



Transport Accident Investigation Commission
Te Komihana Tirotiro Aitua Waka

Annual Report 2014 – 2015

Year ended 30 June 2015

Prepared and published in accordance with
the requirements of the Crown Entities Act 2004

Transport Accident Investigation Commission
Annual Report 2015

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2nd November 2015

Hon Minister Craig Foss
Associate Minister of Transport
Executive Wing
Parliament Buildings
Wellington

Dear Minister

We have the honour to present to you this Annual Report of the Transport Accident Investigation Commission for the 12 months ended 30 June 2015.

It has been prepared and is signed in accordance with the provisions of the Crown Entities Act 2004.

A handwritten signature in blue ink, appearing to read 'H. Cull'.

Helen Cull QC
Chief Commissioner

A handwritten signature in blue ink, appearing to read 'Jane Meares'.

Jane Meares
Commissioner

Our vision

No repeat accidents — ever!

Our mission

Safer transport through investigation, learning and influence

Our values

Fairness
Impartiality
Independence
Competence
Integrity
Accessibility
Timeliness
Certainty

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The Transport Accident Investigation Commission

The Transport Accident Investigation Commission (the Commission) is a standing commission of inquiry established by the Transport Accident Investigation Commission Act 1990 (the Act). The Act prescribes the Commission's purpose, which is "to determine the circumstances and causes of accidents and incidents with a view to avoiding similar occurrences in the future, rather than to ascribe blame to any person"¹. It does this by investigating transport occurrences and then informing the transport sector and the public – both domestically and internationally – of what happened, the lessons that can be learnt, and what might need to change to help prevent a recurrence. To achieve its purpose the Commission must:

- decide whether to investigate (the Commission must do so if it believes that an accident or incident has significant implications for transport safety or would allow it to make recommendations that would improve transport safety)
- co-ordinate and direct the investigations it initiates and decide which other parties (if any) should be involved in its investigations
- consider evidence gathered by investigators, advice from experts, and the submissions of consulted people and organisations; and hold private or public hearings
- publish its findings and recommendations – the Commission has recommendatory powers only.

The Commission has broad investigative powers under the Act, including the power of entry and inspection, and the power to seize, remove and protect evidence. It also has wide powers under the Commissions of Inquiry Act 1908.

On occasions, Coroners, the New Zealand Police, and transport safety authorities (the regulators²), may also investigate the same transport occurrences as the Commission is investigating. The Commission has the unique and important role of conducting investigations independently of any other interest – for the purpose of helping to improve safety, and not to attribute blame or liability.

At 30 June 2015, the Commission had two Commissioners appointed by the Governor-General:

- Ms Helen Cull QC, Acting Chief Commissioner since March 2015 (appointed March 2010, term expires March 2015, subsequently extended to June 2020 on appointment to Chief Commissioner)
- Ms Jane Meares, Commissioner (appointed February 2015, term expires April 2019)

At the time of preparing this Annual Report, Ms Cull had been appointed Chief Commissioner, Peter McKenzie QC Deputy Chief Commissioner, and Stephen Davies Howard Commissioner. This is the first time the Commission has had four Commissioners.

The Commission is required under statute to employ a Chief Executive. At 30 June 2015, the Chief Executive employed 12 investigative staff (including the Chief Investigator of Accidents) and 9 corporate support staff. The Commission is structured into two main units; Investigation Services and Business Services. Investigation Services is led by the Chief Investigator of Accidents and consists of teams of investigators responsible for investigating rail, maritime and aviation occurrences. Business Services performs a range of corporate functions, including finance, research, legal, governance, policy, communications, human resource, information and communications technology, information management, and general administration. The Commission's organisational structure is shown in Figure 1 on page 19.

Commissioners' remuneration is disclosed in Section 3 of this report.

¹ Section 4 of the Transport Accident Investigation Commission Act.

² Maritime New Zealand, the Civil Aviation Authority, and the New Zealand Transport Agency.

Chief Commissioner's overview

Commission operations

The Commission's optimal operating capacity is 30 open cases. At the beginning of 2014/15 the caseload was 32. Over the year the Commission opened as many inquiries as it closed (11), and therefore at the end of 2014/15, the caseload remained at 32.

In July 2014, the Commission issued an interim report into the failure of a passenger train to stop at a station³. Included in the report were four urgent recommendations; a further two recommendations were issued in April 2015. The inquiry is continuing.

In December 2014 the Commission released its report into the grounding of the *Rena*⁴. The inquiry was a significant one for the Commission. At the time of the Commission making its determination on the grounding of the *Rena*, it was reduced to one sitting member. The inquiry itself was resource-intensive. Significant public interest coupled with substantive legal issues meant that the inquiry was extended to allow for hearings, with comprehensive submissions made from the *Rena*'s owners and operator.

In addition to the inquiry caseload, the Commission has been working with independent experts on further inquiries into the September 2010 sky diving accident at Fox Glacier aerodrome involving eight parachutists⁵. The Commission decided to consider further evidence in 2014 following issues raised in the Coroner's inquest into the deaths of the parachutists and concerns raised by families through the media. As part of the evidential review, substantive flight tests have been undertaken. The results of the flight tests were being considered at the time of this report.

Strategic highlights

The findings from the inquiry into the grounding of the *Rena* had international implications for maritime safety, as did another of the Commission's inquiries into a lifting sling failure on a freefall lifeboat on a general cargo ship⁶. In both these inquiries, the Commission recommended that the Director of Maritime New Zealand raise the safety issues identified through the International Maritime Organization.

During the year, the Ministry of Transport developed a discussion paper on options to reduce the risks of alcohol- and drug-related impairment in aviation, maritime, and rail. The paper was developed in response to the Commission's report on the 2012 Carterton hot-air balloon accident⁷, and to the Coroner's findings on the accident. The Commission had recommended regulatory changes to strengthen the management of alcohol and drugs in the aviation, rail, and maritime transport modes.

The New Zealand Transport Agency, the rail regulator, has appointed a new staff member who will be responsible for reviewing and following up on all Commission recommendations relating to rail.

Stakeholder highlights

In January 2015, the Commission released its first issue of the Watch List, a safety monitoring publication. The Watch List presents the Commission's highest-priority safety issues in the transport modes covered by its mandate. The aim of the Watch List is to highlight where transport systems need to change so that safety is improved, to ensure the public is aware of these issues, and to communicate to the industry matters of particular interest to the Commission. In the Commission's view, the issues on the Watch List need more attention and effort on the part of those who can make a difference to transport safety.

³ Inquiry 14-103: Matangi passenger train, failed to stop, Melling Station

⁴ Report 11-204: Container ship MV *Rena* grounding on Astrolabe Reef, 5 October 2011

⁵ Report 10-009: Walter Fletcher FU24, ZK-EUF, loss of control on take-off and impact with terrain, Fox Glacier aerodrome, South Westland, 4 September 2010

⁶ Report 14-202: Lifting sling failure on freefall lifeboat, general cargo ship *Da Dan Xia*, Wellington, 14 April 2014

⁷ Report 12-001: Hot-air balloon collision with power lines and in-flight fire, near Carterton, 7 January 2012
All reports are available on the Commission's website: <http://www.taic.org.nz/>

Over the year, the Commission undertook its third, independently conducted, formal survey of inquiry participants and key stakeholders. Most who took part were positive in their responses, and were of the view that Commission staff were knowledgeable, open and honest, and professional. Most were also of the opinion that the Commission has a positive influence on transport safety. Respondents suggested areas where they thought staff could do better. Suggestions included timeliness in finalising reports, which will be a major focus for 2015/16.

Capability and capacity highlights

Progress in improving investigative and corporate procedures and processes has continued. In 2014/15 the Commission began the development of a Quality Assurance Framework. The project will include a review of investigation processes and case management systems. One outcome will be managers' improved ability to monitor work progress.

A senior manager has been assigned Major Accident and Business Continuity Preparedness as part of his portfolio. During 2014/15 he completed a review of major accident preparedness and made several recommendations. Workshops with other senior staff have further refined these recommendations, which will be developed into a programme for the new financial year.

Work continued over the year on the Commission's records management systems. Records from the old system have been transferred to the newly-reconfigured electronic documents and records management system. Information management policy and guidelines have also been reviewed.

Managing organisational risk

Over the year, managers worked with the Ministry of Transport on a review of the Commission's business model and funding. The review confirmed a need for an increase in baseline funding to maintain capacity and competency in the face of several challenges: an ageing workforce, changing expectations of inquiry breadth and depth, as well as technological and data analysis advances in the transport sector generally, and the challenges and opportunities these give accident investigation. The funding review found this environment had resulted in timeliness issues with respect to publication of its reports. No quality issues were found.

Acknowledgement to Mr John Marshall, QC, CNZM

Commissioners and staff were deeply saddened at the death in June 2015 of Mr John Marshall, QC, CNZM. Mr Marshall was appointed to the Transport Accident Investigation Commission in March 2010, becoming Chief Commissioner in May 2010, and retiring in March 2015. He made an outstanding contribution to the work of the Commission, presiding over significant inquiries including the *Easy Rider* fishing boat and Carterton hot air balloon tragedies, and several other accidents and incidents in which alcohol or cannabis had a role. His firm advocacy for better regulation and zero tolerance of substance impairment in safety critical transport roles leaves a lasting legacy for transport safety in New Zealand. Mr Marshall was made a Companion of the New Zealand Order of Merit in the 2015 Queen's Birthday Honours List.



Helen Cull, QC
Chief Commissioner

1. Non-financial reporting

1.1. Measuring outputs and impacts

1.1.1. The Commission has one output class: inquiries. This section begins with a brief overview of the Commission's caseload during the year in terms of the numbers of inquiries dealt with and the time to closure. Details about the Commission's output and performance measures can be found in:

- the Statement of Performance (against the forecast in the Statement of Performance Expectations 2014/15), which follows at section 2 on page 21
- Appendix 1, which lists the Commission's full casebook of inquiries open at any time during the financial year⁸
- Appendix 2, which shows statistics for caseload data over the previous three years.

1.1.2. Following the caseload overview, the rest of this section highlights the various ways in which the Commission's work during 2014/15 contributed to improved transport safety. It illustrates how the Commission's mission statement, "Safer transport through investigation, learning, and influence" was put into practice.

1.1.3. Impact is examined in two ways in this report. The first is a review of how the Commission has taken the initiative in influencing participants in the transport sector to improve safety, in ways that complement and enhance the output of inquiry reports (section 1.3). The second examination of impact is by analysis of key lessons, safety actions and recommendations arising from the Commission's inquiries (section 1.4).

1.2. Caseload during the year

1.2.1. The following paragraphs draw on Table 8 on page 21. Where a number is followed by another in brackets, for example "3 (4)", the first measure relates to the year under review and the second to the previous year.

1.2.2. During 2014/15 the Commission opened 11 (16) domestic inquiries. When staffed with 9 fully effective investigators⁹ the Commission estimates it should complete between 20 and 25 domestic inquiries a year (2 or 3 per investigator), taking an average 330 working days (18 months), with half of all inquiries ideally completed within 220 to 440 working days (1 to 2 years). This translates, assuming an unlikely even flow of cases in and out, to 30 cases open at any one time.

1.2.3. The total number of domestic inquiries completed in 2014/15 – 11 (17) – is less than the target for the year. Two main factors contributed to the number of completed inquiries being lower than expected. One was that for a significant part of the year, a sole Commissioner was sitting. At the same time, the Commission was dealing with some particularly resource-intensive work, specifically the inquiry into the grounding of the *Rena*; and preparation of an addendum to the final report into the sky diving accident at Fox Glacier¹⁰. This latter review placed extra demands on the air investigators and corporate staff. It involved a complex validation exercise, consultation with interested parties, and engagement with international peer reviewers.

⁸ An up-to-date list of current inquiries, published inquiry reports, and safety recommendations is available on the Commission's website www.taic.org.nz along with general corporate information.

⁹ Investigators are considered fully effective after about three years of training and experience.

¹⁰ Report 10-009: Walter Fletcher FU24, ZK-EUF, loss of control on take-off and impact with terrain, Fox Glacier aerodrome, South Westland, 4 September 2010

- 1.2.4. Cases open at the end of year had been open for an average of 362 (271) working days. Fifty-four percent (29%) of cases closed were completed within 220 and 440 days.
- 1.2.5. The Commission also assisted overseas peer agencies during the year with 5 (6) inquiries with a New Zealand connection. All 5 were in the aviation mode. This work also occupies some investigator time.
- 1.2.6. A list of the domestic inquiry reports published for the year is given in Table 1 below.

Table 1: Domestic inquiries published in 2014/15

| Inquiry number | Title |
|-----------------|---|
| Air | |
| 13-009 | RNZAF Boeing 757, NZ7571, landing below published minima, Pegasus Field, Antarctica, 7 October 2013 |
| 13-007 | Boeing 737-838, ZK-ZQG, stabiliser trim mechanism damage, 7 June 2013 |
| 13-002 | Inquiry AO-2013-002: Robinson R44, ZK-HAD, engine power loss and ditching, Lake Rotorua, 24 February 2013 |
| 13-005 | In-flight loss of control, Robinson R22, ZK-HIE, near New Plymouth, 30 March 2013 |
| 12-002 | Airbus A320 ZK-OJQ, Bird strike and subsequent engine failure, Wellington and Auckland International Airports, 20 June 2012 |
| Rail | |
| 14-102 | High-speed roll-over, empty passenger Train 5153, Westfield, South Auckland, 2 March 2014 |
| 13-106 | Track occupation irregularity, leading to near head-on collision, Otira-Arthur's Pass, 10 June 2013 |
| 13-105 | Capital Connection passenger train, departed Waikanae Station with mobility hoist deployed, 10 June 2013 |
| 12-102 | Train control power failure, 26 April 2012 |
| Maritime | |
| 14-202 | Lifting sling failure on freefall lifeboat, general cargo ship Da Dan Xia, Wellington, 14 April 2014 |
| 11-204 | Marine Inquiry 11-204: Container ship MV Rena grounding on Astrolabe Reef, 5 October 2011 |

1.3. Commission initiatives for safer transport

- 1.3.1. The Commission adopts a pro-active stance in dealing with safety issues arising from its inquiries. To increase transport safety, the Commission has acted in various ways beyond the publication of inquiry reports and issuing of associated recommendations. The examples below describe what initiatives the Commission has taken over the 2014/15 year to influence and engage with transport sector participants to increase safety, either by improving regulations or enhancing safety practices.

