

# Transport 2018

**28 NOVEMBER 2018** 



NEW SOUTH WALES AUDITOR-GENERAL'S REPORT

FINANCIAL AUDIT

### 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* and the *Local Government Act 1993*.

We conduct financial or 'attest' audits of State public sector and local government entities' 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 entities to ensure sound financial management.

Following a financial audit the Audit Office issues a variety of reports to entities and reports periodically to parliament. In combination these reports give opinions on the truth and fairness of financial statements, and comment on entity 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 entity 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 entity's operations, or consider particular issues across a number of entities.

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.

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In accordance with section 52A of the *Public Finance and Audit Act 1983*, I present a report titled '**Transport 2018'**.



**Margaret Crawford** 

Auditor-General 28 November 2018



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### **Section one**

## Transport 2018

This report analyses the results of our audits of the Transport cluster agencies for the year ended 30 June 2018.



### **Executive summary**

This report analyses the results of our audits of financial statements of the Transport cluster for the year ended 30 June 2018. The table below summarises our key observations.



### 1. Financial reporting

**Audit opinions** 

Valuation of assets

Revenue growth

**Negative Opal Cards** 

Cost recovery



### 2. Audit observations

Internal controls

Write-off of assets

Unqualified audit opinions were issued on the 2017–18 financial statements of all agencies in the Transport cluster.

Asset valuations are complex and continue to create challenges. The Transport cluster has a large geographically dispersed asset base, requiring significant resources, judgement and estimation techniques to determine fair values. Although agencies complied with the requirements of the accounting standards and Treasury policies on valuations, we identified some opportunities for improvements at Roads and Maritime Services (RMS).

RMS incorporated data from its asset condition assessments for the first time in the valuation methodology which improved the valuation outcome. Overall, we were satisfied with the valuation methodology and key assumptions, but we noted some deficiencies in the asset data in relation to asset component unit rates and old condition data for some components of assets.

Also, a bypass and tunnel were incorrectly excluded from RMS records and valuation process since 2013. This resulted in an increase for these assets' value by \$133 million.

Transport agencies' revenue growth increased at a higher rate than patronage. Public transport passenger revenue increased by \$114 million (8.3 per cent) in 2017–18, and patronage increased by 37.1 million (5.1 per cent) across all modes of transport based on data provided by Transport for NSW (TfNSW).

Negative balance Opal Cards resulted in \$3.8 million in revenue not collected in 2017–18 (\$7.8 million since the introduction of Opal).

Overall cost recovery from public transport users (on rail and State Transit Authority of New South Wales (STA) bus services) decreased from 23.2 per cent to 22.4 per cent between 2016–17 and 2017–18. The main reason for the decrease is due to expenditure increasing at a faster rate than revenue in 2017–18.

There was an increase in findings on internal controls across the Transport cluster. Key themes related to information technology, employee leave entitlements and asset management.

The Transport cluster wrote-off over \$200 million of assets which were replaced by new assets or technology.

Majority of this asset write-off was reported by RMS, with \$199 million relating to the write-off of existing roads, bridges, maritime assets, traffic signals and controls network replaced during the year.

### Transport Asset Holding Entity (TAHE)

TAHE has been established to be a dedicated asset manager for the delivery of public transport asset management. The *Transport Administration Amendment (Transport Entities) Act 2017* will convert RailCorp into TAHE. RailCorp is expected to transition to TAHE from 1 July 2019. Several working groups are considering different aspects of the TAHE transition including its status as a forprofit Public Trading Enterprise and which assets to transfer to TAHE.

#### Maintenance

Agencies in the transport cluster do not have a consistent approach to managing maintenance.

Some transport agencies estimate backlog maintenance while others do not quantify it. Individual agencies define and report on backlog maintenance in an inconsistent manner.

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

TfNSW advised it is liaising with Infrastructure NSW to develop a consistent definition of maintenance backlog across all transport service providers.

Similarly, not all agencies monitor unplanned maintenance across the Transport cluster. Unplanned maintenance can be more expensive than planned maintenance. TfNSW should develop a consistent approach to define, monitor and track unplanned maintenance across the cluster.



### 1. Introduction

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

- financial reporting
- audit observations.

### 1.1 Snapshot of the cluster

Transport for NSW (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 Chief Investigator of the Office of Transport Safety Investigations (OTSI) or the 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 include gains and losses.
- 4 The Residual Transport Corporation was also established effective 1 July 2017. Financial statements were not submitted for audit and Transport advises that the entity did not trade.

### 1.2 Changes to the cluster

Effective from 1 July 2017, the Transport Administration Amendment (Transport Entities) Act 2017:

- established a new entity, Residual Transport Corporation New South Wales (RTC), to hold, manage, operate and maintain transport assets vested in or owned by it. RTC is controlled by TfNSW
- established Sydney Trains and NSW Trains as stand-alone entities. Previously Sydney Trains and NSW Trains were subsidiary corporations of Rail Corporation New South Wales (RailCorp).

The Transport cluster was also impacted by the *Transport Administration Amendment (Sydney Metro) Act 2018*. Effective from 1 July 2018 the amendment established a new entity, Sydney Metro. Sydney Metro will be responsible for delivering metro passenger services and developing land around the metro stations, depots and stabling yards.

### 1.3 Operational snapshot

### **New South Wales Public Transport Services Cost to Government**



Ferries <sup>(b)</sup>
Passenger journeys 16.4 million**
Passenger revenue \$52.4 million**
Total expenses \$22 million*
Government funding \$83 million*
Net Assets \$164 million*
<b>****</b>





#### Notes:

- a Bus passenger journeys and passenger revenue include STA and private bus operators. Government funding represents the net contract payments to STA and private bus operators. Net assets and total expenses relate to STA only.
- Total expenses and net assets relate to Sydney Ferries only. Government funding represents the net contract payments to the private operator. Passenger revenue is retained by the private operator.
- Relates to Sydney Trains, NSW Trains and RailCorp only, Total expenses exclude inter-rail transactions. Excludes all light rail results. TfNSW manages some rail assets and metro rail projects. The value of these assets and the associated government funding received is not included. Government funding includes cash equity injections.
- 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 NSW Treasury.

#### Source:

- \* Transport agencies' financial statements audited. Total expenses include other losses.
- \*\* Information from transport agencies (unaudited).



### 🖺 2. Financial reporting

Financial reporting is an important element of good governance. Confidence and transparency in public sector decision making are enhanced when financial reporting is accurate and timely.

This chapter outlines our audit observations related to the financial reporting of agencies in the Transport cluster for 2018.

#### Observation

#### Conclusions and recommendations

### 2.1 Quality of financial reporting

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

Sufficient audit evidence was obtained to conclude the financial statements were free of material misstatement.

#### 2.2 Key accounting issues

Valuation of assets continues to create challenges. Although agencies complied with the requirements of the accounting standards and Treasury policies on valuations, we identified some opportunities for improvements at RMS.

RMS incorporated data from its asset condition assessments for the first time in the valuation methodology which improved the valuation outcome. Overall, we were satisfied with the valuation methodology and key assumptions, but we noted some deficiencies in the asset data in relation to asset component unit rates and old condition data for some components of assets.

Also, a bypass and tunnel were incorrectly excluded from RMS records and valuation process since 2013. This resulted in an increase for these assets' value by \$133 million.

The valuation inputs for Wetlands and Moorings were revised this year to better reflect the assets' characteristics resulting in a \$98.0 million increase.

### 2.3 Timeliness of financial reporting

**Residual Transport Corporation did** not submit its financial statements by the statutory reporting deadline. Residual Transport Corporation remained a dormant entity with no transactions for the year ended 30 June 2018.

With the exception of Residual Transport Corporation, all agencies completed early close procedures and submitted financial statements within statutory timeframes.

Early close procedures allow financial reporting issues and risks to be addressed early in the reporting and audit process.

#### 2.4 Financial sustainability

**NSW Trains and the Chief** Investigator of the Office of **Transport Safety Investigations** reported negative net assets of \$75.7 million and \$89,000 respectively at 30 June 2018.

NSW Trains and the Chief Investigator of the Office of Transport Safety Investigations continue to require letters of financial support to confirm their ability to pay liabilities as they fall due.

#### 2.5 Passenger revenue and patronage

Transport agencies revenue growth increased at a higher rate than patronage.

Public transport passenger revenue increased by \$114 million (8.3 per cent) in 2017–18, and patronage increased by 37.1 million (5.1 per cent) across all modes of transport based on data provided by TfNSW.

#### Observation

#### **Conclusions and recommendations**

Negative balance Opal Cards resulted in \$3.8 million in revenue not collected in 2017–18 and \$7.8 million since the introduction of Opal. A total of 1.1 million Opal cards issued since its introduction have negative balances.

Transport for NSW advised it is liaising with the ticketing vendor to implement system changes and are investigating other ways to reduce the occurrences.

#### 2.6 Cost recovery from public transport users

Overall cost recovery from users has decreased.

Overall cost recovery from public transport users (on rail and bus services by STA) decreased from 23.2 per cent to 22.4 per cent between 2016–17 and 2017–18. The main reason for the decrease is due to expenditure increasing at a faster rate than revenue in 2017–18.

