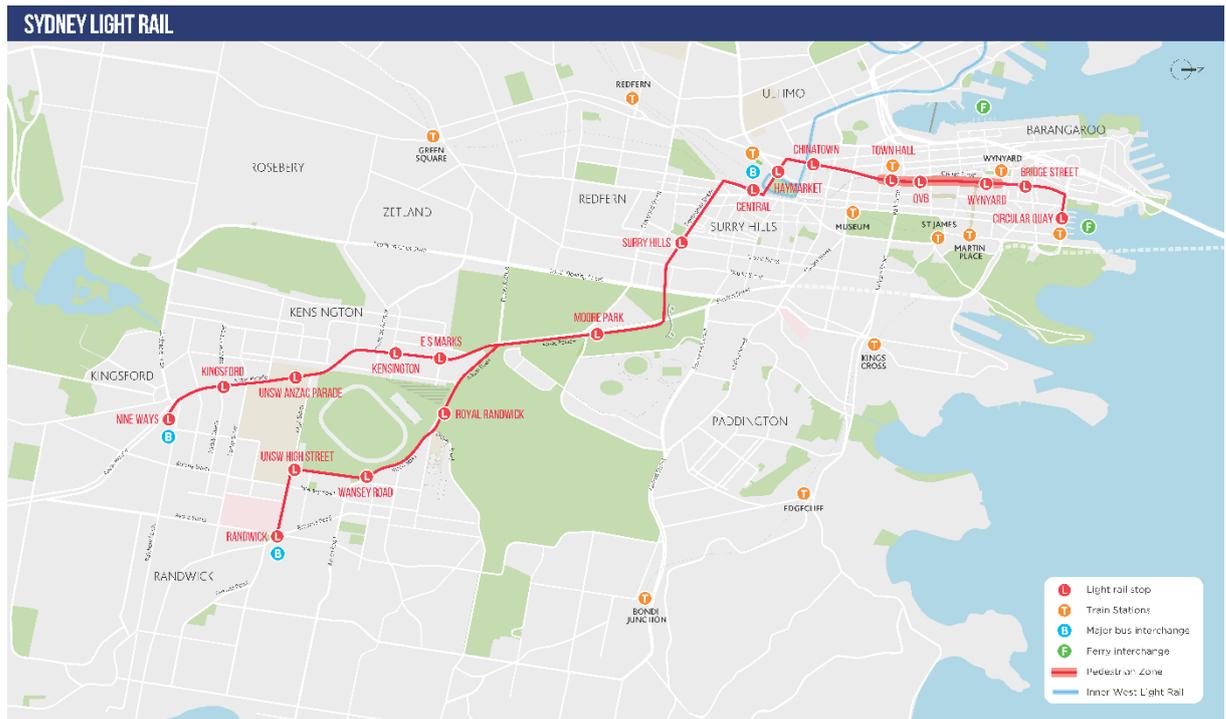


Source: Sydney Light Rail (http://www.sydneylightrail.transport.nsw.gov.au/map) (unaudited).

# Newcastle Light Rail

The Newcastle Light Rail is a high capacity, frequent service through Newcastle city centre.

The Audit Office has included an audit on Newcastle Transport Reforms in the 2017–18 forward performance audit program.

Below is the development map.



Source: Revitalising Newcastle (http://revitalisingnewcastle.nsw.gov.au/what-we-are-doing/newcastle-light-rail/) (unaudited).

## Parramatta Light Rail

The Parramatta Light Rail is in the investment decision stage. The 12-kilometre line is aimed at helping passengers travel across greater Parramatta including to their homes, hospitals and universities.