Publishing Watch List

- 1.3.2. In January 2015, the Commission released its first issue of the Watch List, a safety monitoring publication. The Watch List presents the Commission's highest-priority safety issues in the transport modes covered by its mandate. The Commission identifies issues for inclusion in various ways, including taking a thematic view of the types of occurrences it deals with. The Watch List currently has three issues: the use of technologies to track and locate vehicles, recreational boat users' knowledge and skills, and the regulatory environments for preventing performance impairments through substance use. (More information about the content of the Watch List can be found in paragraph 1.6.18.) All three issues have arisen in the course of the Commission's inquiries and been the subject of its recommendations.
- 1.3.3. Through the Watch List, the Commission;
- highlights areas where transport systems need to change so that safety is improved
 - ensures the public is aware of these issues
 - communicates to the industry matters of particular interest to the Commission.
- 1.3.4. In the Commission's view, the issues on the Watch List need more attention and effort on the part of those who can make a difference to transport safety.

Engaging with stakeholders

- 1.3.5. The Commission continues to meet participants in the transport sector to discuss areas of common concern. Over the year, for example, it met the new Chief Coroner, and the board of Maritime New Zealand, providing the opportunity to raise matters of particular interest. The Commission is also increasingly meeting with inquiry stakeholders, inviting them to attend Commission hearings to speak to their submissions, and explore and discuss issues. This is particularly important where these are matters of high public or international concern. An example of such a meeting was the hearings held by the Commission in relation to its inquiry into the grounding of the container ship the *Rena*¹¹.
- 1.3.6. A further example included discussion with representatives from the Ministry of Transport in April 2015. Ministry staff attended a Commission meeting to present options being consulted under "Clear Heads". This was the discussion document the Ministry developed to consult on options to reduce the risks of alcohol- and drug-related impairment in aviation, maritime, and rail. (See "strategic highlights" in the Chief Commissioner's Overview).

Identifying patterns in accident types

- 1.3.7. The Commission has given particular scrutiny during the year to accidents involving Robinson helicopters. During the year, the Commission released two reports related to accidents involving Robinson helicopters¹², and at the time of writing had four open inquiries involving two types of this helicopter.
- 1.3.8. The Commission identified that a significant proportion involved a "mast-bump". A mast bump involves the main rotor hub or a part of the main rotor attachment striking the rotor drive shaft, which can cause catastrophic damage to the helicopter. The Commission has directed its investigators to look more broadly at the causes and circumstances of these accidents. The Commission notes the Civil Aviation Authority has been working on an intensive statistical analysis and in-depth study of accidents involving Robinson helicopters that supports this work.

¹¹ Report 11-204: Container ship MV *Rena* grounding on Astrolabe Reef, 5 October 2011.

¹² Report 13-005: In-flight loss of control, Robinson R22, ZK-HIE, near New Plymouth, 30 March 2013; and 13-002: Robinson R44, ZK-HAD, engine power loss and ditching, Lake Rotorua, 24 February 2013

1.4. Investigation, learning, and influence

Measuring impact through investigation, learning and influence

1.4.1. The Commission has recommendatory powers only so it works to improve safety in the air, rail, and maritime modes by influencing other agencies and organisations to act on the findings of its inquiries. Measuring influence directly is difficult, but it is possible to assess the actual or potential impact of an individual inquiry's progress or output by assessing key features of the final inquiry report:

- Findings enumerate the key factors drawn from the analysis of the facts that contributed to the occurrence. The number of findings loosely equates to the complexity of both the occurrence and the inquiry.
- Key lessons distil the main points identified so that the conditions in the transport system that led to the accident or incident can be modified, and similar situations avoided.
- Safety actions describe what others did in response to the event and inquiry process before the inquiry finished and for which a safety recommendation would otherwise have been made.
- Recommendations highlight the most serious safety issues identified in an inquiry and ask for something to be done. Recipients' responses received by time of publication are included in the published report. Investigators follow up on recipients' progress in fulfilling recommendations.

Key lessons, safety actions and recommendations from inquiries closed in 2014/15

1.4.2. Appendix 2 sets out the key lessons, safety actions, and recommendations from the 11 inquiries completed during the year. A summary is given below. The figures shown should be considered indicative only; they do not reflect the scale of actions taken or recommended, neither are they weighted by the risk posed by the related safety issues.

- Twenty-two key lessons were identified, relating mainly to operating procedures and risk management (8 and 7 respectively). About two thirds were, in their broadest sense, applicable across all modes even though they had been identified in the context of a specific accident.
- Thirty-eight safety actions were taken, most by operators (33). The safety actions related mostly to improved infrastructure and equipment (13), reviewed operating procedures (10), and training and education (6).
- Twelve recommendations were made, evenly spread over these categories: review or introduction of rules or regulations; risk management; oversight, monitoring, and reporting; and awareness and education.

Recommendations issued and closed in 2014/15

1.4.3. Recommendations are a formal inquiry output made during or at the conclusion of an inquiry to address a safety issue that has been identified. Not every inquiry generates recommendation(s), others highlight recommendations previously made and sometimes (and ideally) relevant parties will already have taken actions since the occurrence that mean there is no need to make them. (In addition to recommendations, the Commission instigated, in 2011, a section of its reports that identifies key lessons from inquiries. It means that even where no formal recommendation has been made, transport sector participants can readily identify the outcomes of the Commission's inquiries and apply lessons from specific occurrences to their own operations. Appendix 3 contains summaries of key lessons and recommendations contained in inquiry reports published in 2014/15.) The Commission's website (www.taic.org.nz) hosts a copy of the recommendations database.

- 1.4.4. Commission investigators review open recommendations with recipients, mainly the transport sector regulators. They place closure recommendations before the Commission where appropriate action has been taken.
- 1.4.5. Table 2 records the numbers of recommendations issued and closed during the year, the number of inquiries they related to, and the average working days closed recommendations had been open (220 working days/year). Table 3 gives the equivalent information for the previous year, but readers are cautioned against making direct comparisons. Differences can occur because a large number of related recommendations generated by a single inquiry may be closed all at the same time; or because of the particular nature of inquiries underway or closed in a particular year.
- 1.4.6. At the end of 2014/15 (2013/14) there were 211 (222) safety recommendations open with an average age of 1,316 (1,219¹³) working days. The increasing average age is due, in part, to historic safety recommendations, which may have been superseded by sector restructuring and technology changes. They require research and formal decision by the Commission before they can be closed. Some were closed in 2014/15; the Commission continues working to close historic recommendations.
- 1.4.7. The air recommendations closed during 2014/15 related to a range of issues. These included increasing education and awareness for pilots on, for example, emergency communications, aircraft separation responsibilities, and safe flying in certain conditions; improved aerodrome safety; and stricter requirements on holders of air operator certificates in relation to management of safety issues.
- 1.4.8. The rail recommendations closed in the year related to improving train control, reducing driver distraction, reviewing track and structures inspection regimes, applying speed restrictions at repeat accident spots, and developing safety education for school children in relation to the rail environment. The maritime recommendation closed in 2014/15 related to improving the effectiveness of an operator's emergency-response training.

Table 2: Recommendations issued and recommendations closed 2014/15

| | Issued | | Closed | | | |
|--------|-------------|-----------|-------------|-----------|--------------------|---------|
| | Safety recs | Inquiries | Safety recs | Inquiries | Working days open* | |
| | No. | No. | No. | No. | Total | Average |
| Air | 5 | 3 | 22 | 16 | 2,629 | 120 |
| Rail | 7 | 4 | 13 | 9 | 1,187 | 91 |
| Marine | 6 | 2 | 1 | 1 | 102 | 102 |

*220 working days = 1 year

¹³ Last year, these figures were reported as days rather than working days.

Table 3: Recommendations issued and recommendations closed 2013/14

| | Issued | | Closed | | | |
|--------|-------------|-----------|-------------|-----------|--------------------|---------|
| | Safety recs | Inquiries | Safety recs | Inquiries | Working days open* | |
| | No. | No. | No. | No. | Total | Average |
| Air | 10 | 5 | nil | - | - | - |
| Rail | 14 | 5 | 4 | 3 | 560 | 140 |
| Marine | 3 | 3 | 1 | 1 | 27 | 27 |

*220 working days = 1 year

1.5. No repeat accidents – ever!

- 1.5.1. The Commission’s purpose is to determine the circumstances and causes of accidents and incidents with a view to avoiding similar occurrences in the future. This year the Commission has taken a new approach to demonstrating how it achieves its statutory purpose. This approach, set out in sections 1.3 and 1.4 above, takes a closer examination than in previous years of the Commission’s impact on the transport sector.
- 1.5.2. In recent years, the Commission worked towards using quantitative measures of the transport sector outcomes to which it contributes. The aim had been to develop a small set of trend indicators for occurrence types related to the Commission’s caseload. (Refer to the table headed “Main measures: Outcome” beginning on page 7 of the Statement of Intent 2014-2018.) It has proved challenging to find reliable data to support the indicators chosen. The Commission has previously made recommendations about, and commented on, the availability and quality of data.¹⁴
- 1.5.3. In reviewing the information available, the Commission considered the analysis of its initiatives as set out in the preceding sections, provides a more comprehensive picture of how it is contributing to transport sector outcomes. The Commission’s recommendations and its other activities to increase transport safety are usually directed to regulators and operators, so that they can act upon the issues raised.

1.6. Corporate operating intentions and achievements

Strategic objectives and intentions for 2014/15

- 1.6.1. The Commission seeks to contribute to a vision of *No repeat accidents – ever!*, thus supporting the Minister’s desired outcome of safer transport. Like any vision, it is an aspirational one. It is unlikely to be achieved due to accident risk that is either deliberately accepted or cannot be eliminated. It can only be realised by the concerted efforts of individuals and private and public sector entities involved in transport.
- 1.6.2. The Commission’s particular contribution towards its vision is captured by its mission statement of “Safer transport through investigation, learning and influence”. The vision and

¹⁴ See Report 10-011 *Report into flying training safety in New Zealand*, (open recommendations 032/12 and 034/12); *Jet Boat Accidents – Historical Impact Review*, June 2012. Both reports are available on the Commission’s website: <http://www.taic.org.nz>

mission statements are consistent with the Commission’s statutory purpose “...to determine the circumstances and causes of accidents and incidents with a view to avoiding similar occurrences in the future”.

1.6.3. The Commission seeks to pursue its goal by working to ensure safety issues are properly identified and resolved. The Commission has set five strategic objectives to ensure it contributes to a safer transport system and meets its statutory obligations. The strategic objectives are:

- Deliver sound, cost effective Crown entity performance
- Develop and maintain responsive reciprocal stakeholder relationships
- Share inquiry and entity information
- Develop and maintain capable staff
- Properly conduct investigations

1.6.4. To meet the wants and needs of stakeholders, and deliver independent safety-focused investigation in keeping with its legislation and operating environment, the Commission works to five operating intentions. Operating intentions, which are informed by the strategic objectives, are organisation themes setting management priorities for the Commission’s daily operations and on-going organisational development. The operating intentions for 2014/15 are shown in Table 4.

Table 4: Strategic objectives and intentions

| Strategic objectives | Strategic intentions for 2014/15 |
|--|--|
| Deliver sound, cost effective Crown entity performance | Continuously improve operating efficiency |
| Develop and maintain responsive reciprocal stakeholder relationships | Develop and maintain inquiry stakeholder programme |
| Share inquiry and entity information | Communicate more about what the Commission does, learns, and recommends to help improve transport safety |
| Develop and retain capable staff | Acquire, develop and retain strategic skills |
| | Develop and maintain a workforce plan |
| Properly conduct investigations | Develop and maintain inquiry and investigation best practice |

1.6.5. The remainder of this section begins with a discussion of the funding review, which took place over 2014/15. The headings of the following sections are the operating intentions as shown in the table above. The narrative in each section discusses progress under the measures as set out in the Statement of Intent for 2014-2018.

Funding review

1.6.6. During the year the Commission, with assistance from the Ministry of Transport, commissioned an independent review of the Commission’s funding and business model with a view to pursue sustainable funding.

1.6.7. A bid for increased funding was accepted as part of the Government’s 2015 budget. As a result, the Commission’s baseline funding increases from \$3.865 million to \$5.233 million in 2015/16. From 2018/19, baseline funding will remain at \$5.520 million per annum. The increased funding does not change the Commission’s output or strategic direction, as

represented by the strategic objectives above. However the new funding does reshape timing of strategy implementation and will change output targets over time.

- 1.6.8. In anticipation of a successful bid for increased funding, the Commission revised its Statement of Intent for the period 2015 to 2019. It also began developing a change management programme to support and enhance organisational performance. Initially, emphasis will be on embedding new resources and processes including recruiting and inducting new staff, particularly investigators. The Commission has reviewed its employment practices to ensure it can attract and retain the right people (refer to the section beginning at paragraph 1.7.2).
- 1.6.9. Commission management established a Change Programme Board to oversee all major projects and activities relating to the change management programme, and to ensure they are well planned and delivered. The Chief Executive chairs the board; two senior Commission managers and a Ministry of Transport representative make up the other members. Key projects for the upcoming financial year relate to recruitment and case management.