### 2.1 Quality of financial reporting

### **Audit opinions**

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

Unqualified audit opinions were issued for all 30 June 2018 financial reports that were submitted for audit. While financial reporting has improved across the cluster, valuation of assets continues to create challenges. There were some issues with asset valuations at Roads and Maritime Services (RMS) as discussed below.

### 2.2 Key accounting issues

### **Valuation of Infrastructure Assets**

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. Each year agencies perform a full revaluation of specific classes of its assets with all asset classes subject to a full revaluation over a 5-year period. Although overall agencies complied with the requirements of the accounting standards and Treasury policies on valuations, we identified some opportunities for improvements at RMS.

### Comprehensive valuation for roads and bridges identified some data limitations

RMS incorporated data from its asset condition assessments for the first time in the valuation methodology in accordance with the accounting standards and Treasury policy requirements. This improved the valuation outcome by reflecting improvements in asset condition over the years. It resulted in an increase in the assets' remaining useful lives and an increment to value of the asset. We were satisfied with the overall valuation methodology and key assumptions, but we noted some deficiencies in the asset data in relation to asset component unit rates and old condition data for some components of assets. Some elements of condition data used in the valuation process dated back to 2010 and some assets did not have recent unit rates available to calculate replacement costs.

Also, a bypass and tunnel were incorrectly excluded from RMS records and valuation process since 2013. This resulted in an increase for these assets' value by \$133 million.

#### Valuation basis for Wetlands and Moorings changed resulting in a \$98 million increase

RMS engaged an independent valuer to perform a revaluation of moorings and wetland assets using an income approach in 2017–18. Our review of the valuation noted some inputs, including the projected cash flow periods and the discount rate, did not adequately reflect the assets' characteristics. Subsequent to our concerns, the valuer revised the valuation resulting in an

increment of \$98 million. RMS further engaged a peer review by a second independent valuer to ensure wetland and moorings assets were recorded at fair value. The total fair value of Maritime assets at 30 June 2018 was \$801 million.

### New accounting standards

The Australian Accounting Standards Board has issued new accounting standards effective in future financial years and include:

- AASB 9 Financial instruments
- AASB 15 Revenue from Contracts with customers
- AASB 16 Leases
- AASB 1058 Income of Not-For-Profit Entities
- AASB 1059 Service Concession Arrangements: Grantors.

Agencies across the cluster have established working groups to prepare for the implementation of the new accounting standards effective from 1 July 2019. As at 30 June 2018, agencies had not quantified the impact of these standards.

### 2.3 Timeliness of financial reporting

### Most agencies complied with their statutory financial reporting timeframes

Timely financial reporting is essential for sound financial management, effective decision making and improving public accountability. All agencies complied with the statutory timeframe for completion of early close procedures. With the exception of Residual Transport Corporation (RTC), all Transport cluster agencies submitted financial statements on time in accordance with Treasury Circular 18-06 'Agency guidelines for the 2017–18 Mandatory Annual Returns to Treasury'.

Cluster agencies	Early close procedures	Financial statements	Audit report
Principal Department			
Department of Transport			
Agencies related to the Department			
Transport for NSW			<b>₽</b> ^
NSW Trains	igoremsize	lacksquare	
Rail Corporation New South Wales			
Roads and Maritime Services			
State Transit Authority			
Sydney Ferries			
Sydney Trains			
Chief Investigator of the Office of Transport Safety Investigations	•		igoremsize
Transport Service of New South Wales	igoremsize	lacksquare	<b>!</b> ^
Port Authority of New South Wales	igoremsize	igoremsize	
Residual Transport Corporation	•	•	#

### Key



Statutory reporting deadline was met



Statutory reporting deadline was not met

### Residual Transport Corporation did not submit its financial statements by the statutory reporting deadline

RTC did not submit financial statements. RTC was established on 1 July 2017. The *Public Finance* and *Audit Act 1983* required RTC to submit financial statements for audit for the year ended 30 June 2018 by 13 August 2018. The RTC did not submit financial statements on the basis that it remained a dormant entity with no transactions for the year ended 30 June 2018.

### 2.4 Financial sustainability

### Letters of financial support

NSW Trains and Chief Investigator of the Office of Transport Safety Investigations require letters of financial support to continue to report as a going concern

NSW Trains and OTSI continue to require letters of financial support to confirm their ability to pay liabilities as they fall due.

NSW Trains and OTSI reported negative net assets of \$75.7 million and \$89,000 respectively at 30 June 2018 (\$64.1 million and \$55,000 as at 30 June 2017). These entities receive grants from TfNSW on a year on year basis.

While not requiring a letter of financial support, Sydney Trains reported an operating loss of \$217 million for the year ended 30 June 2018 (\$164 million). Future operating losses may erode its reported net assets of \$480 million at 30 June 2018 (\$689 million).

<sup>^</sup> The Audit Office did not issue the opinion on the Transport for NSW and Transport Service of New South Wales financial statements by the statutory deadline. This was due to additional work required to audit the guarantee arrangement and contingent liabilities for the CBD and South East Light Rail project.

<sup>#</sup> An audit opinion for the Residual Transport Corporation was not issued as the financial statements were not prepared.

### 2.5 Passenger revenue and patronage

### Transport agencies revenue growth increased at a higher rate than patronage

Public transport passenger revenue increased by \$114 million (8.3 per cent) in 2017–18, and reported patronage increased by 37.1 million (5.1 per cent) across all modes of transport.

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

Rail continues to be the most used mode of public transport earning 66.0 per cent of total 2017–18 passenger revenue, similar to 2016–17. It also accounted for 53.1 per cent of total public transport patronage in both 2017–18 and 2016–17.

#### Passenger revenue and patronage by transport mode

	Passenger re	venue***	Movement	Patrona	ge****	Movement
Year ended 30 June	2018	2017		2018	2017	
Mode of public transport	\$m	\$m	%	million trips	million trips	%
Rail	977	896	9.0	405.9	385.9^	5.2
Buses*	440	409	7.6	332.0	315.6	5.2
Ferries**	52	50	4.0	16.4	16.0	2.5
Light rail	11	11		10.3	10.0	3.0
Total passenger revenue and patronage from public transport	1,480	1,366	8.3	764.6	727.5	5.1

<sup>\*</sup> Passenger revenue for STA and private bus operators.

#### Source

### Negative balance Opal cards resulted in \$3.8 million in revenue not collected

The total number of Opal cards with negative balances increased from 776,771 as at 30 June 2017 to 1.1 million as at 30 June 2018. Negative balance Opal cards resulted in \$3.8 million in revenue not collected during 2017–18 (\$2.6 million during 2016–17). While this represents less than 0.3 per cent (0.2 per cent) of total annual passenger revenue during 2017–18, the total balance of lost revenue will continue to grow over time. TfNSW advise the cumulative balance of negative balance Opal Cards is \$7.8 million as at 30 June 2018.

Approximately \$200,000, has been recovered from prior year balances.

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 advised it is liaising with the ticketing vendor to implement system changes and are investigating other ways to reduce the occurrences.

<sup>\*\*</sup> Passenger revenue did not include Newcastle Ferries

<sup>^</sup> Rail patronage for 2016–17 did not include 1.7 million trips for NSW Trains Regional patronage.

<sup>\*\*\*</sup> Financial statements (audited) and information from TfNSW (unaudited). Revenue excludes those collected by private operators where they set the fares.

<sup>\*\*\*\*</sup> Information from TfNSW (unaudited).

#### Opal reader breakdowns are reducing

Data provided by TfNSW indicate there were over 2,500 Opal reader breakdowns during the year. Over 2,000 of the breakdowns were on buses. The risk of revenue loss is minimised on most modes of transport as there are multiple readers in each location to use if there is a breakdown. However, Opal reader breakdowns on buses can lead to loss of revenue as passengers are unable to tap on these buses.

There has been a reduction in Opal reader breakdowns reported by TfNSW year on year, reducing from over 14,700 total breakdowns in 2014–15.

### 2.6 Cost recovery from public transport users

### Cost recovery has decreased slightly

The overall cost recovery from public transport users (on rail and bus services provided by STA) decreased from 23.2 per cent to 22.4 per cent between 2016–17 and 2017–18. This is calculated based on revenue from customers and the cost to government of providing services. The main reason for the decrease is due to expenditure increasing at a faster rate than revenue in 2017–18.

The following modes of public transportation have not been included in our analysis as they are operated under contract by private operators and we have not audited the financial information:

- bus services operated under private contract
- light rail services
- Sydney Ferries.

Cost recoveries for rail and STA bus services are shown below.

### **Cost recovery**

	Ra	ail		ses only)
Year ended 30 June	2018	2017	2018	2017**
Cost of services per passenger journey (\$)	12.8	12.2	3.1	2.9
Passenger revenue per passenger journey (\$)	2.5	2.4	1.5	1.5
Net cost per passenger journey (\$)*	10.3	9.8	1.6	1.4
Cost recovery from users (%)	19.2	19.7	47.9	51.2

<sup>\*</sup> The net cost per passenger journey represents the amount subsidised by taxpayers through government contributions. Patronage includes untapped estimates such as for school students but excludes estimates for fare evasion.