Below is the development map.
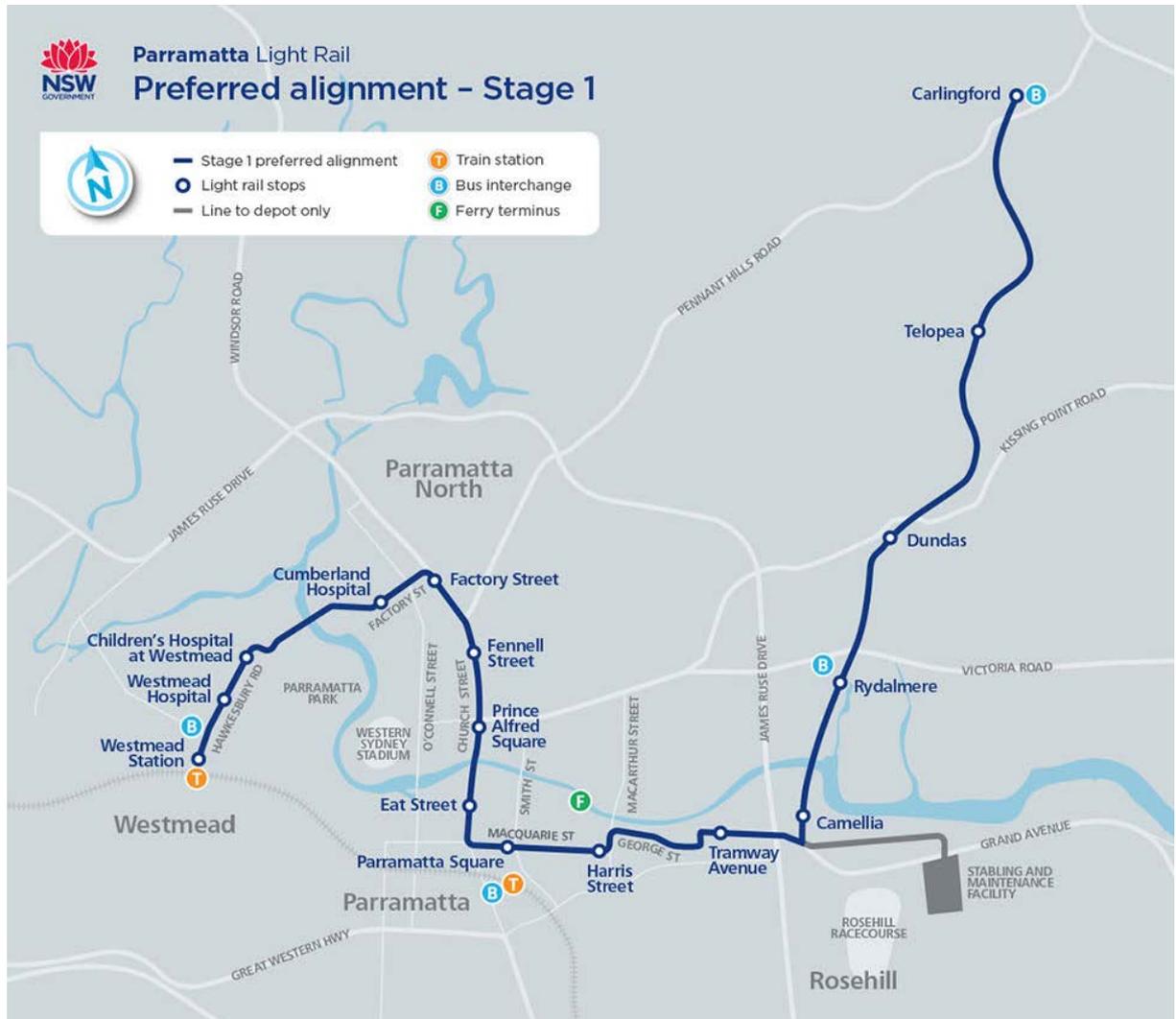
## 3.6 Safety performance

Data provided by Transport indicate rail passenger injuries fell 12 per cent in 2016–17, from 1,133 to 1,001, and bus passenger injuries fell 23 per cent from 537 to 416.

Ferry passenger injuries increased from six in 2015–16 to 11 in 2016–17 due to a significant incident at Circular Quay in October 2016 where a ferry collided with the backboard on the wharf. The collision resulted in five passengers being taken to hospital.

Passenger safety performance measures the number of passenger injuries and fatalities that occurred because of service operations. Non-passenger related injuries and fatalities may occur, but can be outside the operators' control.