Continuously improve operating efficiency

- 1.6.10. The Commission continued to seek efficiencies to meet cost pressures, and to improve service delivery where possible. It has adopted the all-of-government model contracts for Crown entities, prepared by the Ministry of Business, Innovation and Employment. These model contracts contain the standard terms and conditions applicable for the commissioning of goods and services to government agencies. Additional provisions to the contract templates cover obligations relating to protected information under the Transport Accident Investigation Commission Act 1990.
- 1.6.11. The Commission continued to pursue purchasing and shared services initiatives. In 2014/15, the Commission joined the all-of-government purchasing contracts for flights and accommodation. All the all-of-government purchasing opportunities have now been evaluated and implemented where appropriate. The Commission has engaged with the Ministry of Transport in a shared funding programme with the purpose of strengthening evidence management processes. As a result, the Commission is now operating a new management process for site evidence.
- 1.6.12. The Commission had been participating in a formal international benchmarking programme pilot led by a peer international agency. However the programme has not yet continued beyond the pilot stage. The Commission has put formal benchmarking on hold because of the lack of a continuing international programme, and because it will now concentrate on implementing the change programme. Nevertheless, the Commission continues to informally benchmark its practice and performance against its peers, and will continue its support for an international benchmarking system.

Develop and maintain inquiry stakeholder programme

- 1.6.13. With the assistance of the Ministry of Transport, the Commission has undertaken a review of stakeholder relations. Recommendations resulting from the review will contribute to the development of a contact programme for inquiry stakeholders.
- 1.6.14. The Commission undertook its third, independently conducted, formal survey of inquiry participants and key stakeholders. The survey explored participants' experience of the Commission's investigative and inquiry processes and its approach to communications. It also sought their views about whether the Commission is helping to improve transport safety. The majority of respondents were positive about the approach taken by staff during investigations, positive in their impressions of the public perception of the Commission, and indicated they thought staff demonstrate the Commission's values most of the time. Respondents suggested areas where they thought staff could do better. Suggestions included timeliness in finalising reports, which will be a major focus for 2015/16.

- 1.6.15. The Commission has a rolling programme of reviews of its Memoranda of Understanding with organisations it works with closely. The programme of review helps ensure the operating processes that support the Commission's working relationships with these organisations remain efficient and effective. In 2014/15 the Commission revised its Memoranda of Understanding with the New Zealand Defence Force, the Civil Aviation Authority, and the Australian Transport Safety Bureau.
- 1.6.16. The Commission maintained its programme of international engagement in 2014/15. The main forum for strengthening international relations is the annual International Transportation Safety Association Chairman's meeting (ITSA). The purpose of the Association is to promote independent investigation into the causes of transport accidents, and for member agencies to provide mutual assistance in in-depth investigations. The Commission considers attendance at ITSA and other meetings such as the Marine Accident Investigators' International Forum and the Australian Transport Safety Bureau as crucial for building capability and maintaining responsive, reciprocal stakeholder relationship programmes. This is especially important given the size of the Commission. Should a major accident occur, the Commission would need to draw on the assistance of these overseas agencies; having existing connections and relationships in such circumstances would mean a better and swifter response.
- 1.6.17. During the year, the Commission worked with officials from the Ministry of Foreign Affairs and Trade, the Ministry of Transport, and the Civil Aviation Authority to establish engagement with the Dutch investigation into the Malaysian Airlines MH17 occurrence in Ukraine. The Commission offered investigator assistance to support its Dutch colleagues, although the offer was not taken up. The Commission did not activate its Annex 13 role as a participant with the involvement of two New Zealand nationals on the flight because the primary task was body identification.

Communicate more about what we do, learn, and recommend to improve transport safety

- 1.6.18. In January 2015, the Commission released its first issue of the Watch List, a safety monitoring publication. The Watch List presents the Commission's highest-priority safety issues in the aviation, maritime, and rail transport sectors. The first issue of the Watch List included three topics:
- The issue of people in safety-critical roles being impaired as a result of using drugs or alcohol. The Ministry of Transport has stated its zero tolerance of operator impairment where members of the public are being transported by sea, rail, and air. At the time this report was being prepared, it was considering submissions on policy options for reducing the risks of alcohol- and drug-related impairment in these modes.
 - The use of technologies to track aircraft, ships and boats, and rail vehicles. Since the publication of the Watch List, good progress has been made in achieving visibility of trains on the rail network, and in March 2015 the Commission closed related recommendations to the New Zealand Transport Agency.
 - The need for recreational boat users to demonstrate they understand and practise safe boating behaviour before getting out on the water.

Acquire, develop, and retain strategic skills

- 1.6.19. As at 30 June 2015, the number of fully qualified investigators per mode was three.

Table 5: Distribution of years employed post qualification (investigation staff)

| | 2014/15 Target | 2014/15 Actual | 2013/14 Actual ¹ |
|------------|-------------------|-------------------|--------------------------------|
| 1-5 years | 20% | 50% | 90% |
| 6-10 years | 60% | 40% | 0% |
| 10+ years | 20% | 10% | 10% |

¹ These numbers were incorrectly reported in the Statement of Intent 2014-2018

1.6.20. A review was undertaken of the Commission’s employment practices to ensure it can continue to attract and retain the right people with the right skills and competencies, and are supported by the right systems and processes. (The section beginning at paragraph 1.7.2 discusses the review in more detail.) The review was completed in anticipation of a recruitment project, which was begun in June 2015, to fill nine new positions – six investigation staff and three corporate staff.

1.6.21. In May 2015, a recent European graduate of Cranfield University, who has masters qualifications in aeronautical engineering and human factors, began a five-month internship with the Commission. Once the assignment is completed, management will evaluate whether such a programme could effectively contribute to succession planning within the organisation.

1.6.22. The Commission continued its practice of providing training for all staff, as described in the section beginning at paragraph 1.8.3. In total, four investigators undertook training at Cranfield University in the United Kingdom in 2014/15. Attendance at this course ensures investigators are trained in common international practices, supporting opportunities for inter-agency collaboration, and holding real benefits should New Zealand experience a major accident. In such a situation, the Commission would have to draw on the assistance of international colleagues, and inter-operability with other nations would be critical to a rapid and effective response. No southern hemisphere institution offers the equivalent comprehensive accident investigation training.

1.6.23. Two investigators undertook the advanced investigator training course Applied Marine Accident Investigation. The course concentrates on applying techniques to the specialised aspects of marine operations and types of accidents. Some of the aspects covered are: team management, site safety and security, media management, site management, working with data recorders, documentation investigation, accident site photography, use of bridge simulators, witness interviewing, analysis techniques, formal report writing and development of safety recommendations.

Develop and maintain a workforce plan

1.6.24. During 2014/15, the Commission’s Workforce Strategy was developed into a Workforce Plan, which formed part of the Funding Review Business Case. The Plan sets out the Commission’s workforce requirements in current and anticipated operational capability. The requirements have been identified in an evolving environment of skill scarcity and an ageing workforce, and the need to maintain a critical mass of trained and experienced investigators. Over time the Workforce Plan will expand to include succession and retention plans so that the Commission has a comprehensive strategy for maintaining operational capacity.

Develop and maintain inquiry and investigation best practice

1.6.25. In 2014/15, the Commission began scoping a project to review policies, processes, and tools across the whole organisation, and develop a comprehensive Quality Assurance Framework.

The project will include a review of investigation processes and case management systems, as well a review of inquiry protocols. The Framework enables staff to carry out their work with the correct tools, and to document it to set standards so that progress is transparent. The Framework improves the ability of managers to monitor work progress, and allows for easy auditing. It integrates with the organisation’s existing systems, and will be “future proofed” to aid ongoing maintenance. The current focus is on identifying and remedying gaps in the framework. The Commission aims to have it operational in October 2015.

- 1.6.26. As part of the development of the Quality Assurance Framework, the Commission has aligned its policies and processes more closely with those required by the International Civil Aviation Organisation.
- 1.6.27. Historical impact reviews are designed to assess the influence of the Commission’s activity in the transport sector. The most recent review, which was begun and targeted for release in 2013/14, adopted a multi-modal look at the Commission’s impact on safety issues related to substance impairment. A draft of the review was completed in 2013/14; however as a result of the data analysis, further direction from the Commission is required. Constrained research capacity means the completion of this report is delayed. It has also meant the Commission has had to defer the 2014/15 historical impact review. From next year (2015/16) the historical impact reviews will alternate with the stakeholder survey as part of the Commission’s self-review programme.

1.7. Corporate organisation

Workforce profile

- 1.7.1. The Commission is a small organisation that relies on the knowledge, skills and professionalism of its specialist workforce. As at 30 June 2015, the Commission had a total of 22 staff including the Chief Executive; 5 were part time.

Table 6: Employee workforce composition as at 30 June 2015

| Gender | Number | Ethnicity | Number | Age (years) | Number | Disability | Number |
|--------|--------|-----------|--------|-------------|--------|------------|--------|
| Male | 12 | European | 21 | <51 | 10 | Yes | 0 |
| Female | 10 | Maori | 0 | 51-55 | 3 | No | 22 |
| | | Asian | 1 | 56-60 | 3 | | |
| | | Pacific | 0 | 61-65 | 6 | | |

Review of employment practices

- 1.7.2. In 2014/15, the Commission completed a review of its employment practices. The work was in preparation for a successful bid for increased funding and in anticipation of the recruitment programme to begin in 2015/16. The aim was to ensure the organisation can continue to attract and retain the right people with the right skills and competencies, and are supported by the right systems and processes.
- 1.7.3. The review recommended a simplification of performance management, a more consistent approach to employee contractual arrangements, and a review of remuneration practices. Key activities arising from the review are changes to the organisation’s performance management and remuneration systems. The changes to the performance system align organisational goals and individual effort, and clarify the link between individual performance and

remuneration. The changes to the remuneration system ensure reliable labour market information for specialist staff. Also, a remuneration banding structure is being introduced with to support career aspirations in an affordable and sustainable manner by the organisation.

Organisational culture

- 1.7.4. The Commission operates a flexible and comprehensive strategic plan for people capability. The plan ensures staff impacts are always considered as part of general business decision-making. It enables and encourages high performance.
- 1.7.5. The Commission is a learning organisation and promotes an open and participative work environment. It encourages staff to contribute to corporate planning and development, and in the operation of the Commission, for example, through involvement in the development of policy and process improvements. The Commission strives to create a respectful and collaborative work culture in which all employees are committed to its success.
- 1.7.6. The Commission has an Equal Employment Opportunity practice based on the philosophy of inclusion, with the expectation that all employees are treated fairly and with respect. The organisation values diversity. Diversity includes, but is not limited to, workforce composition; for example, the organisation considers a range of opinions and management styles desirable to be successful as an organisation.
- 1.7.7. Managers are accountable for establishing the links between individual and organisational performance. The Commission's revised performance management strategy is designed to support managers and staff by making these links explicit. Managers are responsible for ensuring the performance review process is used consistently and appropriately.

1.8. Developing and maintaining staff

Recruitment

- 1.8.1. The Commission is an equal opportunities employer. It widely advertises available positions, and conducts a comprehensive recruitment process. That process includes a diverse recruitment panel, practical and psychometric assessments, and thorough curriculum vitae and reference checks to increase the validity of appointees.
- 1.8.2. All new employees and other workers, for example contract staff, are subject to an individualised induction process to help them quickly assimilate into the organisation and understand its expectations. These expectations include those set out in the Public Service Code of Conduct as well the Commission's ethical foundations based on its values. The organisation's zero tolerance towards harassment and bullying and its obligations regarding health and safety are also part of induction.

Training and development

- 1.8.3. The base skill pivotal to the Commission's successful performance is factual investigation. Credible factual investigation depends, in part and as a starting point, on transport sector experience and expertise. However, this base skill must be supported by strong investigative and analytical experience and expertise. It takes at least two to three years for a new investigator arriving with a strong transport background to become adequately trained and experienced to be regarded as fully effective.
- 1.8.4. The Commission's training programme ensures staff members develop and maintain the knowledge and skills essential to their specialist work. The Commission funds investigators to complete (multi-modal) fundamental and (mode-specific) advanced training courses at Cranfield University in the United Kingdom. Investigators may also undertake modal specific

training and professional education opportunities beyond the maintenance of professional credentials that might be required for a role.

- 1.8.5. This year, the Commission continued its policy of investing significantly in staff development. Four investigators undertook Cranfield training in 2014/15 (see paragraph 1.6.22). Overall, there were 16 attendances by investigators at courses, training sessions, and international working meetings. In one of these sessions, the Australian Transport Safety Bureau (ATSB) provided a two-day refresher course on the ATSB investigation methodology. Commission staff have adopted the methodology as its preferred model. The course built on investigators' Cranfield training, but also introduced the model to the corporate staff who attended. The result was better collective understanding of the Commission's investigation model.
- 1.8.6. The Commission is sponsoring a senior manager to undertake post-graduate study in the field of disaster and emergency management. Other corporate staff were funded to attend professional courses and international working meetings.
- 1.8.7. During the year, the Commission developed an organisation-wide approach to development opportunities. The purpose was to identify common development topics and enable a consolidated performance and career development opportunity for all employees. This new approach is in operation for the 2015/16 year.
- 1.8.8. Table 7 below shows the training hours for investigators and other staff over 2014/15.

Table 7: Training hours for 2014/15

| | | 2014/15 Target | 2014/15 Actual | 2013/14 Actual ¹ |
|---|---------------|-------------------|-------------------|--------------------------------|
| Training hours per annum | | | | |
| <i>Target is based on 100 hours per annum per investigator; and 40 hours per annum for other staff plus one tertiary programme (negotiated)</i> | Investigators | 1,000 hours | 997 | 1,086 |
| | Other staff | 200-400 hours | 830 | 552 |

¹ These numbers were incorrectly reported in the Statement of Intent 2014-2018

- 1.8.9. Whenever practicable the Commission considers promoting from within the organisation before considering an external recruitment. To further support the internal promotions the organisation provides acting-up opportunities to develop employees and better position them to take up more senior roles internally. This practice forms part of developing a formal succession plan.