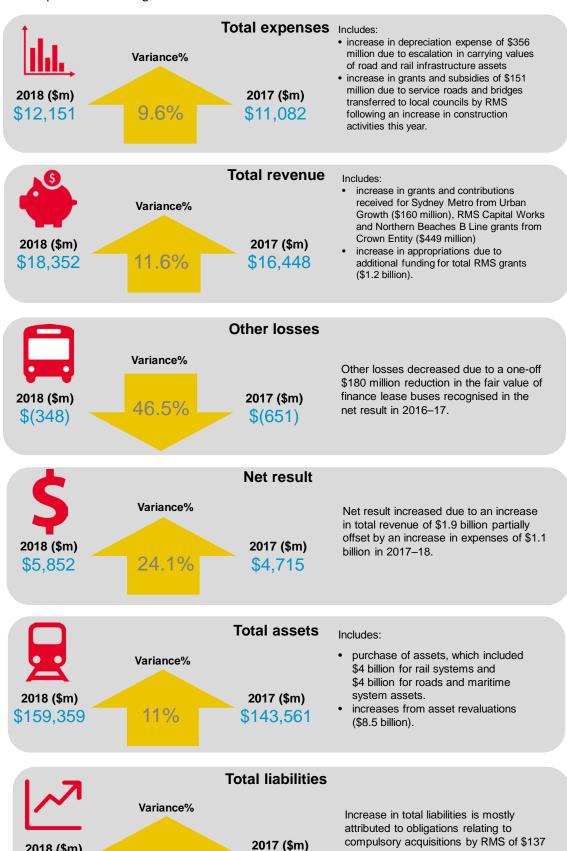
### 2.7 Analysis of financial information

### **Department of Transport Consolidation**

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

<sup>\*\*</sup> Excludes Newcastle services which were privately operated in 2017–18. Includes \$43.2 million actuarial adjustment. Source: Passenger information from TfNSW (unaudited).

The Department's abridged consolidated financial information is shown below.



million.

\$11,855

3.5%

2018 (\$m)

\$12,272



### 3. Audit observations

Appropriate financial controls help ensure the efficient and effective use of resources and administration of agency policies. They are essential for quality and timely decision making.

This chapter outlines our observations and insights from:

- our financial statement audits of agencies in the Transport cluster for 2018
- the areas of focus identified in the Audit Office Annual Work Program.

The Audit Office Annual Work Program provides a summary of all audits to be conducted within the proposed time period as well as detailed information on the areas of focus for each of the NSW Government clusters.

#### Observation

#### **Conclusions and recommendations**

#### 3.1 Internal controls

There was an increase in findings on internal controls across the Transport cluster.

Key themes related to information technology, employee leave entitlements and asset management. Eighteen per cent of all issues were repeat issues.

#### 3.2 Audit Office Annual Work Program

The Transport cluster wrote-off over \$200 million of assets which were replaced by new assets or technology.

Majority of this write-off was recognised by RMS, with \$199 million relating to the write-off of existing assets which have been replaced during the year.

RailCorp is expected to convert to TAHE from 1 July 2019.

Several working groups are considering different aspects of the TAHE transition including its status as a for-profit Public Trading Enterprise and which assets to transfer to TAHE. We will continue to monitor developments on TAHE for any impact to the financial statements.

RMS' estimated maintenance backlog at 30 June 2018 of \$3.4 billion is lower than last year. Sydney Trains' estimated maintenance backlog at 30 June 2018 increased by 20.6 per cent to \$434 million. TfNSW does not quantify its backlog maintenance. TfNSW advised it is liaising with Infrastructure NSW to develop a consistent definition of maintenance backlog across all transport service providers.

Not all agencies monitor unplanned maintenance across the Transport cluster.

Unplanned maintenance can be more expensive than planned maintenance. TfNSW should develop a consistent approach to define, monitor and track unplanned maintenance across the cluster.

### 3.1 Internal controls

Key themes identified on internal controls related to information technology, employee leave entitlements and asset management

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.

There were 61 unique management letter findings raised across the cluster, compared to 56 in 2016–17. Eighteen per cent of all issues were repeat issues.

The table below describes the common issues identified in the Transport cluster by category and risk rating.

Category	Risk rating *	Issue
Information technology	Moderate: 17 new, 5 repeat  Low: 5 new, 3 repeat	The financial audits identified 30 unique opportunities for agencies to improve information technology (IT) processes and controls that support the integrity of financial data used to prepare agencies' financial statements. The audits noted issues associated with:  user access administration privileged user activities.
Operational deficiencies or improvements	Moderate: 7 new, 1 repeat  Low: 3 new, 1 repeat	<ul> <li>The financial audits identified internal control weaknesses across key business processes, including:</li> <li>delays in capitalising completed capital works</li> <li>review of capitalised expenditure</li> <li>data entry of timesheets.</li> </ul>
Financial reporting	Moderate: 5 new Low: 5 new, 1 repeat	<ul> <li>The financial audits identified opportunities for agencies to strengthen financial reporting, including:</li> <li>completeness of heritage asset register</li> <li>review of long outstanding accruals.</li> </ul>
Compliance with key legislation and/or policies	Moderate: 2 new Low: 6 new	The financial audits identified compliance matters including:  • employee leave issues  • review of policies.

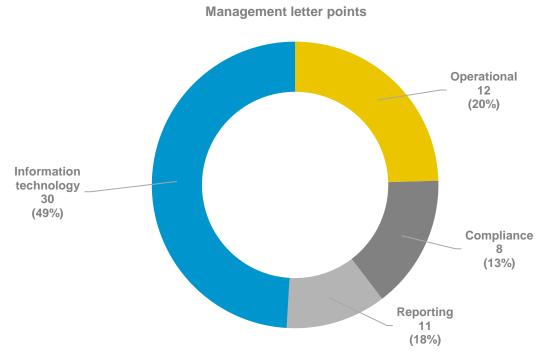
I High risk from the consequence and/or likelihood of an event that has had, or may have a negative impact on the entity.

Omega to the consequence and/or likelihood of an event that has had, or may have a negative impact on the entity.

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

Note: Management letter findings are based on final management letters issued to agencies.

The graph below shows 49 per cent of reported deficiencies were information technology related. The remaining matters were split between operational (20 per cent), financial reporting (18 per cent) and non-compliance with key legislation and/or policies (13 per cent).



Source: Audit Office management letters.

Rectifying certain IT deficiencies can take longer than rectifying other control deficiencies. IT fixes may require program changes, system testing and interruptions to services, However, until they are addressed, vulnerabilities may be exploited by internal and external parties and pose a threat to agencies.

### 3.2 Audit Office Annual Work Program

Each year our financial audits examine a small number of specific topics across agencies. We determine which topics to consider by looking for opportunities to improve public-sector accountability, governance and administration. We also consider the risks and challenges to reporting the true financial position and performance of the State and how these may be addressed during our audits.

Risks and challenges that may impact on financial reporting of the Transport cluster agencies this year include:

- Write-off of assets
- Transport Asset Holding Entity (TAHE)
- Project Management
- Maintenance.

Project management, identified in the work program, has been reported in the Service delivery chapter.

### Write-off of assets

### The Transport cluster wrote-off over \$200 million of assets which were replaced by new assets or technology

Digital and technological advances could disrupt traditional service delivery models and the useful lives of traditional transport assets. Changing safety expectations and design specifications can also lead to asset useful lives being shortened. As part of our annual work program, we reviewed Transport's identification of impaired assets and remaining useful life assessment in the context of this changing environment.

RMS recognised a write-off of \$199 million for the year ended 30 June 2018 (\$263 million at 30 June 2017). The write-off related to roads, bridges, maritime assets, traffic signals and controls network. These relate to new infrastructure assets constructed that substantially replaced an existing asset. The capitalised value of the original asset is written off.

RailCorp accelerated the depreciation of some assets on the Epping Chatswood Rail Line to writeoff these assets as part of the conversion to the new automated metro rail system. The assets included signalling equipment, and certain substation and operational technology assets.

TfNSW recorded a loss on disposal of their intangibles of \$22.0 million as a result of the upgrades to their websites.

### **Transport Asset Holding Entity (TAHE)**

### RailCorp will convert to TAHE

TAHE has been established to be a dedicated asset manager for the delivery of public transport asset management. TAHE was announced in the 2015–16 State Budget. TAHE is proposed to be a commercial for-profit Public Trading Entity that will provide a commercial return to its shareholders. The 2015–16 State Budget papers explained the impact of TAHE on the budget.

The *Transport Administration Amendment (Transport Entities) Act 2017* will convert RailCorp into 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.

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 transport agencies.

We will continue to monitor developments on TAHE for any impact to the financial statements.

### **Maintenance**

Our financial audit included a review of maintenance and asset management at RMS, Sydney Trains, TfNSW and STA. The review included backlog maintenance and levels of unplanned maintenance. Agencies in the Transport cluster do not have a consistent approach to estimate backlog maintenance and monitor unplanned maintenance.