The number of passenger injuries per 100,000 passenger journeys by mode of transport over the last five years is shown in the graph below.

**Number of passenger injuries**
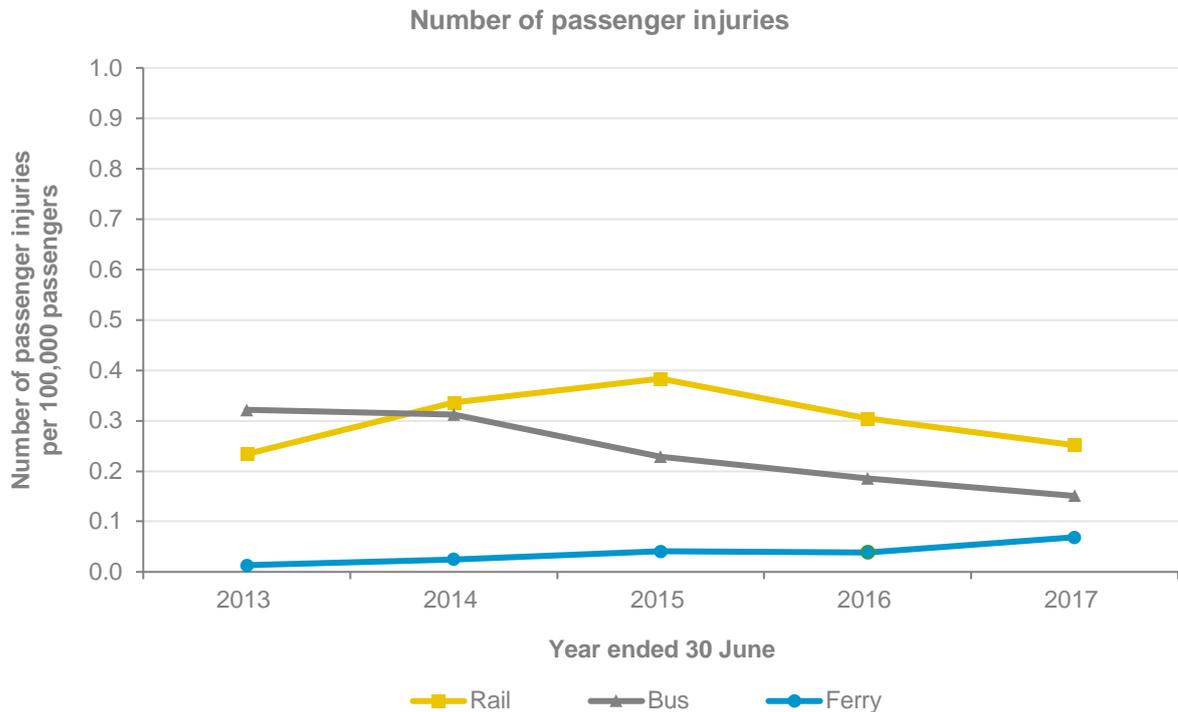


Note: Rail data is only incidents where there were injuries. Bus and ferry data reports all incidents.
Source: TfNSW (unaudited).

Sydney Trains' and NSW Trains' reported injuries fell in 2016–17 in response to initiatives to improve rail safety. Sydney Trains' reported injuries declined for the fourth consecutive year and NSW Trains for the third consecutive year.

STA's Passenger Falls program to reduce passenger falls has continued throughout 2016–17. This included a passenger falls campaign and continued collaboration with relevant stakeholders on the Bus Safety Action Plan to improve passenger and road safety.

The *Rail Safety National Law Act 2012* requires rail transport operators to submit occurrence notifications on rail safety incidents to the Office of the National Rail Safety Regulator (ONRSR). The Independent Transport Safety Regulator (ITSR) conducted regulatory compliance and enforcement activities for ONRSR until 9 March 2017. ITSR had the capacity to provide independent safety advice to the NSW Government. In February 2016, the NSW Government approved a Bill to abolish the ITSR, noting the functions would be undertaken by ONRSR. ITSR ceased operations and operations were transitioned to ONRSR on 9 March 2017. ONRSR prepares an annual rail industry safety performance report, which is available on its website: http://www.onrsr.com.au/resource-centre-document-finder/rail-safety-report.