1.9. Good employer initiatives

Flexible working hours

- 1.9.1. As well as offering part-time employment, the Commission allows flexible working hours and the ability for employees to work away from the office, supporting work-life balance. It also provides time in lieu (that is, additional to alternative holidays) to employees who are required to work in the weekends. As a smaller organisation the Commission requires flexibility in the workforce to quickly respond to operational needs.
- 1.9.2. With an ageing workforce the Commission is open to considering options for managed retirement. This practice supports operational capability and succession planning, and maximises the institutional knowledge of experienced employees. In return, employees get more flexible working arrangements and greater job satisfaction.

Remuneration and recognition

- 1.9.3. The Commission offers a pay-for-performance remuneration system designed to attract and retain high performing employees. In 2014/15 the remuneration system was reviewed and refreshed to better meet this goal, including options for providing rewards and recognition, as well as leave entitlements. An amended remuneration policy and practice to better reflect organisational needs is expected to be introduced in the 2015/16 year.

A safe and healthy working environment

- 1.9.4. The Commission remains committed to promoting a safe, healthy and balanced lifestyle for employees. To help achieve this objective, the Commission contributes to gym memberships or similar exercise-related subscriptions, contributes to eye examinations and prescription glasses, funds optional flu vaccinations, and provides medical examinations for investigators. In addition, it provides health and safety training and protective and corporate clothing appropriate to roles.
- 1.9.5. The Commission remains committed to supporting health and safety requirements by having floor wardens and trained first aiders in the work place, fully-stocked first aid kits on each floor and providing regular health and safety training. The Commission is rewriting its health and safety policy, which is scheduled for completion during 2015/16, and which will further promote health and safety awareness when it releases the policy.

Harassment and bullying prevention

- 1.9.6. The Commission has a zero tolerance approach to harassment and bullying, which is set out in its Code of Conduct. The Code is based on State Service Commission's guidelines. The Commission's position on harassment, including sexual harassment and bullying, are made known to new employees and other onsite workers during inductions. This ensures a strong and clear message about unacceptable behaviour is delivered early in an employees' working life with the Commission.

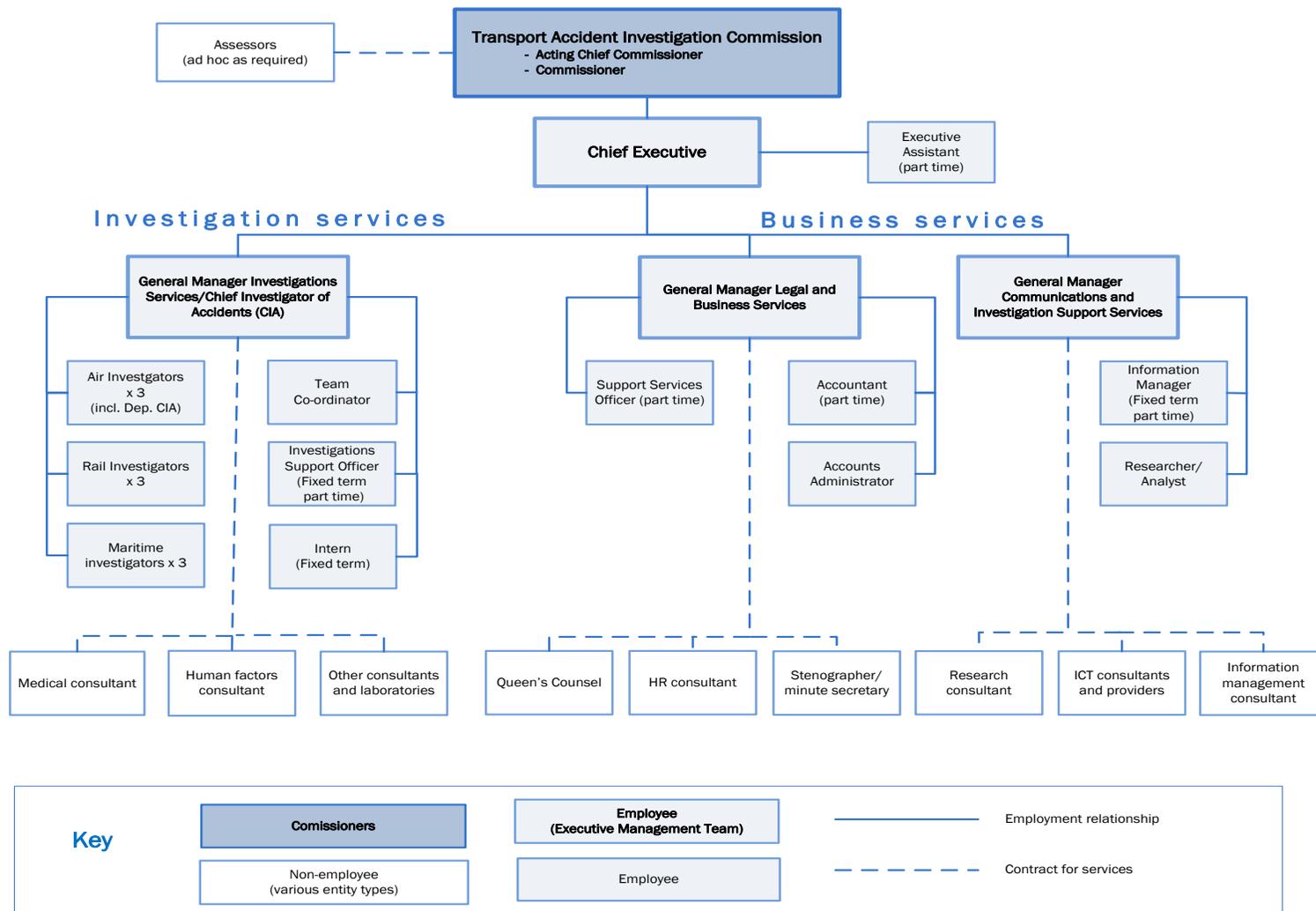


Figure 1: Organisational chart as 30 June 2015

Statement of responsibility

We are responsible for the preparation of the Transport Accident Investigation Commission's financial statements and statement of performance, and for the judgements made in them.

We are responsible for any end-of-year performance information provided by the Transport Accident Investigation Commission under section 19A of the Public Finance Act 1989.

We have the responsibility for establishing and maintaining a system of internal control designed to provide reasonable assurance as to the integrity and reliability of financial reporting.

In our opinion, these financial statements and statement of performance fairly reflect the financial position and operations of the Transport Accident Investigation Commission for the year ended 30 June 2015.



Helen Cull QC
Chief Commissioner



Jane Meares
Commissioner

29 October 2015

2. Statement of performance for output targets

- 2.1.1. The Commission has one output class: Inquiries. This section provides an overview of the Commission's performance results for this financial year. Details of inquiries active during the year, including metadata from which some of the following measures are calculated, are at Appendix 1. Refer to the Statement of Comprehensive Revenue and Expense on page 23 for the revenue and expenditure of this output class. Table 8 and Table 9 report against the targets set out on pages 7 and 8 of the Statement of Performance Expectations for 2014/15.

Table 8: Performance measures for the year ended 30 June 2015 (Financial, volume, timeliness, and quality)

| Measure | Actual 2013/14 | Actual 2014/15 | SPE Target 2014/15 |
|--|----------------|-----------------|---------------------|
| Financial | | | |
| Average cost of domestic inquiries closed | \$245K | \$302K | \$171K ¹ |
| Volume | | | |
| Number of domestic inquiries completed | 17 | 11 | 20-25 |
| Number of inquiries by overseas jurisdictions assisted | 6 | 5 | 4-8 |
| Number of domestic inquiries in progress as at 30 June (12 month rolling average) | 34 | 35 ² | 30 |
| Timeliness | | | |
| Average age of domestic inquiries in progress (working days at year end, 12 month rolling average) | 265 | 321 | 330 |
| Quality | | | |
| Successful judicial Review of a Commission inquiry process or decision | 0 | 0 | 0 |
| Successful challenge to an Ombudsman, the Privacy Commissioner, or Human Rights Commissioner of an administrative decision or action | 0 | 0 | 0 |

Notes

References to "working days" and "days" are calculations using a year of 220 working days.

¹Calculated by allocating all costs (including general overheads) to inquiries. A proportion of overheads is allocated to all open inquiries, and a further proportion of overheads is allocated according to time spent on each inquiry.

²The number of cases open as at 30 June 2015 was 32 (compared with 32 as at 30 June 2014).

Table 9: Performance measures for the year ended 30 June 2015 (Impact)

| Measure | Actual 2013/14 | Actual 2014/15 | SPE Target 2014/15 |
|---|---|---|---|
| Impact | | | |
| Stakeholders' assessments of the Commission's work (Stakeholder Survey – qualitative measure) | Most stakeholders believe Commission having positive impact | Most stakeholders believe Commission having positive impact ¹ | Most stakeholders believe Commission having positive impact |
| Average age of open safety recommendations | New measure | Average increased ² | Average declines |
| Agencies' response to investigations | New measure | 67% a further 17% were partially accepted, or accepted conditional on resources | 90% of safety recommendations made are accepted by recipient upon issue |
| | New measure | Achieved Safety actions: 38 Recommendations: 12 | Number of safety actions > Number of recommendations |
| | New measure | Achieved Safety actions: 38 Safety issues: 31 | Number of safety actions > Number of safety issues |
| Historical impact review (qualitative measure) | 0 ³ | 0 ³ | 1 |

Notes

References to “working days” and “days” are calculation using a year of 220 working days.

¹The Stakeholder Survey is a qualitative measure, and therefore reporting percentage responses has little statistical value. In 2014/15, 27 respondents completed the survey. With the exception of timeliness, at least 19 of the respondents agreed or strongly agreed with positive statements about Commission staff's way of working, and the Commission's way of working.) Again with the exception of timeliness, at least 17 of the respondents believed that the Commission 'always' or 'mostly' demonstrates its values.

²The average age of open safety recommendations increased from 1,219 working days as at 30 June 2014 to 1,316 working days as at 30 June 2015. See paragraph 1.4.6.

³A draft historical impact review for the 2013/14 year was completed and approved for consultation in 2014/15. Further work is required to finalise the report. Constraints on research capability mean completion of the report has been delayed and has affected the 2014/15 historical impact review, which has been deferred. See paragraph 1.6.27.

3. Financial statements

TRANSPORT ACCIDENT INVESTIGATION COMMISSION
STATEMENT OF COMPREHENSIVE REVENUE AND EXPENSE FOR THE YEAR ENDED 30 JUNE 2015

| | Notes | Actual 2015 \$000 | Budget 2015 \$000 | Actual 2014 \$000 |
|--|-------|-------------------------|-------------------------|-------------------------|
| Revenue | | | | |
| Funding from the Crown | | 3,960 | 3,865 | 3,865 |
| Interest revenue | | 38 | 27 | 31 |
| Other revenue | 2 | 32 | 25 | 98 |
| Total Revenue | | 4,030 | 3,917 | 3,994 |
| Expenditure | | | | |
| Audit Fees | | 18 | 18 | 18 |
| Commissioners' fees | 10 | 121 | 172 | 137 |
| Depreciation and amortisation expense | 5&6 | 138 | 161 | 144 |
| Finance costs | 7 | - | - | 2 |
| Lease, rentals and outgoings | | 631 | 645 | 733 |
| Personnel costs | 9 | 2,252 | 2,203 | 2,043 |
| Other expenses | | 928 | 718 | 841 |
| Total Expenditure | | 4,088 | 3,917 | 3,918 |
| Net Surplus/(Deficit) | | (58) | - | 76 |
| Other Comprehensive revenue and expense | | - | - | - |
| Total Comprehensive revenue and expense | | (58) | - | 76 |

Explanations of major variances against budget are provided in note 19.

The accompanying notes form part of these financial statements.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION
STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2015

| Assets | Notes | Actual 2015 \$000 | Budget 2015 \$000 | Actual 2014 \$000 |
|---|-------|-------------------------|-------------------------|-------------------------|
| Current Assets | | | | |
| Cash and cash equivalents | 3 | 1,049 | 1,014 | 993 |
| Receivables | 4 | 3 | 2 | 3 |
| Prepayments | | 31 | 24 | 50 |
| Total Current Assets | | 1,083 | 1,040 | 1,046 |
| Non-Current Assets | | | | |
| Property, plant and equipment | 5 | 141 | 150 | 148 |
| Intangible assets | 6 | 660 | 650 | 752 |
| Total Non-Current Assets | | 801 | 800 | 900 |
| Total Assets | | 1,884 | 1,840 | 1,946 |
| Liabilities and taxpayers' funds | | | | |
| Current Liabilities | | | | |
| Payables | 14 | 199 | 145 | 150 |
| Employee entitlements | 8 | 133 | 140 | 186 |
| Total Current Liabilities | | 332 | 285 | 336 |
| Total Liabilities | | 332 | 285 | 336 |
| Net Assets | | 1,552 | 1,555 | 1,610 |
| Equity | | | | |
| General Funds | 15 | 1,552 | 1,555 | 1,610 |
| Total Equity | | 1,552 | 1,555 | 1,610 |

Explanations of major variances against budget are provided in note 19.

The accompanying notes form part of these financial statements.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION
STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 30 JUNE 2015

| | Note | Actual 2015 \$000 | Budget 2015 \$000 | Actual 2014 \$000 |
|--|------|-------------------------|-------------------------|-------------------------|
| Balance at 1 July | | 1,610 | 1,555 | 1,534 |
| Total comprehensive revenue and expense for the year | | (58) | - | 76 |
| Balance at 30 June | 15 | 1,552 | 1,555 | 1,610 |

Explanations of major variances against budget are provided in note 19.