### TfNSW is currently establishing a consistent definition for backlog maintenance

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

	7.90	1109 2017 10	Ago	1109 2010 11
Backlog maintenance	RMS	Sydney Trains*	RMS	Sydney Trains*
Amount (\$b)	3.4	0.4	3.7	0.4
Total value of assets requiring maintenance (gross) (\$b)	115.3	62.7	114.8	60.7
Total value of assets requiring maintenance (net) (\$b)	88.4	29.1	78.8	28.1
% Gross	2.9	0.7	3.2	0.6
% Net	3.8	1.5	4.7	1.3

Agency 2017-18

Agency 2016-17

#### Notes:

- 1 TfNSW does not quantify maintenance backlog.
- 2 STA did not report any maintenance backlog in 2016–17 and 2017–18.
- \* Sydney Trains maintains the network of assets owned by RailCorp and charges NSW Trains for their portion of the cost.

RMS' estimated maintenance backlog at 30 June 2018 of \$3.4 billion is lower than last year. RMS backlog maintenance remains the highest in the cluster. RMS advises 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 at 30 June 2018 increased by 20.6 per cent from \$360 million to \$434 million.

STA did not report any maintenance backlog at 30 June 2018 as it does not manage any transport infrastructure.

TfNSW does not quantify its backlog maintenance, mainly relating to its Country Rail Network infrastructure assets. It advised it is liaising with:

- Infrastructure NSW to develop a consistent definition of maintenance backlog across all transport service providers
- Transport for Victoria in benchmarking asset management practices.

Individual agencies define and report on backlog maintenance in an inconsistent manner.

Backlog maintenance can indicate that maintenance tasks to repair or prevent equipment failures, or to maintain asset condition at a defined standard have not been completed. Asset maintenance is essential to ensure the optimal management of physical assets to maximise value. Postponing maintenance can lead to more costly and extensive maintenance.

#### Not all agencies monitor unplanned maintenance across the Transport cluster

The agencies differ in the approach for monitoring unplanned maintenance across the Transport cluster. Levels of unplanned maintenance are not formally reported on by all Transport cluster entities (except RMS). TfNSW does not actively monitor levels of unplanned maintenance.

Unplanned maintenance can be more expensive than planned maintenance.

TfNSW should consider developing a consistent approach to define, monitor and track unplanned maintenance across the cluster.



### 4. Service delivery

This chapter outlines certain service delivery outcomes for 2017–18. The data on activity levels and performance is provided by Cluster agencies. The Audit Office does not have a specific mandate to audit performance information. Accordingly, the information in this chapter is unaudited.

We report this information on service delivery to provide additional context to understand the operations of the Transport cluster and to collate and present service information for different modes of transport in one report.

In our recent performance audit, <u>Progress and measurement of Premier's Priorities</u>, we identified 12 limitations of performance measurement and performance data. We recommended that the Department of Premier and Cabinet ensure that processes to check and verify data are in place for all agency data sources.

### 4.1 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.

In November 2017, timetable changes were introduced across the public transport network to address risks arising from patronage growth and potential capacity and punctuality issues. This change added 8,600 new weekly train, bus and ferry services.

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

TfNSW considers 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 (6 am to 10 am) and departing Sydney CBD during the afternoon peak (3 pm to 7 pm).

The 2017 performance audit 'Passenger Rail Punctuality' found rail agencies are well placed to manage the forecast increase in passengers up to 2019. 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.

TfNSW advised it has undertaken work on developing strategies to increase capacity and maintain punctuality after 2019. 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	Act	tual
Percentage Punctuality	2018	2018	2017
Year ended 30 June	(%)	(%)	(%)
Sydney Trains Suburban	92.0	91.6	93.4
NSW Trains Intercity	92.0	90.0	88.8
NSW Trains Regional	78.0	78.3	74.8

Source: Sydney Trains and NSW Trains (unaudited).

### Sydney Trains' average punctuality was below target in 2017–18

Data provided by TfNSW indicate Sydney Trains achieved an average punctuality performance of 91.6 per cent against the target of 92.0 per cent. Sydney Trains report it exceeded the punctuality target prior to the timetable change with on time running of 93.8 per cent of services. The average punctuality performance fell to an average of 89.8 per cent after the timetable change.

Prior to the timetable change, three out of four train lines met the punctuality target. After the timetable change, only one train line out of five met the punctuality target.

The chart below shows the performance of the train lines before and after the November 2017 timetable change against the target.

Punctuality (prior and post timetable change)\* 100 90 80 70 60 50 40 30 20 10 T1 - North Shore. T2 - Inner West T3 - Bankstown T4 - Eastern T8 - Airport & & Leppington Line Northern & Line Suburbs South Line\*\*\* & Illawarra Line\*\* Western Prior to timetable change Post timetable change Target

- \* T5, T6 and T7 are running loop services that do not pass through Central, and are excluded from the punctuality calculation.
- \*\* T4 did not have a timetable change.
- \*\*\* T8 was introduced as part of the November 2017 timetable change by splitting the T2 line.

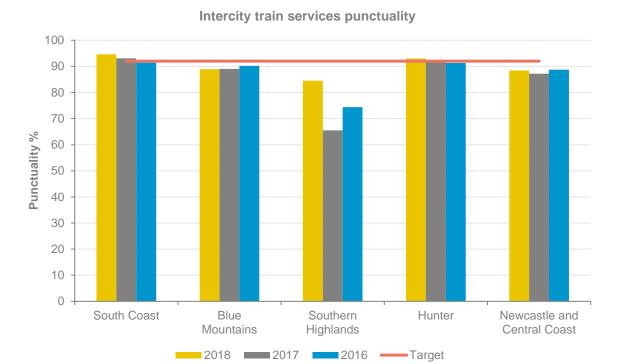
Source: TfNSW (unaudited).

### NSW Trains' Intercity services punctuality was below target in 2017–18

Although punctuality improved compared to the previous year, meeting punctuality targets remains a challenge for NSW Trains' intercity services. Poor punctuality, especially during peak hours, may result in overcrowding.

Data provided by TfNSW indicate Intercity services were below punctuality targets. Intercity services achieved an average punctuality performance of 90.0 per cent in 2017–18.

See below for the punctuality performance of intercity train services.



Source: TfNSW (unaudited).

#### Punctuality performance dropped as low as 25 per cent during the year

For Sydney Trains services, data provided by TfNSW indicate morning peak suburban services achieved an average punctuality performance of 94.0 per cent, which was above the target. The morning punctuality performance ranged between 61.6 per cent and 100 per cent. Afternoon peak suburban services achieved an average punctuality performance of 89.0 per cent, with a low of 25.4 per cent.

For NSW Trains intercity services, morning peak services achieved an average punctuality of 92.8 per cent, which was above the target. The morning punctuality performance ranged between 51.4 per cent and 100 per cent. Afternoon peak services achieved an average punctuality performance of 87.0 per cent, with a low of 30.6 per cent.

See below for the percentage of days that Suburban and Intercity services met the punctuality target.

Peak surburban and intercity services performance 100 90 80 70 % of peaks 60 50 40 30 20 10 0 PM Peak AM Peak AM Peak PM Peak 2017-18 2017-18 Suburban Intercity

■Percentage of days above target

■Percentage of days below target

Source: TfNSW (unaudited).

### **Buses**

Three KPIs measure punctuality performance for all bus operators. A bus service is punctual if it is at the bus stop at the timetabled time in accordance with the Contract parameter for on-time and is measured at the start, middle and end of the trip.

GPS tracking is used to monitor bus punctuality. Therefore, untracked or cancelled bus services are not included in the punctuality calculation. This is a change from reporting methodology in previous years, where a cancelled bus was considered late. TfNSW monitors the data from operators. Bus performance against cancellation targets are not publicly available.

The punctuality target for bus services is for 95.0 per cent of services to be on time according to published timetables. With the current bus contracts, 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. For contracts that have renewed or new contracts during 2017–18 and onwards, there are penalties for not meeting targets at the middle or end of the trip.

There are also penalties on the cancel rate of services under all private bus contracts.

The bus contracts do not impose financial penalties on STA for poor punctuality performance.

TfNSW advised one private operator incurred a financial penalty for punctuality in 2017–18.

#### Introduction of B-line buses

B-Line buses were introduced to operate between Mona Vale and Wynyard from November 2017. Unlike other bus services, this service does not operate to a published timetable. B-Line buses are considered punctual if they run within a 1.2 minute deviation of the planned frequency (on average per month). TfNSW advise the results for January to June 2018 were within target.

