F.7 ANN



Annual Report Ripoata Ā-tau

2021/2022

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



Transport Accident Investigation Commission Te Kōmihana Tirotiro Aituā Waka Annual Report 2022

Crown Copyright

This work is licenced under the Creative Commons Attribution 3.0 New Zealand licence. In essence, you are free to copy, distribute, and adapt the work, as long as you attribute the work to the Crown and abide by the other licence terms.

To view a copy of this licence, visit <u>http://creativecommons.org/licences/by/3.0/nz/</u>. Please note that no departmental or governmental emblem, logo or Coat of Arms may be used in any way which infringes any provision of the Flags, Emblems, and Names Protection Act 1981. Attribution to the Crown should be in written form and not by reproduction of any such emblem, logo or Coat of Arms.



Transport Accident Investigation Commission

12 April 2023

Hon Michael Wood Minister of Transport Executive Wing Parliament Buildings Wellington

Dear Minister

Annual Report 2021/2022

We present the Annual Report of the Transport Accident Investigation Commission for the 12 months ended 30 June 2022.

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

Jane Meares Chief Commissioner

Day Harch

Stephen Davies Howard **Deputy Chief Commissioner**

Our vision Tō mātou tirohanga

No repeat accidents - ever! Whakakore aituā tukurua!

Our mission Tā mātou whāinga

Safer transport through investigation, learning and influence

Our values Ā mātou uara

Fairness Impartiality Independence Competence Integrity Timeliness Certainty

Our purpose Tā tātou kaupapa

Ko te aronga a Te Kōmihana Tirotiro Aituā Waka, ki te whakatau me te āta tirotiro he aha te pūtake o ngā Aituā Waka. A me pēhea rā te karo, kia kore ai aua takanga e pa mai anō a tōna wā.

The purpose of the Transport Accident Investigation Commission is to determine the circumstances and causes of accidents and incidents with a view to avoiding similar occurrences in the future.

Contents Rārangi take

Chief Commissioner's overview	2
Our organisation	4
Our work	7
Our impact	14
Non-financial reporting	20
Statement of responsibility	35
Statement of performance	36
Activity by mode	46
Financial statements	53
Independent auditor's report	72

Chief Commissioner's overview Te tirohanga a te Kōmihana matua



Jane Meares Chief Commissioner

The year ended 30 June 2022 was an eventful one for the Commission and our staff on many different fronts. We continued to contribute to safer transport safety through investigation, learning and influence while also progressing projects to strengthen the organisation and undertaking work outside our usual activities.

Under the direction of the Minister of Transport, we are investigating two fatal accidents that occurred during ship loading operations. Usually, occurrences involving the safety of workers loading or unloading ships are outside our mandate. However, under our legislation the Minister of Transport may direct an investigation into the circumstances and causes of such accidents. We are encouraged by this expression of confidence in our independent and evidence-based investigation and inquiry work. As with all our inquiries, we are committed to identifying any systemic safety issues, so that similar accidents, and their tragic consequences, can be avoided.

We continue our commitment to the Pacific region by making our expertise available where we can. In early 2022, the Cook Islands Government, through the Ministry of Foreign Affairs and Trade (MFAT), requested our assistance in investigating the grounding of a cargo ship. MFAT arranged for, and funded, a secondment of two of our maritime investigators to undertake this task. The investigation is continuing.

The maritime team is also influencing transport safety internationally through the International Maritime Organization (IMO). Our maritime investigators, together with Maritime New Zealand have been making a significant contribution to identifying safety issues related to pilot ladders and bringing them to international attention. The IMO has asked New Zealand to take a leading role in ensuring the matter is further researched. This is further recognition of the international standing of the Commission and our staff.

Organisationally, we made good progress in implementing the Knowledge Transfer System. This is a project to apply additional funding we received from 1 July 2020. The funding was to ensure we have the right people, systems, and processes to adapt to the increasingly technological and data-driven nature of the transport system. Last year the project focussed on detailed analysis and planning. Over 2021/22, we took a major step when we purchased a new case management system. The system we chose is the same as that used by our Australian counterparts, the Australian Transport Safety Bureau (ATSB). Our investigation methods are closely aligned with the ATSB's, particularly the approach to the analysis process, so the choice was a clear one. The system went 'live' in August 2022 and will be fully implemented over the coming year. We are grateful to the ATSB for their generous and invaluable assistance.