The accompanying notes form part of these financial statements.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION
STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30 JUNE 2015

| | Notes | Actual 2015 \$000 | Budget 2015 \$000 | Actual 2014 \$000 |
|---|----------|-------------------------|-------------------------|-------------------------|
| Cash flows from operating activities | | | | |
| Receipts from the Crown | | 3,960 | 3,865 | 3,865 |
| Interest received | | 38 | 27 | 31 |
| Receipts from other revenue | | 32 | 25 | 97 |
| Payments to suppliers | | (1,644) | (1,716) | (1,886) |
| Payments to employees | | (2,305) | (2,040) | (2,041) |
| GST (net) | | 13 | - | 7 |
| Net cash flows from operating activities | | 94 | 161 | 73 |
| Cash flows from investing activities | | | | |
| Purchase of property, plant and equipment | | (33) | (48) | (111) |
| Purchase of intangible assets | | (5) | - | - |
| Net cash flows from investing activities | | (38) | (48) | (111) |
| Cash Flows from Financing Activities | | | | |
| Payments of finance leases | | - | - | (5) |
| Net Cash Flows from Financing Activities | | | - | (5) |
| Net (decrease)/increase in cash and cash equivalents | | 56 | 113 | (43) |
| Cash and cash equivalents at the beginning of the year | | 993 | 901 | 1,036 |
| Cash and cash equivalents at the end of the year | 3 | 1,049 | 1,014 | 993 |

Explanations of major variances against budget are provided in note 19.

The GST (net) component of cash flows from operating activities reflects the net GST paid to and received from the Inland Revenue Department. The GST (net) component has been presented on a net basis, as the gross amounts do not provide meaningful information for financial purposes and to be consistent with the presentation basis of other primary financial statements.

The accompanying notes form part of these financial statements.

1. Statement of accounting policies

Reporting Entity

The Transport Accident Investigation Commission (TAIC) is an independent Crown entity established under the Transport Accident Investigation Commission Act 1990. Its main purpose is to inquire into maritime, aviation and rail occurrences within New Zealand with a view to determining their causes and circumstances rather than ascribe blame and to assist overseas agencies.

TAIC's ultimate parent is the New Zealand Crown.

TAIC may also co-ordinate and co-operate with overseas accident investigation authorities or represent New Zealand during accident investigations conducted by overseas authorities in which New Zealand has a specific interest.

TAIC's investigation capability is occasionally extended, on either a pro bono public or a cost recovery basis to Pacific Island States.

TAIC has designated itself as a public benefit entity (PBE) for financial reporting purposes.

The financial statements for TAIC are for the year ended 30 June 2015, and were approved by the Board on 29 October 2015.

Basis of preparation

The financial statements have been prepared on a going concern basis, and the accounting policies have been applied consistently throughout the period.

Statement of compliance

The financial statements of TAIC have been prepared in accordance with the requirements of the Crown Entities Act 2004, which includes the requirement to comply with generally accepted accounting practice in New Zealand (NZ GAAP).

The financial statements have been prepared in accordance with Tier 2 PBE accounting standards. The Commission has elected to report in accordance with Tier 2 due to having expenditure of less than \$30m.

These financial statements comply with PBE accounting standards.

These financial statements are the first financial statements presented in accordance with the new PBE accounting standards. There are no material adjustments arising on transition to the new PBE accounting standards.

Presentation currency and rounding

The financial statements are presented in New Zealand dollars and all values are rounded to the nearest thousand dollars (\$000).

Summary of Significant Accounting Policies

Revenue

The specific accounting policies for significant revenue items are explained below:

Funding from the Crown

TAIC is primarily funded from the Crown. This funding is restricted in its use for the purpose of TAIC meeting the objectives specified in its founding legislation and the scope of the relevant appropriations of the funder.

TAIC considers there are no conditions attached to the funding and it is recognised as revenue at the point of entitlement.

The fair value of revenue from the Crown has been determined to be equivalent to the amounts due in the funding arrangements.

Donated assets

Where a physical asset is gifted to or acquired by TAIC for nil consideration or at a subsidised cost, the asset is recognised at fair value and the difference between the consideration provided and fair value of the asset is recognised as revenue. The fair value of donated assets is determined as follows:

- For new assets, fair value is usually determined by reference to the retail price of the same or similar assets at the time the asset was received.
- For used assets, fair value is usually determined by reference to market information for assets of a similar type, condition, and age.

Interest

Interest revenue is recognised using the effective interest method.

Rental revenue

Lease receipts under an operating sublease are recognised as revenue on a straight-line basis over the lease term.

Foreign currency transactions

Foreign currency transactions are translated into NZ\$ (the functional currency) using the spot exchange rates at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognised in the surplus or deficit.

Leases

Operating leases

An operating lease is a lease that does not transfer substantially all the risks and rewards incidental to ownership of an asset to the lessee.

Lease incentives received are recognised in the surplus or deficit as a reduction of rental expense over the lease term.

Receivables

Short-term receivables are recorded at their face value, less any provision for impairment.

A receivable is considered impaired when there is evidence that TAIC will not be able to collect the amount due. The amount of the impairment is the difference between the carrying amount of the receivable and the present value of the amounts expected to be collected.

Investments

Bank term deposits

Investments in bank term deposits are initially measured at the amount invested.

After initial recognition, investments in bank deposits are measured at amortised cost using the effective interest method, less any provision for impairment.

Property, plant and equipment

Property, plant and equipment consists of the following asset classes: buildings, leasehold improvements, furniture and office equipment.

All assets classes are measured at cost, less accumulated depreciation and impairment losses.

Additions

The cost of an item of property plant and equipment is recognised as an asset if, and only if, it is probable that future economic benefits or service potential associated with the item will flow to TAIC and the cost of the item can be measured reliably.

Work in progress is recognised at cost less impairment and is not depreciated.

In most instances, an item of property, plant and equipment is initially recognised at its cost. Where an asset is acquired through a non-exchange transaction, it is recognised at its fair value as at the date of acquisition.

Disposals

Gains and losses on disposals are determined by comparing the proceeds with the carrying amount of the asset. Gains and losses on disposals are reported net in the surplus or deficit. When revalued assets are sold, the amounts included in revaluation reserves in respect of those assets are transferred to general funds.

Subsequent costs

Costs incurred subsequent to initial acquisition are capitalised only when it is probably that future economic benefits or service potential associated with the item will flow to TAIC and the cost of the item can be measured reliably.

The costs of day-to-day- servicing of property, plant, and equipment are recognised in the surplus or deficit as they are incurred.

Depreciation

Depreciation is provided on a straight line basis on all property, plant, and equipment at rates that will write-off the cost of the assets to their estimated residual values over their useful lives. The useful lives and associated depreciation rates of major classes of property, plant, and equipment have been estimated as follows:

| Fixed asset type | Useful life (years) | Depreciation rate |
|-------------------------|---------------------|-------------------|
| Buildings (store) | 5 - 50 | 2% to 20% |
| Computer equipment | 1.5 - 10 | 10% to 67% |
| Furniture and equipment | 1.2 - 14 | 7% to 80.4% |

Leasehold improvements are depreciated over the unexpired period of the lease or the estimated remaining useful lives of the improvements, whichever is the shorter.

The residual value and useful life of an asset is reviewed, and adjusted if applicable, at each financial year end.

Intangible assets

Software acquisition and development

Acquired computer software licenses are capitalised on the basis of the costs incurred to acquire and bring to use the specific software.

Costs associated with maintaining computer software are recognised as an expense when incurred.

Amortisation

The carrying value of an intangible asset with a finite life is amortised on a straight-line basis over its useful life. Amortisation begins when the asset is available for use and ceases at the date that the asset is derecognised. The amortisation charge for each financial year is recognised in the surplus or deficit.

The useful lives and associated amortisation rates of major classes of intangible assets have been estimated as follows:

| Fixed asset type | Useful life (years) | Depreciation rate |
|------------------|---------------------|-------------------|
| Software | 2.1 - 10 | 10% - 48% |

Impairment of property, plant and equipment and intangible assets

TAIC does not hold any cash-generating assets. Assets are considered cash-generating where their primary objective is to generate a commercial return.

Non-cash -generating assets

Property, plant and equipment and intangible assets that have a finite useful life are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognised for the amount by which the asset's carrying amount exceeds its recoverable service amount. The recoverable service amount is the higher of an asset's fair value less costs to sell and value in use.

Value in use is determined using an approach based on either a depreciated replacement cost approach, restoration cost approach, or a service units approach. The most appropriate approach used to measure value in use depends on the nature of the impairment and availability of information.

If an asset's carrying amount exceeds its recoverable service amount, the asset is regarded as impaired and the carrying amount is written-down to the recoverable amount. The total impairment loss is recognised in the surplus or deficit.

The reversal of an impairment loss is recognised in the surplus or deficit.

Payables

Short-term payables are recorded at their face value.

Employee Entitlements

Short-term employee entitlements

Employee benefits that are due to be settled within 12 months after the end of the period in which the employee renders the related service are measured based on accrued entitlements at current rates of pay.

These include salaries and wages accrued up to balance date and annual leave earned, but not yet taken at balance date.

Presentation of employee entitlements

Annual leave is classified as a current liability.

Superannuation scheme

Defined contribution scheme

Obligations for contributions to KiwiSaver are accounted for as a defined contribution superannuation scheme and are recognised as an expense in the surplus or deficit as incurred.

Provisions

A provision is recognised for future expenditure of uncertain amount or timing when there is a present obligation (either legal or constructive) as a result of a past event, it is probable that an outflow of future economic benefits will be required to settle the obligation, and a reliable estimate can be made of the amount of the obligation.

Provisions are measured at the present value of the expenditure expected to be required to settle the obligation using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the obligation. The increase in the provision due to the passage of time is recognised as an interest expense and is included in “finance costs”.

Onerous Contracts

A provision for onerous contracts is recognised when the expected benefits or service potential to be derived from a contract are lower than the unavoidable cost of meeting the obligations under the contract.

The provision is measured at the present value of the lower of the expected cost of terminating the contract and the expected net cost of continuing with the contract.

Goods and services tax

All items in the financial statements are stated exclusive of GST except for receivables and payables, which are stated on a GST inclusive basis. Where GST is not recoverable as input tax then it is recognised as part of the related asset or expense.

The net amount of GST recoverable from, or payable to, the Inland Revenue Department (IRD) is included as part of receivables or payables in the statement of financial position.

The net GST paid to, or received from, the IRD, including the GST relating to investing and financing activities, is classified as an operating cash flow in the statement of cash flows.

Commitments and contingencies are disclosed exclusive of GST.

Income tax

TAIC is a public authority and consequently is exempt from the payment of income tax. Accordingly, no provision has been made for income tax.

Budget figures

The budget figures are derived from the statement of performance expectations as approved by the Board at the beginning of the financial year. The budget figures have been prepared in accordance with NZ GAAP, using accounting policies that are consistent with those adopted by the Board in preparing these financial statements.

Critical accounting estimates and assumptions

In preparing these financial statements, TAIC has made estimates and assumptions concerning the future. These estimates and assumptions may differ from the subsequent actual results. Estimates and assumptions are continually evaluated and are based on historical experience and other factors, including expectation or future events that are believed to be reasonable under the circumstances. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are disclosed below:

Estimating useful lives and residual values of property, plant and equipment

At each balance date, the useful lives and residual values of its property, plant and equipment are reviewed. Assessing the appropriateness of useful life and residual value estimates of property, plant and equipment requires a number of factors to be considered such as the physical condition of the asset, expected period of use of the asset by TAIC, and expected disposal proceeds from the future sale of the asset.

TAIC has not made any significant changes to past assumptions concerning useful lives and residual values.

Critical judgements in applying the Commission's accounting policies

Management has exercised the following critical judgements in applying accounting policies:

Leases classification

Determining whether a lease agreement is a finance lease or an operating lease requires judgement as to whether the agreement transfers substantially all the risks and rewards of ownership to TAIC.

Judgement is required on various aspects that include, but are not limited to, the fair value of the leased asset, the economic life of the leased asset, whether or not to include renewal options in the lease term and determining an appropriate discount rate to calculate the present value of the minimum lease payments.

Classification as a finance lease means the asset is recognised in the statement of financial position as property, plant and equipment, whereas for an operating lease no such asset is recognised.

TAIC has exercised its judgement on the appropriate classification of equipment leases, and has determined it has no finance leases.