#### STA did not meet punctuality targets

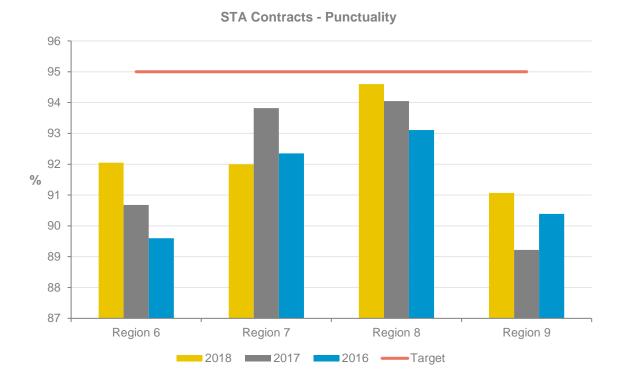
There are 14 bus service contracts in the Sydney metropolitan area and 12 bus service contracts in the outer metropolitan area. STA provided services under four Sydney metropolitan contracts, operating as Sydney Buses, while all other contracts are serviced by private bus operators.

During 2017–18, STA operated services for Sydney metropolitan contracts:

- 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).

A private bus operator was awarded the contract to operate Contract 6 (Sydney Olympic Park, Burwood, Ashfield, Leichhardt, Campsie and Rockdale) in the Sydney metropolitan area, originally serviced by STA, from 1 July 2018.

Data provided by TfNSW indicate, on average for the year, STA has not met the punctuality target in any of its four metropolitan contracts for the last three years. The chart below shows STA's average punctuality performance over the year for its four metropolitan contracts compared to the target. While below target, average punctuality improved for three out of four STA contracts. TfNSW measures punctuality performance monthly and the performance can vary month to month. TfNSW advise STA has met punctuality targets on some months.



Note: For details of regions covered by each bus contact refer to Appendix four. Source: TfNSW (unaudited).

Data provided by TfNSW for the 2017–18 year indicate that except for Contract 2 (covering Liverpool, Glenfield, Ingleburn, Bringelly and Hoxton Park), all other Sydney Metropolitan Contracts managed by private bus operators met punctuality targets overall.

The chart below shows punctuality performance for the last three years for Sydney Metropolitan Bus Contract regions.



Private bus operators contracts (Sydney metropolitan) - Punctuality

#### Notes:

- 1 For details of regions covered by each bus contact refer to Appendix four.
- 2 Contract 11 routes were included in the new Contract 10 when it commenced on 1 January 2013.
- 3 From 1 July 2017 GPS tracking is used to monitor bus punctuality and cancelled buses are now excluded. As this is a change from the previous methodology, the results may not be comparable to prior years.

Source: TfNSW (unaudited).

### TfNSW advises bus punctuality targets are being met on all but one contract in Outer Sydney Metropolitan Contracts

Data provided by TfNSW shows that in 2017–18, all contracts were above the target punctuality, except for Newcastle Integrated Services Contract for bus services servicing the Newcastle area. The punctuality for the Newcastle services decreased from just under target at 94 per cent in 2016–17 to 91 per cent in 2017–18.

A private bus operator was awarded a 10-year contract to operate Newcastle buses, originally serviced 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 TfNSW indicates punctuality performance for ferry services in all service areas has been above target for the past five years. In 2017–18, average performance in all areas was 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 90.0 per cent.

#### Light rail services did not meet punctuality targets in 2017-18

The Inner West Light Rail line provides services across two fare zones, between Central and Dulwich Hill. Data provided by TfNSW indicate the average punctuality performance has fallen below target compared to previous years at 87.2 per cent in 2017–18.

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.

### 4.2 Public transport capacity

### Rail

### Passenger crowding remains an issue in the AM peak

To measure crowding Sydney Trains uses a customer loading 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 used to continuously estimate the customer load for all train services throughout the year, through a model called ROAM (Rail Opal Assignment Model). This model was first used in 2016–17 and has been refined during the year.

While Opal data can continuously monitor the customer loads, TfNSW focuses on two periods of the year to assess capacity. These periods are chosen as they represent a typical week and are not impacted by events such as school holidays or public holidays.

The unaudited data relates to services arriving at Central Station between 8 am to 9 am and departing between 5 pm to 6 pm in:

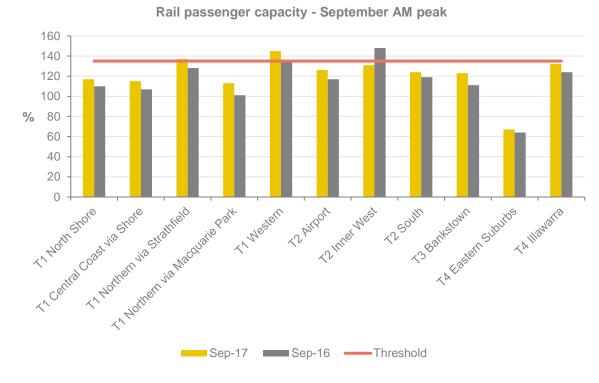
- March 2018
- September 2017.

In the September 2017 AM peak, two lines reported average passenger crowding above the benchmark of 135 per cent loading:

- T1 Northern via Strathfield
- T1 Western.

This increased from September 2016, where only the T2 Inner West Line reported average crowding above the benchmark.

The graph below shows the variation in passenger capacity against the threshold, for the September periods.



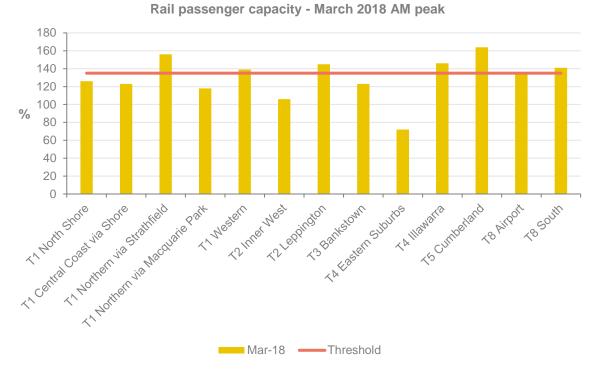
Source: TfNSW (unaudited).

The results are publicly available on the Transport Open Data Hub website.

In March 2018, the average loading in the AM peak decreased by one per cent to 125 per cent, down from 126 per cent in March 2017. Despite this, there were six lines where passenger crowding was above the 135 per cent benchmark.

TfNSW advised the results for March 2018 are not comparable with March 2017 due to the changes in the train service lines since the introduction of the new timetable.

The graph below shows rail passenger capacity against the threshold for March 2018.



Source: TfNSW (unaudited).

### **Buses**

### Customers can use mobile applications to check capacity

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

Since September 2016, bus customers can use smart phone 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 app uses Opal data to give customers' smartphones live information about seating availability when planning trips.

In our last three Transport reports we recommended TfNSW develop target measures on crowding for its bus operators in all regions. TfNSW advise that it is difficult for a generic measure to be applied as crowding on routes where there are frequent bus services should be considered differently to crowding on a less frequent service.

TfNSW use a model called BOAM (Bus Opal Assignment Model) to identify bus stops and bus routes which experience high demand based on customer Opal taps. TfNSW advised it uses this to assess and plan for changed service level (frequency), bus types and routes based on the patronage demand.

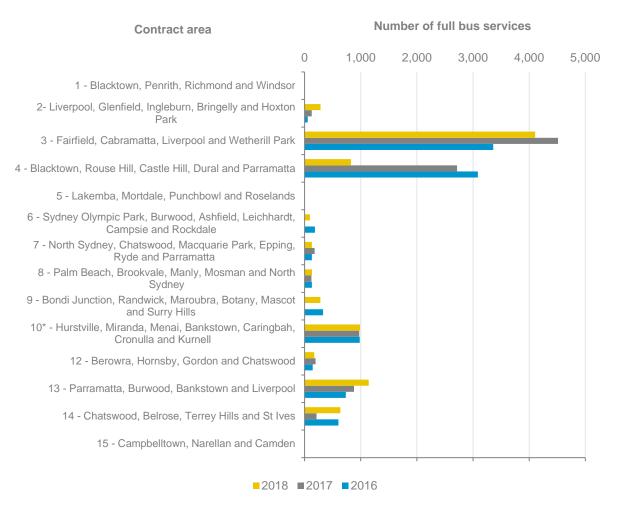
#### The number of full buses decreased by over 1,100 since 2016-17

In line with 2016–17, TfNSW advises there were no reported capacity issues for Sydney metropolitan bus service contracts one (Blacktown, Penrith, Richmond and Windsor) and 15 (Campbelltown, Narellan and Camden) during 2017–18. In contract area five (Lakemba, Mortdale, Punchbowl and Roselands), there were two reported issues, up from none in the previous years.

Bus operators reported 8,801 full buses during 2017–18, down from 9,916 in 2016–17. This measure means that customers were left behind.

The graph below shows the number of full bus services per contract area.

Number of full bus services per contract area for year ended 30 June



\* Contract 11 routes were included in the new Contract 10 when it commenced on 1 January 2013. Source: TfNSW (unaudited).

TfNSW advise that Contract 14 includes one major corridor operating from Terrey Hills and Frenchs Forest into the Sydney CBD with continued passenger growth. Contract three introduced additional double decker buses to increase capacity.