ITSR's service measures over the last three years are summarised below.

**Service measures**

| Year ended 30 June | 2017* | 2016 | 2015 |
|---|---|---|---|
| | Actual | Actual | Actual |
| Compliance activities completed | 116 | 166 | 188 |
| Statutory notices issued | 63 | 93 | 100 |

\*     Results are for the period July 2016 to 9 March 2017.
Source: ITSR (unaudited).

ITSR had a targeted inspection program with rail operators on rail safety issues. It consolidated its activities within a national operations work plan.

The Office of Transport Safety Investigations (OTSI) investigates safety incidents involving bus, ferry and/or rail transport to identify reasons why incidents occurred and provides recommendations. A summary of its service measures over the last three years is shown below.

**Service measures**

| Year ended 30 June | 2017 | 2016 | 2015 |
|---|---|---|---|
| | Actual | Actual | Actual |
| Notifiable incidents reported | 652 | 678 | 640 |
| Notifiable rail incidents reported to ATSB | 131 | 103 | 110 |
| Incident investigations conducted | 17 | 20 | 13 |
| Confidential safety information and reporting scheme Investigations conducted | 23 | 18 | 10 |

Source: OTSI (unaudited).

Since January 2013, notifications of rail incidents are reported to the Australian Transport Safety Bureau (ATSB). The number of notifiable incidents reported improved in 2016–17 compared to 2015–16. Notifiable rail incidents reported to ATSB increased in 2016–17 by 27 per cent. The agency advised that the cause and contributing factors of rail incidents vary each year and are unpredictable.

## Road safety performance outcomes

Data provided by Transport indicate road fatalities decreased by eight per cent between July 2016 and June 2017. The NSW Centre for Road Safety reported 359 fatalities in 2016–17, compared to 390 in 2015–16. Transport advised that fatalities mainly involve speed, fatigue and vehicle occupants not wearing available restraints.

## Trend in road fatality rates
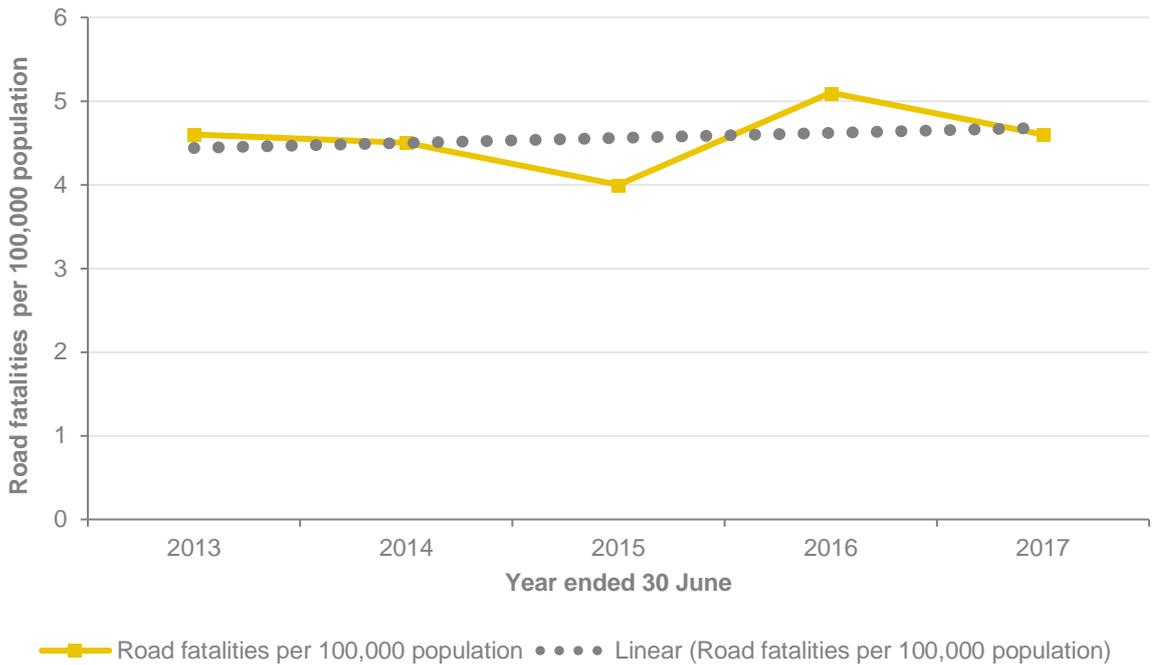


Source: NSW Centre for Road Safety (unaudited).