2. Other revenue

| | Actual 2015 \$000 | Actual 2014 \$000 |
|--|-------------------------|-------------------------|
| Rental revenue from property subleases | 18 | 90 |
| Other revenue | 14 | 8 |
| Total revenue | 32 | 98 |

3. Cash and cash equivalents

| | Actual 2015 \$000 | Actual 2014 \$000 |
|--|-------------------------|-------------------------|
| Cash at bank and on hand | 323 | 292 |
| Short-term deposits maturing in less than 3 months | 726 | 701 |
| Total cash and cash equivalents | 1,049 | 993 |

4. Receivables

| | Actual 2015 \$000 | Actual 2014 \$000 |
|---|-------------------------|-------------------------|
| Receivables (gross) | 3 | 3 |
| Less: provision for impairment | - | - |
| Total receivables | 3 | 3 |
| Total receivables comprises: | | |
| Receivables from the sale of goods and services (exchange transactions) | 3 | 3 |

5. Property, plant and equipment

Movement for each class of property, plant, and equipment are as follows:

| | Buildings | Computer equipment | Furniture and office equipment | Total |
|---------------------------------|-----------|-----------------------|--------------------------------------|-------|
| | \$000 | \$000 | \$000 | \$000 |
| Cost | | | | |
| Balance as at 1 July 2013 | 170 | 166 | 221 | 557 |
| Balance at 30 June 2014 | 170 | 171 | 131 | 472 |
| Balance at 1 July 2014 | 170 | 171 | 131 | 472 |
| Additions | | 17 | 17 | 34 |
| Disposals | (16) | - | - | (16) |
| Balance at 30 June 2015 | 154 | 188 | 148 | 490 |
| Accumulated depreciation | | | | |
| Balance as at 1 July 2013 | 67 | 127 | 168 | 362 |
| Balance at 30 June 2014 | 81 | 152 | 91 | 324 |
| Balance at 1 July 2014 | 81 | 152 | 91 | 324 |
| Depreciation Expense | 13 | 14 | 14 | 41 |
| Elimination on disposal | (16) | - | - | (16) |
| Balance at 30 June 2015 | 78 | 166 | 105 | 349 |
| Carrying Amounts | | | | |
| At 1 July 2013 | 103 | 39 | 53 | 195 |
| At 30 June 2014 and 1 July 2014 | 89 | 19 | 40 | 148 |
| At 30 June 2015 | 76 | 22 | 43 | 141 |

As at year end there was no work in progress (2013-14: nil)

6. Intangible Assets

Movement for each class of intangible assets are as follows:

| | Acquired Software | Total |
|---|----------------------|-------|
| | \$000 | \$000 |
| Cost | | |
| Balance at 1 July 2013 | 881 | 881 |
| Balance at 30 June 2014 and 1 July 2014 | 987 | 987 |
| Additions | 5 | 5 |
| Disposals | | |
| Balance at 30 June 2015 | 992 | 992 |
| Accumulated amortisation | | |
| Balance at 1 July 2013 | 143 | 143 |
| Balance at 30 June 2014 and 1 July 2014 | 235 | 235 |
| Amortisation expense | 97 | 97 |
| Disposals | - | - |
| Impairment losses | - | - |
| Balance at 30 June 2015 | 332 | 332 |
| Carrying amounts | | |
| At 1 July 2013 | 738 | 738 |
| At 30 June and 1 July 2014 | 752 | 752 |
| At 30 June 2015 | 660 | 660 |

As at year end there was no work in progress (2013-14: nil)

7. Finance Costs

| | Actual 2015 \$000 | Actual 2014 \$000 |
|----------------------------|-------------------------|-------------------------|
| Interest on finance lease | - | 2,491 |
| Total finance costs | - | 2,491 |

8. Employee entitlements

| | Actual 2015 \$000 | Actual 2014 \$000 |
|------------------------------|-------------------------|-------------------------|
| Current portion | | |
| Accrued salaries and wages | 17 | 87 |
| Annual leave | 116 | 99 |
| <i>Total current portion</i> | 133 | 186 |

9. Personnel Costs

| | Actual 2015 \$000 | Actual 2014 \$000 |
|--|-------------------------|-------------------------|
| Salaries and wages | 2,209 | 1,908 |
| Defined contribution plan employer contributions | 53 | 52 |
| Increase/(decrease) in employee entitlements | (53) | 2 |
| Recruitment | - | 31 |
| Other staff costs | 43 | 50 |
| Total personnel costs | 2,252 | 2,043 |

10. Commissioner remuneration

The total value of remuneration paid or payable to each Board member during the year was:

| Commissioner | Actual 2015 \$000 | Actual 2014 \$000 |
|---|-------------------------|-------------------------|
| Mr JL Marshall, QC (Chief Commissioner) (retired February 2015) | 40 | 68 |
| Ms HA Cull, QC (Chief Commissioner) | 62 | 47 |
| Mr HG Broad, CNZM (Commissioner) (resigned 31 January 2014) | - | 22 |
| Ms J Meares (Commissioner) | 19 | - |
| Total Commissioner remuneration | 121 | 137 |

11. Employee remuneration

| | Actual 2015 | Actual 2014 |
|-------------------------------------|----------------|----------------|
| Total remuneration paid or payable: | | |
| \$100,000-\$109,999 | 3 | 2 |
| \$110,000-\$119,999 | 1 | 1 |
| \$120,000-\$129,999 | 4 | 4 |
| \$130,000-\$139,999 | - | 2 |
| \$140,000-\$149,000 | 3 | - |
| \$150,000-\$159,000 | - | - |
| \$160,000-\$169,999 | - | - |
| \$170,000-\$179,999 | 1 | 1 |
| \$180,000-\$189,999 | - | - |
| \$190,000-\$199,999 | - | - |
| \$200,000-\$209,999 | - | - |
| \$210,000-\$219,999 | - | - |
| \$220,000-\$229,999 | 1 | 1 |
| Total employees | 13 | 11 |

12. Related party transactions

TAIC is a wholly owned entity of the Crown.

Related party disclosures have not been made for transactions with related parties that are within a normal supplier or client/recipient relationship on terms and conditions no more or less favourable than those that it is reasonable to expect TAIC would have adopted in dealing with the party at arm's length in the same circumstances. Further, transactions with other government agencies (for example, Government departments and Crown entities) are not disclosed as related party transactions when they are consistent with the normal operating arrangements between government agencies and undertaken on the normal terms and conditions for such transactions.

Key management personnel compensation

| | Actual 2015 \$000 | Actual 2014 \$000 |
|--|-------------------------|-------------------------|
| <i>Commission Members</i> | | |
| Remuneration | 121 | 137 |
| Full-time equivalent members | 0.33 | 0.42 |
| <i>Leadership Team</i> | | |
| Remuneration | 692 | 676 |
| Full-time equivalent members | 4 | 4 |
| Total key management personnel remuneration | 813 | 813 |
| Total full time equivalent personnel | 4.33 | 4.42 |

The full-time equivalent for Board members has been determined based on the frequency and length of Board meetings and the estimated time for Board members to prepare for meetings.

13. Operating leases

Operating leases as lessee

The future aggregate minimum lease payments to be paid under non-cancellable operating leases are as follows:

| | Actual 2015 \$000 | Actual 2014 \$000 |
|---|-------------------------|-------------------------|
| Not later than one year | 600 | 600 |
| Later than one year and not later than five years | 1,957 | 2,110 |
| Later than five years | 1,417 | 1,864 |
| Total non-cancellable operating leases | 3,974 | 4,575 |

TAIC leases two properties and has an operating lease for photocopier equipment. A significant portion of the total non-cancellable operating lease expense relates to the lease of one and a half floors of an office building. The lease expires on August 2023. TAIC does not have the option to purchase the asset at the end of the lease term.

There are no restrictions placed on TAIC by any of its leasing arrangements.

14. Payables

| | Actual 2015 \$000 | Actual 2014 \$000 |
|---|-------------------------|-------------------------|
| Payables under exchange transactions | | |
| Creditors | 50 | 42 |
| Accrued expenses | 72 | 44 |
| Total payables under exchange transactions | 122 | 86 |
| Payables under non-exchange transactions | | |
| Taxes payables (GST,PAYE, and rates) | 77 | 64 |
| Total payables under non-exchange transactions | 77 | 64 |
| Total payables | 199 | 150 |

15. Equity

| | Actual 2015 \$000 | Actual 2014 \$000 |
|--------------------------------------|-------------------------|-------------------------|
| Accumulated surplus/(deficit) | | |
| Balance at 1 July | 1,610 | 1,534 |
| Surplus/(deficit) for the year | (58) | 76 |
| Balance at 30 June | 1,552 | 1,610 |

16. Financial instruments

The carrying amounts of financial assets and liabilities in each of the financial instrument categories are as follows:

| | Actual 2015 \$000 | Actual 2014 \$000 |
|---|-------------------------|-------------------------|
| Loans and receivables | | |
| Cash and cash equivalents | 1,049 | 993 |
| Receivables | 3 | 3 |
| Total loans and receivables | 1,052 | 996 |
| Financial liabilities measured at amortised cost | | |
| Payables (excluding taxes payable) | 122 | 86 |
| <i>Total financial liabilities measured at amortised cost</i> | 122 | 86 |

17. Contingencies

Contingent liabilities

There are no contingent liabilities existing at balance date (2014: Nil)

Contingent assets

At balance date TAIC was continuing to receive reparations for money that was taken fraudulently. Reparations received at 30 June 2015 were \$5,200 (2014:\$5,300). The contingent asset at balance date is \$287k (2014:\$292k).

18. Events after the balance date

There were no significant events after balance sheet date.

19. Explanation of major variances against budget

Explanations for significant variations from the TAIC's budgeted figures in the statement of intent are as follows:

Statement of comprehensive revenue and expense

Other expenses

Other expenses are higher than budgeted by \$202,000 mainly due to increased costs for travel to investigation sites and for specialised advice contracted for investigations.

Funding from the Crown

Funding from the Crown is \$95,000 higher than budgeted due to additional funding received during the year to fund the Commission's participation in the Ministry of Transport's shared services programme.

Commissioners' fees

Commissioners' fees are \$51,000 less than budget due to a commissioner vacancy for most of the year.

Statement of changes in cash flows

The statement of changes in cash flows shows a net movement in cash for the period \$57,000 less than budgeted mainly due to the shared services program and fixed term employee costs higher than budgeted.

20. Adjustments arising on transition to the new PBE accounting standards

Reclassification adjustments

There have been no reclassifications on the face of the financial statements in adopting the new PBE accounting standards.

Recognition and measurement adjustments

There have been no recognition and measurement adjustments in the financial statements in adopting the new PBE accounting standards.

Independent Auditor's Report

To the readers of the Transport Accident Investigation Commission's financial statements and performance information for the year ended 30 June 2015

The Auditor-General is the auditor of the Transport Accident Investigation Commission (the Commission). The Auditor-General has appointed me, Kelly Rushton, using the staff and resources of Audit New Zealand, to carry out the audit of the financial statements and the performance information of the Commission on her behalf.

Opinion on the financial statements and the performance information

We have audited:

- the financial statements of the Commission on pages 23 to 37, that comprise the statement of financial position as at 30 June 2015, the statement of comprehensive revenue and expense, statement of changes in equity and statement of cash flows for the year ended on that date and the notes to the financial statements that include accounting policies and other explanatory information; and
- the performance information of the Commission on pages 21 to 22.

In our opinion:

- the financial statements of the Commission:
 - present fairly, in all material respects:
 - its financial position as at 30 June 2015; and
 - its financial performance and cash flows for the year then ended; and
 - comply with generally accepted accounting practice in New Zealand and have been prepared in accordance with Public Benefit Entity (PBE) Standards.
- the performance information:
 - presents fairly, in all material respects, the Commission's performance for the year ended 30 June 2015, including for each class of reportable outputs:
 - its standards of performance achieved as compared with forecasts included in the statement of performance expectations for the financial year; and

- its actual revenue and output expenses as compared with the forecasts included in the statement of performance expectations for the financial year.
- complies with generally accepted accounting practice in New Zealand.

Our audit was completed on 29 October 2015. This is the date at which our opinion is expressed.

The basis of our opinion is explained below. In addition, we outline the responsibilities of the Board and our responsibilities, and explain our independence.

Basis of opinion

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the International Standards on Auditing (New Zealand). Those standards require that we comply with ethical requirements and plan and carry out our audit to obtain reasonable assurance about whether the financial statements and the performance information are free from material misstatement.

Material misstatements are differences or omissions of amounts and disclosures that, in our judgement, are likely to influence readers' overall understanding of the financial statements and the performance information. If we had found material misstatements that were not corrected, we would have referred to them in our opinion.

An audit involves carrying out procedures to obtain audit evidence about the amounts and disclosures in the financial statements and the performance information. The procedures selected depend on our judgement, including our assessment of risks of material misstatement of the financial statements and the performance information, whether due to fraud or error. In making those risk assessments, we consider internal control relevant to the preparation of the Commission's financial statements and performance information in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Commission's internal control.

An audit also involves evaluating:

- the appropriateness of accounting policies used and whether they have been consistently applied;
- the reasonableness of the significant accounting estimates and judgements made by the Board;
- the appropriateness of the reported performance information within the Commission's framework for reporting performance;
- the adequacy of the disclosures in the financial statements and the performance information; and
- the overall presentation of the financial statements and the performance information.

We did not examine every transaction, nor do we guarantee complete accuracy of the financial statements and the performance information. Also, we did not evaluate the security and controls over the electronic publication of the financial statements and the performance information.

We believe we have obtained sufficient and appropriate audit evidence to provide a basis for our audit opinion.

Responsibilities of the Board

The Board is responsible for preparing financial statements and performance information that:

- comply with generally accepted accounting practice in New Zealand and public benefit entity reporting standards;
- present fairly the Commission's financial position, financial performance and cash flows; and
- present fairly the Commission's performance.

The Board's responsibilities arise from the Crown Entities Act 2004.

The Board is responsible for such internal control as it determines is necessary to enable the preparation of financial statements and performance information that are free from material misstatement, whether due to fraud or error. The Board is also responsible for the publication of the financial statements and the performance information, whether in printed or electronic form.

Responsibilities of the Auditor

We are responsible for expressing an independent opinion on the financial statements and the performance information and reporting that opinion to you based on our audit. Our responsibility arises from the Public Audit Act 2001.

Independence

When carrying out the audit, we followed the independence requirements of the Auditor-General, which incorporate the independence requirements of the External Reporting Board.

Other than the audit, we have no relationship with or interests in the Commission.



Kelly Rushton
Audit New Zealand
On behalf of the Auditor-General
Wellington, New Zealand

Appendix 1: Inquiries active in the year ended 30 June 2015

Table 10 is ordered by date launched for all inquiries live at any point in the financial year. Overseas assists are included, but are not taken into account for timeliness calculations. WD = working days calculated on a 220 day year. Colour coding: green, 220 WD or less; yellow, 221-330 WD; orange, 331-440 WD; red, over 440 WD. All domestic inquiries are assigned a starting priority of 2, which may be elevated to 1 in the case of a need for urgency, or demoted to 3 to allow for more urgent cases to proceed ahead. Estimated completion dates were as at 30 June 2015; some will have been extended since to take account of a new expectation of 330 working days average to complete an inquiry, and to take into account developments in specific cases and the overall case load.