### **Ferries**

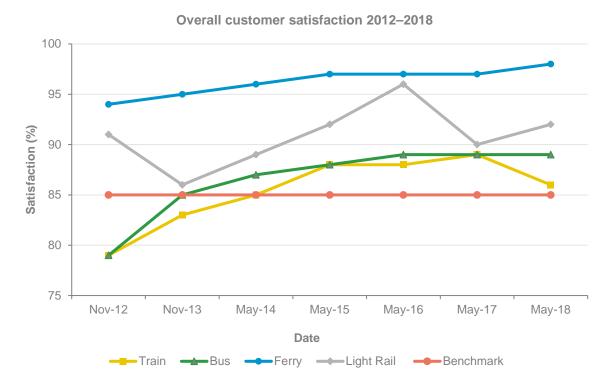
TfNSW advises that during the week examined in May 2018, ferry services on key routes during the morning peak were below capacity.

### 4.3 Customer satisfaction

One of the New South Wales Premier's Priorities is to improve government services by improving customer satisfaction with key government services every year. In May 2018, interviewers engaged by TfNSW gathered information on satisfaction levels by surveying over 16,000 randomly selected customers on board all modes of public transport. TfNSW performs bi-annual customer satisfaction surveys across public transport modes. The surveys ask the passenger for their opinion on their current or most recent trip. The satisfaction levels on each mode rose from May 2017 to May 2018 for all modes of public transportation except for rail.

Between November 2012 and May 2018, the Transport Customer Satisfaction Index (TCSI) showed overall customer satisfaction with all public transport modes improved from 79.4 per cent to 87.6 per cent on a patronage-weighted basis. This is based on customer responses as either partly satisfied, satisfied or highly satisfied.

However, between May 2017 and May 2018, total satisfaction dropped two percentage points from 89.6 per cent in 2016–17. Due to the large patronage on rail, the decrease in rail satisfaction impacted the overall patronage weighted results. The TCSI measures the proportion of transport users partly satisfied to very satisfied with the overall service they received. The target benchmark is 85.0 per cent of customers satisfied.



Source: Customer Satisfaction Index May 2018 (unaudited).

The results of customer satisfaction surveys are shown below.

### **Customer satisfaction survey results**

	May 2018	May 2017
Mode	Partially to very satisfied (%)	Partially to very satisfied (%)
Train:	86	89
Sydney Trains	86	90
NSW Trains	86	85
Light Rail	92	90
Bus	89	89
Ferry	98	97

Source: Customer Satisfaction Index May 2018 (unaudited).

### **Complaints**

### Complaints data reported by TfNSW does not include feedback and complaints made through social media

Across the cluster, customers can report complaints through the Transport website (<a href="https://transportnsw.info/contact-us/feedback">https://transportnsw.info/contact-us/feedback</a>), 131 500 call-centre and the Feedback2Go App. Only incidents categorised as 'complaints' by the customer are captured as part of the complaints data reported by TfNSW. Incidents categorised as 'feedback' by the customer are not included in the complaints data.

Other feedback or complaints reported through social media are excluded from the complaints data. As online platforms such as social media become increasingly popular platforms for feedback and complaints, TfNSW should consider assessing the impact received from such channels.

### Complaints relating to Sydney Trains services rose by 29.0 per cent

Data provided by TfNSW indicate Sydney Trains complaints rose by 4,824 to 21,477, a 29 per cent increase from 2016–17 to 2017–18. The complaints data provided only includes data categorised as complaints by customers on the Transport website and the 131 500 call-centre. These statistics do not include feedback received through social media or applications.

Most complaints received in 2017–18 related to timeliness, which accounts for 27 per cent of all complaints in Sydney Trains.



Source: Sydney Trains (unaudited).

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

### **Total complaints received**

Year ended 30 June	2018	2017	2018	2017
Mode	Number of complaints	Number of complaints	Complaints per 100,000 passengers	Complaints per 100,000 passengers
Train:	28,668	24,518	7.1	6.4
Sydney Trains	21,477	16,653	6.0	4.9
<ul> <li>NSW Trains</li> </ul>	7,191	7,860	15.4	17.4
Light Rail	770	709	7.5	7.1
Bus	57,827	50,495	17.4	16.0
Ferry	394	334	2.4	2.1

Source: TfNSW (unaudited).

Bus passengers continue to raise the most complaints, and represent the highest percentage of complaints per passenger, followed by NSW Trains. Ferry customers raised the least amount of complaints.

### 4.4 Project management

### The Transport cluster manages eight out of ten major infrastructure projects of the State

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 capital budget for the Transport cluster was \$8.8 billion for the year ended 30 June 2018 (\$7.4 billion in 2016–17) which includes \$5.0 billion allocated to major road projects (\$4.2 billion in 2016–17) and \$941 million to minor works and capital maintenance (\$772 million in 2016–17).

We obtained information about five significant ongoing capital projects in the Transport cluster with a total budgeted cost of \$34.9 billion.

#### We looked at:

- the approval process for the original project and any subsequent revisions
- capitalisation of project costs to work in progress and then to depreciable assets
- the amount and use of budgeted project contingencies
- monitoring and oversight of the delivery of the project.

This information presents the results of that work. However, this analysis relies on unaudited information provided by cluster agencies. Where possible the details have been agreed to detail in the relevant State Budget Papers.

Other major Tier 1 capital projects managed by the Transport cluster but not assessed in this Report include:

- Circular Quay Precinct Renewal
- F6 Extension (Southlink)
- More Trains, More Services
- Sydney Gateway
- Sydney Growth Trains
- Western Harbour Tunnel and Beaches Link
- Sydney Metro City and Southwest
- Sydney Metro West
- NorthConnex
- Newcastle Light Rail
- Parramatta Light Rail
- Northern Beaches B-Line
- Northern Beaches Hospital Road Connectivity and Network Enhancement
- Regional Rail Fleet.

#### **Major Transport projects**

Projects	Original completion year	Forecast completion year	Variation - Timeline	Original budget (\$b)**	Revised budget (\$b)**	Variation - Budget
WestConnex	2023	2023^		14.9*	16.8^	•
Sydney Metro Northwest	2019	2019		8.3	8.3	
Woolgoolga to Ballina - Pacific Highway upgrade	2019	2020	0	3.7	4.9	0
CBD and South East Light Rail	2019	2019^	0	1.6	2.1^	•
New Intercity Fleet	2024	2024		2.8	2.8	

Key (



Later than original forecast completion date or more costly than original budget

- \* Budget Paper 2014–15 refers to a capital cost of \$11.5 billion (\$14.9 billion in outturn dollars).
- \*\* Source: Budget Papers 2014–15 to 2018–19.
- Excluding impact of potential claims and delays.

Source: TfNSW (unaudited).

### WestConnex

WestConnex is an integrated public transport and road infrastructure solution. Sydney Motorway Corporation Pty Limited (SMC) was established by the New South Wales Government in August 2014 to deliver the project on behalf of the client, the Roads and Maritime Services (RMS).

At 30 June 2018, the project's governance arrangement included the following.

Body	Reports
Board of SMC (Delivering Agency)	Treasurer, Minister for WestConnex and Minister for Finance, Services and Property
RMS (Client Agency)	Minister for Roads, Maritime and Freight, Minister for WestConnex, Minister for Transport and Infrastructure
Treasurer	Cabinet Committee on Infrastructure
Minister for Roads, Maritime and Freight	Cabinet Committee on Infrastructure
Interdepartmental Steering Committee	Minister for Roads, Maritime and Freight and Minister for WestConnex

<sup>^</sup> Includes representatives from Transport for NSW, Department of Premier and Cabinet, Roads and Maritime Service, NSW Treasury, Department of Planning and Environment, Sydney Motorway Corporation and the Commonwealth Government.

On 31 August 2018, the NSW Government announced the sale of 51 per cent of Sydney Motorway Corporation (SMC) to Sydney Transport Partners for \$9.3 billion. The NSW Government will retain its 49 per cent equity interest in SMC, in a new entity, Roads Retained Interest Pty Ltd. The governance arrangements of the project may change as a result of the sale.

The three stages of the project are shown in the table below.

Project Stage	Scope	Responsible delivery agencies	Status at 30 June 2018	Completion date	Budget (\$b)*
Stage 1	M4 widening and M4 East	SMC	Ongoing	2019	4.3
Stage 2	New M5, King Georges Road Interchange Upgrade and Sydney Gateway contribution (St Peters to Sydney Airport and Port Botany)	SMC	Ongoing	2023	5.3^
Stage 3	M4 to M5 link	SMC (M4/M5 Link Tunnel) / RMS (Rozelle Interchange)	Not Commenced	2023	7.2

<sup>^</sup> Includes \$800 million for Sydney Gateway.

Source: \* WestConnex Updated Strategic Business Case November 2015.

Source: TfNSW (unaudited).

There were two budget revisions since the original business case in 2014. The project's budget was updated 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. The scope changes include extension of stage three to Anzac Bridge and Victoria Road and allow for the future connection of the proposed Western Harbour Tunnel and Beaches Link. These were included in the updated Business Case published in November 2015.

In 2017, the Government announced that Sydney Gateway was a separate project from WestConnex. It aims to provide a new alternative route to enhance connections and reduce travel times to Sydney Airport and Port Botany. The 2018–19 State Budget notes the WestConnex budget includes an \$800 million contribution towards Sydney Gateway.