NSW State Priority includes a primary road safety target expressed in fatalities per 100,000 population. It aims to reduce road fatalities by at least 30 per cent from 2011 levels by 2021. In 2016–17, the rate was 4.6 fatalities per 100,000, higher than the target of 4.4 for the year.

Statistics on fatalities and injuries from road traffic crashes are shown in the table below.

**Fatalities and injuries**

| Year ended 30 June | 2017 Actual | 2016 Actual | 2015 Actual | 2014 Actual | 2013 Actual |
|---|---|---|---|---|---|
| Road fatalities per 100,000 population | 4.6 | 5.1 | 4.0 | 4.5 | 4.6 |
| Total fatalities | 359 | 390 | 304 | 337 | 341 |
| Total injuries[*] | 19,311 | 19,327 | 23,505 | 25,834 | 25,988 |

\*    Total injuries for 2011–12 to 2014–15 were revised following the inclusion of additional injuries identified from the data linkage project for persons who were previously not flagged as injuries in the Police crash report. Injuries data for 2016–17 are preliminary and incomplete for reporting.
Source: NSW Centre for Road Safety (unaudited).

Total injuries decrease between 2014–15 and 2015–16 is partly attributed to the changes in police reporting procedures for non-casualty crashes introduced in the last quarter of 2014. In 2016–17, total injuries remained stable when compared to 2015–16.

## 3.7    Maintenance

### RMS has a maintenance backlog of $3.7 billion

A maintenance backlog is the estimated cost to bring infrastructure, buildings and other structures to a defined standard, measured at a point in time.

RMS estimated maintenance backlog at June 2017 of $3.7 billion which is 9.7 per cent higher than the amount reported in 2016 of $3.4 billion. Transport advises the increment largely relates to two factors - $135 million due to the adoption of survey technology which identified more pavement distress and $145 million due to increases in rates of road pavements renewal.

Transport advises that the current level of pavement backlog is manageable and meets the minimum network condition which has been set to manage risks to assets and services at an acceptable level.

Sydney Trains estimated maintenance backlog of $360 million at 30 June 2017 ($242 million at 30 June 2016).

Postponing maintenance can lead to more costly and extensive maintenance. As the cost of maintenance and complexity increases, less can be done within the available funding. This can further increase backlog maintenance.

Transport cluster agencies manage $134 billion in property, plants and equipment. The total backlog maintenance of $4.1 billion at 30 June 2017 represents 3.1 per cent of those assets.

**Transport cluster agencies maintenance expenditure was $73.8 million lower than planned**

During 2016–17, maintenance expense reported was $73.8 million less than budget. Agencies attribute this to higher capitalised maintenance expenditure, reprioritisation of the maintenance budget to fund Local Council special purpose grants, and $18.3 million of maintenance carried forward into 2017–18.

Maintenance expenditure remained stable at $1.8 billion during 2016–17 and 2015–16.

# 3.8  Road congestion

## Journey time reliability

Data provided by Transport indicates journey time reliability is largely unchanged from 86 per cent in 2015–16 to 87 per cent in 2016–17. This measure is below the NSW State Priority of 90 per cent of peak travel on key road routes being on time.

TfNSW attributes the increase in reliability to multiple factors, including:

- reduction in incidents occurring on key arterial roads has improved the flow of traffic across the network, for example unplanned towing incidents (parked cars towed away in no stopping zones) has decreased by 13 per cent
- improved traffic management around major infrastructure development sites has reduced the impact on customers travelling during the peak periods.