Table 10: Inquiries active in the year ended 30 June 2015

| Status | Inquiry # | Mode | Description | Occurred | Launched | Published | Working days | Estimated completion date | Estimated working days | Priority |
|--------------------------------------|-----------|----------|---|------------|------------|------------|--------------|---------------------------|------------------------|----------|
| Continued | 10-206 | Marine | coastal container vessel Spirit of Resolution, grounding, Manukau Bar, Auckland | 18/09/2010 | 29/09/2010 | | | 13/08/2015 | 1072 | 3 |
| Continued | 11-202 | Marine | passenger and freight ferry Monte Stello, struck underwater object, Tory Channel | 4/05/2011 | 4/05/2011 | | | 19/11/2015 | 1000 | 3 |
| Closed | 11-204 | Marine | Marine Inquiry 11-204: Container ship MV Rena grounding on Astrolabe Reef, 5 October 2011 | 5/10/2011 | 5/10/2011 | 18/12/2014 | 705 | | | |
| Closed | 12-102 | Rail | Train control power failure, 26 April 2012 | 26/04/2012 | 26/04/2012 | 20/11/2014 | 565 | | | |
| Continued | 12-103 | Rail | / RO-2012-103 Train 229, Main Line Derailment, Maewa | 3/05/2012 | 3/05/2012 | | | 21/01/2016 | 818 | 2 |
| Closed | 12-002 | Aviation | Airbus A320 ZK-OJQ, Bird strike and subsequent engine failure, Wellington and Auckland International Airports, 20 June 2012 | 20/06/2012 | 21/06/2012 | 18/06/2015 | 658 | | | |
| Continued | 12-104 | Rail | / RO-2012-104 Train 723, Track Occupation Irregularity, Seddon, 1 August 2012 | 1/08/2012 | 1/08/2012 | | | 13/08/2015 | 667 | 2 |
| Continued | 12-105 | Rail | / RO-2012-105 Passenger Train, wrong routed, Wiri Junction, 31 August 2012 | 31/08/2012 | 4/09/2012 | | | 15/10/2015 | 684 | 2 |
| Continued | 12-203 | Marine | / MO-2012-203 Fishing vessel Amaltal Columbia, fire onboard, 85 km northwest of Lyttelton | 12/09/2012 | 12/09/2012 | | | 17/12/2015 | 717 | 2 |
| Continued | 13-101 | Rail | / RO-2013-101 Freight Train 345, Derailment, Mission Bush Branch | 9/01/2013 | 14/01/2013 | | | 10/03/2016 | 693 | 2 |
| Closed Assisting overseas inquiry | 13-001 | Aviation | Controlled flight into terrain, Kenn Borek Air Ltd., de Havilland DHC-6-300 Twin Otter C-GKBC Mount Elizabeth, Antarctica, 23 January 2013. | 24/01/2013 | 25/01/2013 | 15/09/2014 | | | | |

| Status | Inquiry # | Mode | Description | Occurred | Launched | Published | Working days | Estimated completion date | Estimated working days | Priority |
|-----------|-----------|----------|--|------------|------------|------------|--------------|---------------------------|------------------------|----------|
| Closed | 13-002 | Aviation | Inquiry AO-2013-002: Robinson R44, ZK-HAD, engine power loss and ditching, Lake Rotorua, 24 February 2013 | 24/02/2013 | 24/02/2013 | 29/01/2015 | 424 | | | |
| Continued | 13-003 | Aviation | / AO-2013-003 Robinson R66, in-flight break-up, Kaweka Range | 9/03/2013 | 9/03/2013 | | | 15/10/2015 | 572 | 2 |
| Closed | 13-005 | Aviation | In-flight loss of control, Robinson R22, ZK-HIE, near New Plymouth, 30 March 2013 | 30/03/2013 | 4/04/2013 | 11/06/2015 | 481 | | | |
| Continued | 13-103 | Rail | / RO-2013-103 Train 5618, collision with the stop block, Melling Station | 15/04/2013 | 15/04/2013 | | | 19/11/2015 | 571 | 2 |
| Continued | 13-006 | Aviation | / AO-2013-006 Airbus A340, Runway excursion, Auckland Airport | 18/05/2013 | 20/05/2013 | | | 19/11/2015 | 550 | 2 |
| Continued | 13-104 | Rail | / RO-2013-104 Ganz-Mavag electric multiple unit passenger train, derailment, Wellington | 20/05/2013 | 20/05/2013 | | | 17/09/2015 | 512 | 2 |
| Closed | 13-105 | Rail | Capital Connection passenger train, departed Waikanae Station with mobility hoist deployed, 10 June 2013 | 10/06/2013 | 11/06/2013 | 7/05/2015 | 419 | | | |
| Closed | 13-106 | Rail | Track occupation irregularity, leading to near head-on collision, Otira-Arthur's Pass, 10 June 2013 | 10/06/2013 | 11/06/2013 | 4/12/2014 | 326 | | | |
| Closed | 13-007 | Aviation | Boeing 737-838, ZK-ZQG, stabiliser trim mechanism damage, 7 June 2013 | 7/06/2013 | 21/06/2013 | 26/03/2015 | 387 | | | |
| Continued | 13-008 | Aviation | / AO-2013-008 Boeing 737, cabin depressurization, Auckland | 30/08/2013 | 30/08/2013 | | | 19/11/2015 | 488 | 2 |
| Continued | 13-107 | Rail | / RO-2013-107, Derailment, Mercer | 3/09/2013 | 3/09/2013 | | | 15/10/2015 | 465 | 2 |
| Closed | 13-009 | Aviation | RNZAF Boeing 757, NZ7571, landing below published minima, Pegasus Field, Antarctica, 7 October 2013 | 7/10/2013 | 7/10/2013 | 29/01/2015 | 289 | | | |
| Continued | 13-010 | Aviation | / AO-2013-010 Aerospatiale AS350 B2 ZK-IMJ, collision with second helicopter, Tyndall Glaciers | 28/10/2013 | 29/10/2013 | | | 17/12/2015 | 469 | 2 |
| Continued | 13-011 | Aviation | / AO-2013-011 ZK-VAH, Runway excursion, Auckland airport | 2/11/2013 | 3/11/2013 | | | 19/11/2015 | 449 | 2 |
| Continued | 13-203 | Marine | / MO-2013-203 Interislander passenger and freight ferry Aratere, propeller shaft fracture and loss, Tory Channel | 5/11/2013 | 6/11/2013 | | | 17/09/2015 | 410 | 2 |

| Status | Inquiry # | Mode | Description | Occurred | Launched | Published | Working days | Estimated completion date | Estimated working days | Priority |
|--------------------------------------|-----------|----------|--|------------|------------|------------|--------------|---------------------------|------------------------|----------|
| Closed Assisting overseas inquiry | 13-012 | Aviation | Korean registered Kumertau KA-32A helicopter, landing accident in Antarctica, 4 December 2013 | 4/12/2013 | 12/12/2013 | 15/09/2014 | | | | |
| Assisting Overseas Inquiry | 14-001 | Aviation | Boeing 737-3B7 Freighter, right-hand undercarriage collapse during landing roll, Honiara, Solomon Islands | 26/01/2014 | 29/01/2014 | | | 30/01/2016 | | |
| Continued | 14-201 | Marine | / MO-2014-201 MV Dream Weaver, taking on water, Hauraki Gulf | 23/02/2014 | 24/02/2014 | | | 15/10/2015 | 360 | 2 |
| Continued | 14-101 | Rail | / RO - 2014 -101 KiwiRail Overlander, Collision with heavy truck, Huntly | 27/02/2014 | 27/02/2014 | | | 19/11/2015 | 379 | 2 |
| Closed | 14-102 | Rail | High-speed roll-over, empty passenger Train 5153, Westfield, South Auckland, 2 March 2014 | 2/03/2014 | 3/03/2014 | 26/03/2015 | 234 | | | |
| Closed | 14-202 | Marine | Lifting sling failure on freefall lifeboat, general cargo ship Da Dan Xia, Wellington, 14 April 2014 | 14/04/2014 | 14/04/2014 | 26/03/2015 | 208 | | | |
| Continued | 14-002 | Aviation | / AO-2014-002 Kawasaki Heavy Industries Limited BK117 B-2 Helicopter, double engine power loss, Springston | 5/05/2014 | 6/05/2014 | | | 19/11/2015 | 339 | 2 |
| Assisting Overseas Inquiry | 14-003 | Aviation | / AO-2014-003 Pacific Aerospace 750XL, hard landing, Warrenton, Virginia, USA | 14/05/2014 | 14/05/2014 | | | 13/08/2015 | | |
| Continued | 14-103 | Rail | / RO-2014-103 Matangi passenger train, failed to stop, Melling Station | 27/05/2014 | 27/05/2014 | | | 19/11/2015 | 326 | 2 |
| Continued | 14-104 | Rail | / RO-2014-104 Freight train, collision with excavator, between National Park and Raurimu | 17/06/2014 | 17/06/2014 | | | 21/01/2016 | 351 | 2 |
| Opened | 14-004 | Aviation | / AO-2014-004 Piper PA32, impact with terrain, near Poolburn Dam, near Alexandra | 5/08/2014 | 5/08/2014 | | | 10/02/2016 | 334 | 2 |
| Opened | 14-105 | Rail | / RO-2014-105 Empty passenger train and excavator, near collision, between Featherston and Dalefield | 11/08/2014 | 11/08/2014 | | | 10/03/2016 | 348 | 2 |
| Opened | 14-005 | Aviation | / AO-2014-005 Aerospatiale AS350 helicopter, snow landing accident, Mount Alta, 20 km north-west of Wanaka | 16/08/2014 | 16/08/2014 | | | 10/03/2016 | 345 | 2 |
| Opened | 14-203 | Marine | / MO-2014-203 Captain MJ Souza, fatality on-board, Kiribati Islands region | 24/08/2014 | 25/08/2014 | | | 10/03/2016 | 339 | 2 |

| Status | Inquiry # | Mode | Description | Occurred | Launched | Published | Working days | Estimated completion date | Estimated working days | Priority |
|----------------------------|-----------|----------|---|------------|------------|-----------|--------------|---------------------------|------------------------|----------|
| Opened | 14-006 | Aviation | / AO-2014-006 Robinson R44 Helicopter ZK-HBQ, in-flight break-up, Kahurangi National Park | 7/10/2014 | 10/10/2014 | | | 21/04/2016 | 337 | 2 |
| Opened | 15-001 | Aviation | / AO-2015-001 Pacific Aerospace Ltd 750XL, engine failure, Lake Taupo | 7/01/2015 | 7/01/2015 | | | 16/07/2016 | 335 | 2 |
| Opened | 15-101 | Rail | / RO-2015-001 Rail pedestrian crossing, fatality, Morningside Station | 29/01/2015 | 3/02/2015 | | | 14/07/2016 | 317 | 2 |
| Opened | 15-201 | Marine | / MO-2015-201 Passenger ferry Kea, collision with wharf, Devonport wharf, Auckland | 17/02/2015 | 17/02/2015 | | | 25/08/2016 | 334 | 2 |
| Opened | 15-002 | Aviation | / AO-2015-002 Robinson R44, impact with terrain, Queenstown | 19/02/2015 | 19/02/2015 | | | 25/08/2016 | 333 | 2 |
| Opened | 15-003 | Aviation | / AO-2015-003 Robinson R44, Main rotor blade failure, Waikaia | 25/01/2015 | 25/02/2015 | | | 25/08/2016 | 329 | 2 |
| Assisting Overseas Inquiry | 15-004 | Aviation | / AO-2015-004 Australian-registered B737 VH-VOP, Landing event, Christchurch | 11/05/2015 | 11/05/2015 | | | 24/11/2016 | | |
| Opened | 15-005 | Aviation | / AO-2015-005, loss of air traffic control services, nationwide | 23/06/2015 | 23/06/2015 | | | 16/12/2016 | 326 | 2 |

Summary

| Working days open | Number of inquiries |
|-------------------|---------------------|
| ≤ 220 | 1 |
| 221-330 | 7 |
| 331-440 | 16 |
| > 440 | 19 |

Appendix 2: Caseload data for the year ended 30 June 2015

Table 11: Caseload data 2014/15

| | | Air | | | Rail | | | Marine | | | Total | | |
|---|---------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| | | Jun-13 | Jun-14 | Jun-15 |
| Caseload at year end | | | | | | | | | | | | | |
| Inquiries | Opened | 5 | 5 | 7 | 8 | 5 | 2 | 2 | 3 | 2 | 15 | 13 | 11 |
| | Continued | 7 | 6 | 6 | 6 | 9 | 10 | 5 | 4 | 5 | 18 | 19 | 21 |
| | Total | 12 | 11 | 13 | 14 | 14 | 12 | 7 | 7 | 7 | 33 | 32 | 32 |
| Elapsed WD | Opened | 226 | 667 | 812 | 631 | 355 | 283 | 362 | 264 | 266 | 1,219 | 1,286 | 1,361 |
| | Continued | 2,626 | 1,771 | 2,360 | 1,979 | 3,067 | 4,610 | 2,645 | 2,517 | 3,234 | 7,250 | 7,355 | 10,204 |
| | Total | 2,852 | 2,438 | 3,172 | 2,610 | 3,422 | 4,893 | 3,007 | 2,781 | 3,500 | 8,469 | 8,641 | 11,565 |
| Average WD | Opened | 45 | 133 | 116 | 79 | 71 | 142 | 181 | 88 | 133 | 81 | 99 | 124 |
| | Continued | 375 | 295 | 393 | 330 | 341 | 461 | 529 | 629 | 647 | 403 | 387 | 486 |
| | Total | 238 | 222 | 244 | 186 | 244 | 408 | 430 | 397 | 500 | 257 | 270 | 361 |
| Completed by year end | | | | | | | | | | | | | |
| Inquiries completed | Inquiries completed | 5 | 6 | 5 | 3 | 6 | 4 | 2 | 5 | 2 | 10 | 17 | 11 |
| | Elapsed WD | 2,462 | 3,098 | 2,238 | 1,064 | 2,223 | 1,543 | 878 | 2,099 | 913 | 4,404 | 7,420 | 4,694 |
| | Average WD | 492 | 516 | 448 | 355 | 371 | 386 | 439 | 420 | 457 | 440 | 436 | 427 |
| Total active inquiries during year | | | | | | | | | | | | | |
| Active inquiries | Active inquiries | 17 | 17 | 18 | 17 | 20 | 16 | 9 | 12 | 9 | 43 | 49 | 43 |
| | FTE Investigators | 2.1 | 3.0 | 3.0 | 2.6 | 3.0 | 3.0 | 2.1 | 3.0 | 3.0 | 6.8 | 9.0 | 9.0 |

Notes:

- Opened = opened in that year (and remaining open at the end of the year), Continued = remained open throughout that year, Completed by year end = closed in that year. WD = working days (220 WD/calendar year).
- Inquiry numbers exclude assistance to overseas inquiries which also consumes investigator time.
- The investigator establishment is 9.0 full time equivalents (FTE). All positions are filled, and one investigator works across rail and air inquiries with 0.1FTE of his time is allocated to corporate needs.