The WestConnex project reported total expenses of \$6.9 billion at 30 June 2018.

Key risks identified by RMS at 30 June 2018 for the project include:

- arrangements and co-ordination between multiple government agencies
- acquiring property required for construction sites
- post approval modification, claims and contractual disputes.

Management of SMC and RMS monitor the status of the project, including the progress against milestones, budget, key risks and key issues. However, as the project is in its early stages of construction, the profiles of existing risks may change and further risks may emerge.

SMC has previously reported it had received claims from its design and construction contractor for unforeseen planning conditions and planning approval delays. As the validity of the claims are being assessed, the value of the claims cannot be reliably measured. RMS has been notified of claims where potential upstream claims exist.

Total claims and variations paid amounted to \$172 million (including a \$13.3 million provision for claims relating to delayed approvals).

A performance audit is planned for this project post 30 June 2019.

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Below is the development map of the WestConnex project.

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

### **Sydney Metro Northwest**

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

TfNSW was responsible for the delivery of the Sydney Metro Northwest project from commencement.

On 1 July 2018, Sydney Metro was constituted as a corporation under the *Transport Administration Amendment (Sydney Metro) Act 2018.* Its roles include:

- construct, develop and operate the Sydney Metro
- deliver safe and reliable metro passenger services
- development of land in the locality of metro stations.

The project reports total costs of \$5.7 billion at 30 June 2018.

As part of the project, the Epping to Chatswood railway line was closed from 30 September 2018 to enable major upgrades to be performed to accommodate the Sydney Metro. Station Link bus services commenced from 30 September 2018 to service passengers between the Epping and Chatswood line. This represented a \$49 million investment in over 120 new buses. The completion of the upgrade is required for the delivery of the Sydney Metro Northwest Project by 2019.

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Below is the development map of the Sydney Metro Northwest Project.

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

### 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.

RMS is responsible for the delivery of the project.

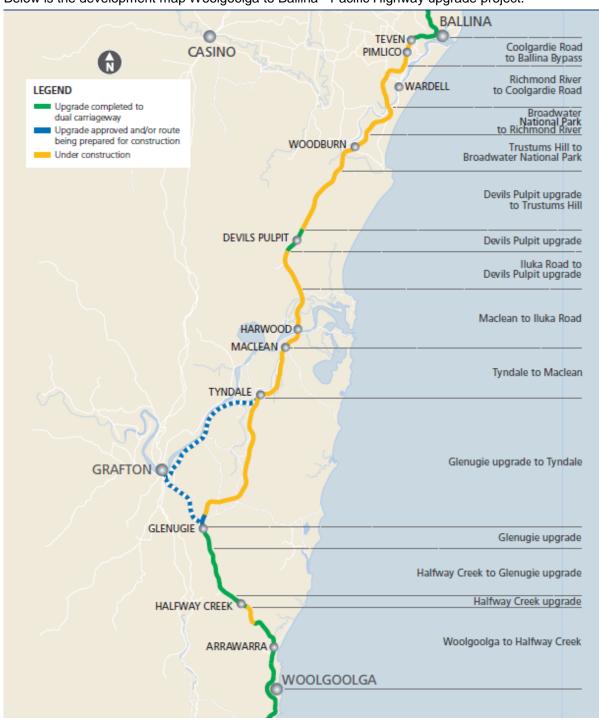
The project starts approximately six kilometres north of Woolgoolga (north of Coffs Harbour) and ends approximately six kilometres south of Ballina. Major construction work started in June 2015. Whilst it was initially scheduled to be completed in 2019, the completion date was revised to 2020. The budget was revised from \$3.7 billion to \$4.9 billion.

The cost of the project totalled \$2.7 billion at 30 June 2018.

TfNSW advised the variation to the budget and schedule are due to:

- increase in construction costs
- costs associated with environmental heritage, cultural and land ownership issues.

Below is the development map Woolgoolga to Ballina - Pacific Highway upgrade project.



 $\textbf{Source: Roads and Maritime Services ($\underline{\textbf{http://www.rms.nsw.gov.au/projects/northern-nsw/woolgoolga-to-ballina/about-this-project.html}).}$ 

### **CBD and South East Light Rail**

#### The CBD and South East Light Rail project is delayed and over budget

The CBD and South East Light Rail is a 12-kilometre route that will connect passengers from Circular Quay to Randwick and Kingsford. It will feature 19 stops designed to service major transport hubs and create interchange points with buses, trains, ferries and the Inner West Light Rail.

The original completion date was March 2019. Although there is no official revised completion date for the project, internal documents and discussions with TfNSW management confirm the project is delayed.

The original budget for the project was \$1.6 billion and this was revised upwards by \$500 million in December 2014 to \$2.1 billion. TfNSW advised this was mostly due to mispricing and omissions in the business case. The project also included a contingency fund of \$207 million. As at 30 June 2018, the contingency fund balance has been fully used.

TfNSW have not officially revised the budget. However, given the contingency fund is exhausted and TfNSW is currently in a facilitation process to resolve claims made by the contractor, additional costs to the project are expected. TfNSW are in the process of preparing a revised forecasted final cost.

The project governance includes the CBD & South East Light Rail Advisory Board (the Board). The Board's role is to provide assurance and strategic oversight of the procurement and delivery stages so there is an independent, critical review of how TfNSW is managing the project. During our review of the Board minutes we noted the Board expressed concerns it was not receiving updates on the final forecasted cost on a timely basis.

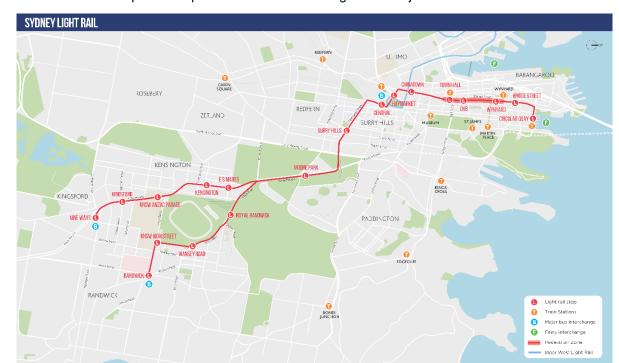
TfNSW also paid \$6.8 million as at 30 June 2018 to small businesses as part of the Small Business Assistance Program. The Small Business Assistance Program was established to assist some small businesses on the light rail alignment impacted by the delays in construction.

TfNSW disclosed contingent liabilities in relation to this project as at 30 June 2018. Management have not quantified the liability as they believe it cannot be measured reliably due to uncertainties as to the extent of the future liability. TfNSW are involved in the following disputes:

- disputes relating to modifications requested by TfNSW and claims made by the contractor
- a contractor engaged by the ALTRAC Light Rail Consortium has started proceedings in the Supreme Court of NSW against TfNSW alleging misleading or deceptive conduct. TfNSW denies that it engaged in any such conduct and is defending the proceedings.
- a statement of claim was filed in the Supreme Court of NSW alleging public and private nuisance as a result of the project. The proceedings have been brought as representative proceedings.

In July 2018, TfNSW entered into an agreement that provides a debt guarantee of up to \$500 million against a borrowing facility provided by two large banks to the consortium constructing the light rail. The borrowing facility has three tranches totalling \$500 million. The first tranche of \$100 million was advanced by those lenders to the consortium on 3 July 2018. The second tranche of \$100 million has been made available to be drawn down by the consortium as it meets certain construction milestones. The remaining tranche cannot be advanced unless certain conditions are met, including agreement of TfNSW. These amounts are contingent liabilities for TfNSW.

In addition to the guarantee arrangement, TfNSW advanced \$100 million payment on account to the contractor in October 2017.



Below is the development map CBD and South East Light Rail Project.

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

## **New Intercity Fleet**

The New Intercity Fleet project will introduce a new fleet of trains to replace the trains carrying customers from Sydney to the Central Coast, Newcastle, the Blue Mountains and the South Coast. A contract to build and maintain more than 500 new train carriages was awarded to RailConnect as part of this project.

Modifications and upgrades to existing rail infrastructure were identified at various locations across the network to accommodate the New Intercity Fleet including:

- modifications to the Ten Tunnels Deviation
- platform extensions
- station and signalling enabling works
- upgrades to existing maintenance facilities and stabling yards.

The New Intercity Fleet project reported total expenditure of \$388 million against a total budget of \$2.8 billion at 30 June 2018.

Below is an image of the New Intercity Fleet.