Journey time reliability measures the proportion of days during the reporting period where the daily average travel times rose above a threshold (a five-minute variation on a typical thirty-minute journey). The measurement is conducted during AM and PM peak periods for 92 Sydney metropolitan area roads, using a combination of GPS Fleet Vehicle data and linear interpolation. Use of Google Travel Time data for Journey Time Reliability reporting will commence in 2017–18.

TfNSW adopted the journey time reliability as a measure after it undertook a Customer Value Proposition Research (the Research) in 2015. The Research identified consistency of travel time having a high importance and strong impact on customer satisfaction.

## Managing road congestion

### RMS initiated measures to address road congestion in 2016–17

The Sydney Road Congestion Capital program is a ten-year major capital works plan developed for many projects aimed at alleviating congestion in Sydney. The $3.5 billion program is expected to be completed in December 2026. In addition, $1.3 billion was approved in 2016–17 to fund The Easing Sydney's Congestion program, which aims to improve the management of Sydney's road network. Key initiatives include the delivery of the M4 Smart Motorway, the Parramatta Congestion Improvement Program and accelerated Pinch Point and Clearways Programs.

# 3.9 Level crossings

**The number of recorded incidents at level crossings significantly increased in 2016–17**

A level crossing is where a railway line and road intersect at the same level, providing passage for both rail and other road users including pedestrians.

Data provided by Transport indicates the number of incidents at level crossings involving Sydney Trains increased 37 per cent from 52 in 2015–16 to 71 in 2016–17. The agency advised the increase is due to a higher number of vandalism incidents and damage caused by road vehicles to the level crossings.

NSW Trains reported 454 incidents in 2016–17, up 97 per cent from 230 in 2015–16. Transport advised that this was partly due to improved reporting since the opening of the Regional Customer Support Centre. Level crossings on the South Coast intercity rail line continue to incur the highest number of incidents.

The number of level crossings for both Sydney Trains and NSW Trains remain the same in the last two years.

The table below shows the number of level crossings, incidents, near misses and fatalities at level crossings for both rail operators.

**Level crossing incidents, near misses and fatalities**

|  | Sydney Trains | | NSW Trains | |
| --- | --- | --- | --- | --- |
| Year ended 30 June | 2017 Actual | 2016 Actual | 2017 Actual | 2016 Actual |
| Number of level crossings | 57 | 57 | 580 | 580 |
| Number of incidents [*] | 71 | 52 | 454 | 230 |
| Number of near misses [**] | 7 | 9 | 117 | 140 |
| Number of fatalities | 0 | 0 | 3 | 2 |

[*]  Occurrences that either resulted in a collision between a train and a road vehicle or person, or endangered the safety of motorists, pedestrians and railway operations.

[**] Occurrences where a train driver took emergency action or had insufficient time to take emergency action to avoid impact with a person at a level crossing and no collision occurred.

Source: TfNSW (unaudited).

NSW Trains reported three fatalities in 2016–17 (two in 2015–16) where people were struck by trains at level crossings while Sydney Trains reported none in the last two years. The number of near miss incidents fell by 22 per cent and 16 per cent for Sydney Trains and NSW Trains respectively compared to 2015–16.

To reduce risks to the public, a Level Crossing Improvement Program was established. The program funds level crossing upgrades and supports safety initiatives.

Transport advise it is also planning to undertake works on level crossings in the next three to five years. These include:

- upgrading the East Richmond level crossing
- automating the Adamstown level crossing and installing traffic lights at the adjoining road intersections and,
- upgrading the Berry level crossing from a passive crossing to an active one.

# Section two

Appendices

# Appendix one – List of 2017 recommendations

The table below lists the recommendations made in this report.