Appendix 3: Key lessons, safety actions, & recommendations for 2014/15

The table below sets out the impact information (as represented by the key lessons, safety actions and recommendations) for the inquiries completed in 2014/15. Please note that carefully worded inquiry reports' contents have been extensively précised in this summary to give a quick impression of the inquiries' complexity and impact. The published inquiry reports are the definitive record which must be referred to for any other purpose.

Table 12: Key lessons, safety actions, and safety recommendations from inquiries closed during 2015

| Findings (number) | Key lessons (number and précis) | Safety actions (number and précis) | Safety recommendations (number and précis) |
|--|---|---|---|
| Greater ≈ more complex | <i>"What did we identify that others should take heed of to avoid it happening to them?"</i> | <i>"What has been done while the inquiry's been underway that's removed the need for a relevant recommendation?"</i> | <i>"What needs to change to reduce the likelihood of a recurrence?"</i> |
| Aviation inquiry 13-001 Kenn Borek Air Ltd., de Havilland DHC-6-300 Twin Otter C-GKBC, Mount Elizabeth, Antarctica, 23 January 2013 Controlled flight into terrain | | | |
| | (Assisting overseas inquiry) | | |
| Aviation inquiry 13-012 Korean registered Kumertau KA-32A helicopter, Antarctica, 4 December 2013 Landing accident | | | |
| | (Assisting overseas inquiry) | | |
| Rail inquiry 12-102 Train control, 26 April 2012 Train control power failure | | | |
| 5 | <p>There were 3 key lessons:</p> <ul style="list-style-type: none"> Projects involving essential core services must be appropriately scoped and resourced. Essential core services must be subjected to a rigorous safety risk assessment process. Power distribution systems for essential core services must be properly managed and serviced. | <p>8 safety actions have been taken since the accident:</p> <ul style="list-style-type: none"> Improved uninterruptible power supply (UPS) circuit breaker discrimination Improved UPS output load diversity in relevant control rooms all UPS alarms are now remotely monitored as-built drawings and manuals provided UPS training for technicians regular testing of emergency power supply all train control power supply outlets audited processes are in place to manage new appliance loads in train control | <p>1 recommendation was made to KiwiRail:</p> <ul style="list-style-type: none"> To revise the risk rating assessment matrix in its Risk Management Policy to reflect the fact that train control is a safety-critical service, and to consider the safety of people in crowds when assessing and mitigating the risks |

| Findings (number) | Key lessons (number and précis) | Safety actions (number and précis) | Safety recommendations (number and précis) |
|---|---|---|--|
| Greater ≈ more complex | <i>“What did we identify that others should take heed of to avoid it happening to them?”</i> | <i>“What has been done while the inquiry’s been underway that’s removed the need for a relevant recommendation?”</i> | <i>“What needs to change to reduce the likelihood of a recurrence?”</i> |
| Rail inquiry 13-106 Otira-Arthur's Pass, 10 June 2013 Track occupation irregularity, leading to near head-on collision | | | |
| 5 | There were 3 key lessons: <ul style="list-style-type: none"> • Train controllers must not make assumptions about the locations of trains or circumvent processes to prevent accidents. • If there is any doubt about a train controller’s performance, they should be stood down. • The train control roster should minimise and manage the risk of train controllers’ performance being impaired by fatigue. | 2 safety actions have been taken since the accident: <ul style="list-style-type: none"> • Network Operating Procedures amended. • A stronger “return to work” clearance process for Train Controllers. | 1 recommendation was made to the Chief Executive of NZTA: <ul style="list-style-type: none"> • To address with KiwiRail how its standard policy and procedures allowed an “at-risk” train controller to continue working at train control workstations while undergoing a formal investigation and remedial process. |
| Maritime inquiry 11-204 Container ship MV Rena, Astrolabe Reef, 5 October 2011 Grounding | | | |
| 19 | There were 3 key lessons: <ul style="list-style-type: none"> • Ship managers must ensure their safety management systems are effective for all ships in their fleet. • Ships’ crews must comply with the mandatory requirements and recommended best industry practice for passage planning, navigation and watchkeeping. • Countries’ maritime education, training and certification systems must be capable of meeting the standards required by international convention. | 3 safety actions had been taken by the Philippines government since the incident: <ul style="list-style-type: none"> • Audit of member agencies to ensure they align with national standards. • Management of conflicts of interest in training bodies. • National monitoring of the maritime education and training system. | 1 recommendation was made to CIEL Shipmanagement: <ul style="list-style-type: none"> • To evaluate the effectiveness of its safety management system. 2 recommendations were made to Maritime New Zealand: <ul style="list-style-type: none"> • To promote, through the IMO, the transparency of the system for auditing countries’ seafarer training systems • To collect sufficient data on shipping movements around the New Zealand coast, and monitor and control the use of virtual aids to navigation. |

| Findings (number) | Key lessons (number and précis) | Safety actions (number and précis) | Safety recommendations (number and précis) |
|---|---|---|--|
| <i>Greater ≈ more complex</i> | <i>"What did we identify that others should take heed of to avoid it happening to them?"</i> | <i>"What has been done while the inquiry's been underway that's removed the need for a relevant recommendation?"</i> | <i>"What needs to change to reduce the likelihood of a recurrence?"</i> |
| Aviation inquiry 13-002 Robinson R44, ZK-HAD, Lake Rotorua, 24 February 2013 Engine power loss and ditching, | | | |
| 4 | There was 1 key lesson: <ul style="list-style-type: none"> Purchasers of aviation parts sourced without proper documentation need to research the service histories of components, as do certifying engineers carrying out the required conformity. | None. | 1 recommendation was made to the Director of the CAA: <ul style="list-style-type: none"> To provide specific guidance to companies certified under Civil Aviation Rule Part 145 for the performance of conformity inspections of parts and components with unknown service histories or incomplete airworthiness. |
| Aviation inquiry 13-009 RNZAF Boeing 757, NZ7571, Pegasus Field, Antarctica, 7 October 2013 Landing below published minima | | | |
| 9 | There were 2 key lessons: <ul style="list-style-type: none"> A properly trained crew is able to function effectively in demanding circumstances. An essential element of risk management is the continuous review of the relevance of the original assessment and its context, hazards and mitigations. | 7 safety actions have been taken since the accident: <ul style="list-style-type: none"> Standard operating procedures amended. Meteorological requirements for passing the Point of Safe Return amended. Flight profiles reviewed. Implementation of a capability statement. Relevant flying squadrons briefed on the occurrence, and lessons learnt included in training. Review of processes/procedures for ensuring that weather information reports are sent. The CAA and relevant New Zealand agencies are working with US agencies to resolve an apparent anomaly in the management of the airspace known as the McMurdo Sector. | 1 recommendation was made to the Chief of Air Force: <ul style="list-style-type: none"> To review the risk assessment for using the Boeing 757 aircraft for Antarctic flight operations, taking into account these matters and any other matters not considered during the initial risk assessment. |

| Findings (number) | Key lessons (number and précis) | Safety actions (number and précis) | Safety recommendations (number and précis) |
|---|--|---|---|
| <i>Greater ≈ more complex</i> | <i>“What did we identify that others should take heed of to avoid it happening to them?”</i> | <i>“What has been done while the inquiry’s been underway that’s removed the need for a relevant recommendation?”</i> | <i>“What needs to change to reduce the likelihood of a recurrence?”</i> |
| Aviation inquiry 13-007 Boeing 737-838, ZK-ZQG, 7 June 2013 Stabiliser trim mechanism damage | | | |
| 2 | There was 1 key lesson: <ul style="list-style-type: none"> All personnel must take care not to leave anything behind inside an aircraft after completing maintenance or cleaning tasks, especially in areas or near systems critical to flight safety. | <ul style="list-style-type: none"> None. | <ul style="list-style-type: none"> None. |
| Rail inquiry 14-102 Empty passenger Train 5153, Westfield, South Auckland, 2 March 2014 High-speed roll-over | | | |
| 6 | There was 1 key lesson: <ul style="list-style-type: none"> Train drivers should always remain vigilant and comply with the trackside signals. They should always be aware that the paths set for their trains can be altered unexpectedly and may not follow the usual paths. | 5 safety actions had been taken since the accident: <ul style="list-style-type: none"> Development of a route risk assessment project Introduction of non-technical skills training for train drivers and train managers Review train driver “A” observation procedures-train driver competence management system Use of the findings and lessons from the incident as a case study for train drivers Development of a project to help improve train driver situational awareness and decision-making. | 1 recommendation was made to the Chief Executive of KiwiRail: <ul style="list-style-type: none"> To provide clear guidelines to train controllers on the practice of providing additional advice to train drivers on route setting or any other unusual factors likely to affect the progress of or the manner in which they drive their trains. |

| Findings (number) | Key lessons (number and précis) | Safety actions (number and précis) | Safety recommendations (number and précis) |
|---|--|--|--|
| Greater ≈ more complex | <i>“What did we identify that others should take heed of to avoid it happening to them?”</i> | <i>“What has been done while the inquiry’s been underway that’s removed the need for a relevant recommendation?”</i> | <i>“What needs to change to reduce the likelihood of a recurrence?”</i> |
| Maritime inquiry 14-202 General cargo ship <i>Da Dan Xia</i>, Wellington, 14 April 2014 Lifting sling failure on freefall lifeboat | | | |
| 8 | <p>There were 2 key lessons:</p> <ul style="list-style-type: none"> No assumptions should be made about the condition of any wire or other equipment that cannot be seen, especially if is safety-critical. Crew members should be secured in their seats during lifeboat-launching and recovery operations. | <p>3 safety actions had been taken since the accident:</p> <ul style="list-style-type: none"> The lifeboat manufacturer has updated the maintenance manual. The manufacturer no longer encloses wire ropes in a plastic sheathing, and has instructed company service stations to replace plastic-sheathed wire ropes on existing lifeboats. The owner issued a circular to all ships in its fleet with the instructions to check the condition of the lifeboat’s lifting wire slings; remove plastic sheathing; regularly renew the lifting wire slings. | <p>2 recommendations were made to the Director of Maritime New Zealand:</p> <ul style="list-style-type: none"> Through the port and flag state control programme, verify that wires that require regular inspection and maintenance by a ship’s crew and surveyors are readily accessible and easily maintained as required. Submit the report to the International Maritime Organization and raise the implications that plastic-sheathed wire ropes have for maritime safety through the appropriate International Maritime Organization safety committee for its consideration. |
| Rail inquiry 13-105 Capital Connection, Waikanae Station, 10 June 2013 Passenger train departed station with mobility hoist deployed | | | |
| 2 | <p>There were 3 key lessons:</p> <ul style="list-style-type: none"> Operational procedures must cover an entire operation Good communication among all persons involved in safety-critical operations is essential Technical solutions to mitigate human error, such as train door interlocking systems, are only effective if they protect all parts of the system | <p>3 safety actions had been taken since the accident:</p> <ul style="list-style-type: none"> The side profile visibility of the wheelchair hoist has been improved A light has been fitted to indicate when the door to the luggage van, where the wheelchair hoist is located, is open (consistent with all other door open indicator lights on the passenger cars) The policy on the identification of disabled passengers and associated procedures has been updated. | <ul style="list-style-type: none"> None. |

| Findings (number) | Key lessons (number and précis) | Safety actions (number and précis) | Safety recommendations (number and précis) |
|---|--|--|--|
| Greater ≈ more complex | <i>“What did we identify that others should take heed of to avoid it happening to them?”</i> | <i>“What has been done while the inquiry’s been underway that’s removed the need for a relevant recommendation?”</i> | <i>“What needs to change to reduce the likelihood of a recurrence?”</i> |
| Air inquiry 13-005, Robinson R22, ZK-HIE, near New Plymouth, 30 March 2013 In-flight loss of control | | | |
| 4 | <p>There was 1 key lesson:</p> <ul style="list-style-type: none"> • Pilots, particularly flight instructors, must be alert to conditions that could result in an inadvertent breach of a flight manual prohibition of low G. | None. | <p>2 recommendations were made to the Administrator, Federal Aviation Administration (FAA) of the United States, which certifies Robinson helicopters:</p> <ul style="list-style-type: none"> • To amend the training regulation to make it clear that dual instruction in the “effects of low G maneuvers” is limited to discussion only. • To require the Robinson Helicopter Company to amend its flight manuals to include the use of “Warning” for those operating conditions and practices that involve a risk of personal injury or loss of life. |
| Air inquiry 12-002, Airbus A320 ZK-OJQ, Wellington and Auckland International Airports, 20 June 2012 Bird strike and subsequent engine failure | | | |
| 5 | <p>There were 2 key lessons:</p> <ul style="list-style-type: none"> • Operators need to balance the cost of availability of inspection services at key aerodromes into which they fly with the cost of an engine failure of this scale. • After a bird strike, the pilots and ground engineering services should maintain increased vigilance of engine performance until the full maintenance checks are completed. | <p>4 safety actions have been taken since the accident.</p> <ul style="list-style-type: none"> • The engine manufacturer reviewed the airworthiness status of the engine, manuals and procedures. Operators were to be reminded of the limitations on flying after a bird strike. • The operator amended its maintenance manual to further limit the fly-on allowance before an appropriate inspection is required. • The operator acted to ensure engine conditions reports are generated and transmitted correctly. • The operator incorporated the lessons learnt from the actions of the crew in its training. | None. |

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