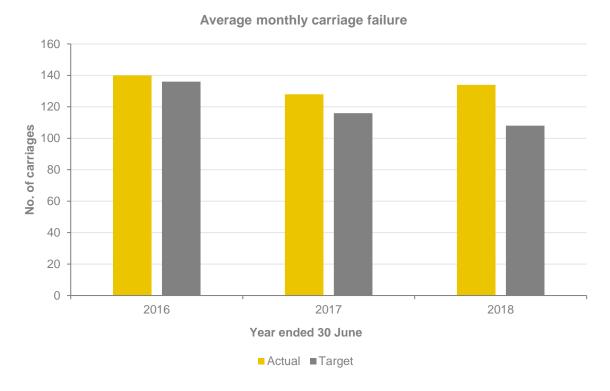
 $\textbf{Source: Transport for NSW ($\underline{\tt https://www.transport.nsw.gov.au/projects/current-projects/new-intercity-fleet)}. }$ 

# 4.5 Fleet ageing and reliability

### Rail

Data provided by TfNSW shows that average monthly carriage failures on electric trains increased by six per month, from 128 carriages in 2016–17 to 134 carriages in 2017–18. This is in the context of increased fleet utilisation due to additional services introduced through the new timetable. At the same time, the target decreased, so that the average monthly carriage failures above target was 26 during 2017–18 (24.0 per cent) compared to 12 during 2016–17 (10.3 per cent).

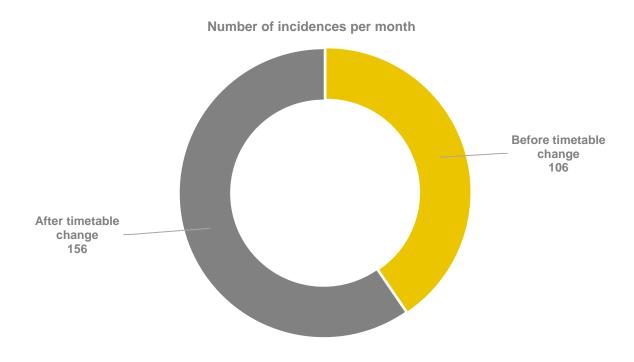
The chart below shows the actual and targeted reported average monthly electric fleet failures over the last three years.



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

### The number of incidences rose 46 per cent after the timetable change

The timetable change in November 2017 had a significant impact in the number of incidences, as shown in the graph below. There were 46 per cent more incidences after the timetable change, with an average of 156 per month after the change, compared to 106 before the change. The introduction of the new timetable increased the average fleet utilisation.



Source: Transport for NSW (unaudited).

The average age of the electric fleet is 20 years (up from 19) with 30 per cent (up from 27 percent) over 30 years. The extra demand from the new timetable has resulted in the re-introduction of previously retired carriages.

The NSW Government ordered 24 new eight-car Waratah-style trains (Waratah Series 2) as part of the More Trains, More Services Program. The first of the new trains are now in service, with the remainder expected to be commissioned over the next five to eight months.

The New Intercity Fleet Project will introduce new trains for the NSW Trains services. The completion date for this project is late 2024 per the 2017–18 Budget Papers.

#### **Buses**

#### Average bus fleet age of 10.5 years is lower than 12-year target

In 2017–18, total bus numbers increased by 144 to 4,067 and the weighted average age increased from 10.3 to 10.5 years.

The Sydney and Outer Metropolitan Bus Service Contracts (SMBSC and OSMBSC) states that the bus fleet average age must not exceed 12 years. TfNSW advises all bus operators complied with their contracts with the maximum average age for a contract region at exactly 12 years.

The SMBSC and OSMBSC also sets targets around major preventable incidents and incidences due to failure to conduct contract maintenance. During 2017–18, \$104,000 of fines were paid by private bus operators across five contract regions for major defect breaches.

For bus contracts refer Appendix Four.

#### **Ferries**

TfNSW's contract with the private ferry operator does not include performance indicators for ferry breakdowns

Ferry services are run by a private operator who also perform the maintenance of the ferries under the contract. The average age of vessels has decreased since last year from 26.5 to 23.6 years. Three new ferries entered service during the year (Pemulwuy, Bungaree and May Gibbs), in addition to the three added late in 2016–17.

TfNSW reported total ferry breakdowns of 191 for the year ended 30 June 2018 (230). There are no specific performance indicators relating to breakdowns in the contract with the private operator. TfNSW could consider such performance indicators when awarding the next contract.

# **Section two**

**Appendices** 



# Appendix one – Status of 2016 and 2017 recommendations

Recommendation	Current status				
The cluster lead agency should:					
Implement measures to prevent the loss of revenue from passengers tapping off with negative Opal cards.	TfNSW is working with its ticketing vendor to implement system changes to reduce revenue loss due to negative exits as well as investigating other measures to reduce the occurrences.				
Develop target measures on crowding for bus operators in all contract regions and publish the results.	TfNSW has key performance indicators in its contracts with bus operators on crowding which requires the operator to advise TfNSW of full buses. There are no current plans to develop targets or publish crowding results, other than through live crowding apps.				
Consider including financial penalties for not meeting each punctuality KPI in future contracts with bus operators.	The new region 6 contract (effective from 1 July 2018) and the Newcastle Integrated Services contract contains these clauses.				
RailCorp and Sydney Trains:					
The transparency of operations of signalling priorities with operators will be improved with the creation of TAHE and the operation of the new Rail Operations Centre (ROC) in 2018.	A revised operations protocol was made effective from 1 January 2018. The protocol continues to be based around ensuring the least number of passengers are impacted by any issues on the network.  TAHE and ROC are not yet in operation.				
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. Budget control measures, regional pricing reviews, benchmarking and outsourcing are all opportunities that have been implemented to improve cost recovery.				
	The recommendation was not addressed by OTSI as the agency remains reliant on NSW Government funding.				
The Transport cluster agencies should:					
Remove user access for terminated staff on a timely basis and ensure all user reviews are completed so access rights are appropriate.	While most user access issues raised in 2016–17 have been resolved, there were further user access issues across the cluster identified as part of our 2017–18 audits.				
Continue reviewing the effectiveness of approaches to managing excessive annual leave.	Agencies advised they have policies to manage excessive annual leave and leave plans were developed for employees with excessive leave. There have been small reductions in excess leave at most agencies.				
Fully addressed — Partially	addressed • Not addressed				



# Appendix two – Cluster agencies

Agency	Website				
Cluster lead entity					
Department of Transport	*				
Transport for NSW	www.transport.nsw.gov.au				
Transport service providers					
NSW Trains	www.transport.nsw.gov.au/nswtrains				
Rail Corporation New South Wales	www.transport.nsw.gov.au/railcorp				
Roads and Maritime Services	www.rms.nsw.gov.au				
State Transit Authority of New South Wales	www.transport.nsw.gov.au/state-transit				
Sydney Ferries	*				
Sydney Trains	www.transport.nsw.gov.au/sydneytrains				
Other agencies					
Office of Transport Safety Investigations	www.otsi.nsw.gov.au				
Port Authority of New South Wales	www.portauthoritynsw.com.au				
Transport Service of New South Wales	*				
Residual Transport Corporation	**				

<sup>\*</sup> Entity does not have a website.

<sup>\*\*</sup> Residual Transport Corporation commenced from 1 July 2017 but according to TfNSW did not trade and did not submit financial statements for audit. RTC does not have a website.



# Appendix three - Financial data

	Total a	ssets	Total liab	oilities	Total rev	/enue*	Total exp	ense**
	2018	2017	2018	2017	2018	2017	2018	2017
	\$m	\$m	\$m	\$m	\$m	\$m	\$m	\$m
Cluster lead entity								
Department of Transport					1	1	1	1
Transport for NSW	19,123	15,910	3,252	3,519	17,139	15,411	13,710	12,299
Transport service prov	viders							
NSW Trains	218	234	294	298	812	782	819	810
Rail Corporation New South Wales	38,067	36,824	2,925	2,868	348	280	1,472	1,254
Roads and Maritime Services	97,760	86,707	2,621	2,526	8,097	6,869	4,777	4370
State Transit Authority of New		22.4		500	0.14		0.40	=00
South Wales	869	894	505	520	641	683	619	599
Sydney Ferries	168	183	3	9	12	50	22	13
Sydney Trains	3,919	4,002	3,439	3,312	3,497	3,368	3,714	3,532
Other agencies								
Office of Transport Safety Investigations					3	3	3	3
Port Authority of New South Wales	624	607	304	139	169	163	151	141
Transport Service of New South Wales	503	508	503	508	1,960	1,776	1,967	1,810

<sup>\*</sup> Total revenue includes other gain and gain on disposal which are shown separately on the financial statements.

Note: The financial statements for the Residual Transport Corporation were not prepared.

Source: Financial statements (audited).

<sup>\*\*</sup> Total expense includes other loss, loss on disposal and income tax expense which are shown separately on the financial statements.



# Appendix four – Bus contracts regions

# **Sydney Metropolitan Service Areas**

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

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

### **Outer Sydney Metropolitan Service Areas**

Contract number	Area serviced
1	Cessnock, Kurri Kurri
2	Maitland, Raymond Terrace
3	Port Stephens
4	Toronto, Wyee, Morisset
Newcastle Integrated Services Contract 1*	Newcastle, Charlestown
6	Wyong, Tuggerah, Gosford
7	Gosford, The Entrance
8	Katoomba, Springwood, Penrith
9	Helensburgh
10	Wollongong, Albion Park
11	Wyong
12	Bulli

<sup>\*</sup> NISC 1 was previously OSMBSC 5 operated by STA. From 1 July 2017, it has been privately operated.

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