## 1.   Financial reporting and controls

| | |
|---|---|
| **1.1 $2.6 million in revenue not collected during 2016–17 through negative balance Opal cards. This represents 0.2 per cent of total annual passenger revenue. TfNSW advise the cumulative balance of negative balance Opal Cards is $4.2 million as at 30 June 2017.** | TfNSW should implement measures to prevent the loss of revenue from passengers tapping off with negative balance Opal cards. |

## 2.   Service delivery

| | |
|---|---|
| **2.1 There are no target measures on crowding for bus operators in any contract region.** | **Repeat issue.** TfNSW should develop target measures on crowding for bus operators in all contract regions and publish the results. |

**Key**   ✅ **Low risk**   ➖ **Medium risks**   ❗ **High risks**

# Appendix two – Status of 2016 recommendations

| Recommendation | Current status | |
|---|---|---|
| **The cluster lead agency should:** | | |
| Develop target measures on crowding for bus operators in all contract regions and publish the results. | **Repeat issue.** TfNSW is working to identify how Opal data can be used to report patronage and provide overcrowding analysis. Refer to the Service Delivery chapter. | 🔴 |
| Consider including financial penalties for not meeting each punctuality KPI in future contracts with bus operators. | An opportunity to implement the recommendation requires a contract renewal process to be finalised with STA, which did not occur during 2016–17. | 🟡 |
| **RailCorp and Sydney Trains:** | | |
| The transparency of operation of signalling priorities with operators be improved with the creation of TAHE and the operation of the new Rail Operations Centre in 2018. | Sydney Trains advised that sufficient internal controls and protocols are in place to manage potential conflicts of interest. The creation of TAHE and the Rail Operations Centre is expected to enhance transparency of this process. | 🟡 |
| **NSW Trains and OTSI should:** | | |
| Continue to focus on strategies to improve financial sustainability and less reliance on the NSW Government funding. | NSW Trains advised that management continually review strategies to improve financial sustainability over the budget estimate period and beyond. Taking opportunities, such as the new fleet project, to realise additional revenue and cost efficiencies will help address this.<br><br>The recommendation was not addressed by OTSI as the agency does not generate revenue and is reliant on NSW Government funding. | 🟡 |
| **The Transport cluster agencies should:** | | |
| Terminate user access on a timely basis and ensure all user reviews are completed so access rights are appropriate. | TfNSW advised review of user access has occurred in every release of the ERP Program delivered to the Transport agencies. In addition, the access is assigned to the position and not the person in the Transport Equip (SAP) system and if a user is terminated, the access profile is automatically removed. Segregation of duty checks are performed on each assignment for access to the position. | 🟡 |
| Continue reviewing the effectiveness of approaches to managing excessive annual leave in 2016–17. | **Repeat issue**. Employees continue to have excessive annual leave. The agencies advised they have policies to manage this leave, where managers are encouraged to discuss and develop leave plans for employees with excessive leave. | 🟡 |
| Review project budgets and delivery schedules to address any impact of deferred implementation. | Transport advise the ERP Program has remained within the budget allocation of $196.3 million. The Sydney Trains implementation was reviewed and found to be contained within the allocated funding even with the deferred implementation from January 2017 to July 2017. | ✅ |

✅ **Fully addressed**       🟡 **Partially addressed**       🔴 **Not addressed**

# Appendix three – Agencies selected for this volume

| Agency | Website |
|---|---|
| **Cluster lead entity** | |
| Department of Transport | ** |
| TfNSW | www.transport.nsw.gov.au |
| **Transport service providers** | |
| NSW Trains | www.nswtrainlink.info |
| RailCorp | www.transport.nsw.gov.au/railcorp |
| RMS | www.rms.nsw.gov.au |
| STA | www.statetransit.info |
| Sydney Ferries | www.transport.nsw.gov.au/content/sydney-ferries |
| Sydney Trains | www.sydneytrains.info |
| **Other agencies** | |
| ITSR* | www.transportregulator.nsw.gov.au |
| OTSI | www.otsi.nsw.gov.au |
| Port Authority | www.portauthoritynsw.com.au |
| Transport Service | ** |

\*      Pursuant to the *Transport Administration Amendment Act 2017*, the Independent Transport Safety Regulator (ITSR) was abolished on 31 March 2017.

\*\*     Entity does not have a website.

# Appendix four – Financial audit reporting

| | Total assets | | Total liabilities | | Total revenue* | | Total expense** | |
|---|---|---|---|---|---|---|---|---|
| | 2017 $m | 2016 $m | 2017 $m | 2016 $m | 2017 $m | 2016 $m | 2017 $m | 2016 $m |
| **Cluster lead entity** | | | | | | | | |
| Department of Transport (parent) | -- | -- | -- | -- | 1 | 1 | 1 | 1 |
| Transport for NSW | 15,910 | 7,452 | 3,519 | 3,129 | 15,411 | 13,333 | 12,299 | 12,381 |
| **Transport service providers** | | | | | | | | |
| NSW Trains | 234 | 259 | 298 | 335 | 782 | 707 | 810 | 780 |
| RailCorp | 36,824 | 31,894 | 2,868 | 2,919 | 280 | 280 | 1,254 | 1,126 |
| Roads and Maritime Services | 86,707 | 82,946 | 2,526 | 2,237 | 6,869 | 7,007 | 4,370 | 3,856 |
| State Transit Authority of NSW | 894 | 892 | 520 | 617 | 683 | 673 | 599 | 702 |
| Sydney Ferries | 183 | 141 | 9 | 6 | 50 | 26 | 13 | 23 |
| Sydney Trains | 4,002 | 4,266 | 3,312 | 3,510 | 3,368 | 3,139 | 3,532 | 3,363 |
| **Other agencies** | | | | | | | | |
| Independent Transport Safety Regulator*** | -- | 11 | -- | 2 | 10 | 15 | 11 | 14 |
| Office of Transport Safety Investigations | -- | -- | -- | -- | 3 | 3 | 3 | 3 |
| Port Authority of New South Wales | 607 | 574 | 139 | 166 | 163 | 144 | 141 | 137 |
| Transport Service of New South Wales | 508 | 557 | 508 | 557 | 1,776 | 1,851 | 1,810 | 1,810 |

\*    Total revenue includes other gain, gain on disposal, capital contribution separately recorded on the financial statements.

\*\*    Total expense includes other losses, loss on disposal, income tax shown separately on the financial statements.

\*\*\*    Pursuant to the *Transport Administration Amendment Act 2017*, the Independent Transport Safety Regulator (ITSR) was abolished on 31 March 2017.

# Appendix five – Bus contracts

| Contract number | Area serviced |
| --- | --- |
| 1 | Blacktown, Penrith, Richmond and Windsor |
| 2 | Liverpool, Glenfield, Ingleburn, Bringelly and Hoxton Park |
| 3 | Fairfield, Cabramatta, Liverpool and Wetherill Park |
| 4 | Blacktown, Rouse Hill, Castle Hill, Dural and Parramatta |
| 5 | Lakemba, Mortdale, Punchbowl and Roselands |
| 6 | Sydney Olympic Park, Burwood, Ashfield, Leichhardt, Campsie and Rockdale |
| 7 | North Sydney, Chatswood, Macquarie Park, Epping, Ryde and Parramatta |
| 8 | Palm Beach, Brookvale, Manly, Mosman and North Sydney |
| 9 | Bondi Junction, Randwick, Maroubra, Botany, Mascot and Surry Hills |
| 10* | Hurstville, Miranda, Menai, Bankstown, Caringbah, Cronulla and Kurnell |
| 12 | Berowra, Hornsby, Gordon and Chatswood |
| 13 | Parramatta, Burwood, Bankstown and Liverpool |
| 14 | Chatswood, Belrose, Terrey Hills and St Ives |
| 15 | Campbelltown, Narellan and Camden |

\* Contract 11 routes were included in the new Contract 10 when it commenced on 1 January 2013.

## OUR VISION

Our insights inform and challenge government to improve outcomes for citizens.

## OUR MISSION

To help parliament hold government accountable for its use of public resources.

## OUR VALUES

**Purpose** – we have an impact, are accountable, and work as a team.

**People** – we trust and respect others and have a balanced approach to work.

**Professionalism** – we are recognised for our independence and integrity and the value we deliver.

auditoffice
OF NEW SOUTH WALES

audit.nsw.gov.au

**audit office**
OF NEW SOUTH WALES

audit.nsw.gov.au