In last year's annual report, we noted that we had a relatively low proportion of investigators who we would consider qualified to be an investigator-in-charge (that is, having completed core training and with two to three years' experience). We continue to manage this situation by contracting expertise when necessary, mainly previous staff members. But we are also putting considerable effort into strengthening internal tools and processes to support the newer investigators in particular. For example, this year we completed the development of a competency framework and training plan, and increased the priority given to the full documentation of investigation processes.

These are two significant pieces of work. In addition, we finalised a Major Accident Plan. (The Plan is about how the organisation manages a response to a major accident, rather than its investigation, which is contained in the investigation manual.) This is a major step in achieving our strategic intention to enhance the ability of the organisation to respond effectively should a major accident occur.

Despite the heavy workload in non-investigative work, and despite the staffing challenges, we met our timeliness targets for 2021/22. In the rail and maritime modes, we have been able to contract ex-staff members to assist, and this has allowed for increased flexibility in how we manage investigations. Managing the workload in the aviation team will continue to be a challenge in the coming year. We are giving priority to the older inquiries to complete them as soon as we can.

We are grateful to those previous staff members who have assisted us over the year, in some cases coming out of retirement. Staff, past and present, have shown a commitment to the Commission's purpose of making transport safer for all that is commendable.

Commissioners would also like to acknowledge Martin Sawyer's first year as the Commission's Chief Executive. Mr Sawyers has brought fresh perspectives and a renewed energy to the tasks at hand, and has already made a significant contribution to the life of the organisation as we strive for safer transport.

Jane Meares Chief Commissioner

Our organisation Tō mātou rōpū

Our purpose

Our purpose is to determine the circumstances and causes of transport occurrences

Our legislation establishes us as a standing commission of inquiry The Commission's purpose is to determine the circumstances and causes of transport accidents and incidents with a view to avoiding similar occurrences in the future, rather than to ascribe blame to any person.¹ The Transport Accident Investigation Commission Act 1990 (the Act) enables the Commission to undertake this task.

The Act establishes the Commission as a standing commission of inquiry. It requires the Commission to investigate certain transport occurrences; and then inform transport system participants – domestically and internationally – of what happened, the lessons identified, and what might need to change to help avoid a recurrence.

To support our functioning, 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. We also have wide powers under the Commissions of Inquiry Act 1908.

On occasions, coroners, the New Zealand Police, transport safety authorities (the regulators²) or WorkSafe New Zealand, may also investigate the same transport accidents and incidents as the Commission is investigating.

¹ Section 4 of the Transport Accident Investigation Commission Act 1990

² Maritime NZ, the Civil Aviation Authority, and Waka Kotahi NZ Transport Agency

Our ethos

Transport is an integral part of New Zealander's lives and plays a Our work is key to vital role in the country's economy. Investment in new technology maintaining public and increasing capacity improve liveability and wellbeing - but trust and confidence only if users are safe and feel safe. The Commission's inquiries in the transport aimed at determining the circumstances and causes of accidents system make a key contribution to maintaining public trust and confidence in the transport system. The principles of independence and impartiality underpin the Independence and ethos of accident investigation the world over. Ensuring evidence is impartiality underpin secured and accessible for critical examination without hindrance our ethos or undue influence from vested interests is the cornerstone of State-mandated accident investigation. People can speak to International transport conventions put these principles into us freely because we practice by obligating signatory States to conduct independent are independent and and impartial investigations.³ New Zealand fulfils this obligation the evidence we through the Act, which establishes the Commission as a gather is protected commission of inquiry and expressly requires us to act independently in performing our statutory functions. Under the Act, all the evidence gathered during an investigation has extensive legal protection from disclosure. Further, none of our published findings, recommendations, or reports can be used in legal proceedings. The Commission's independence and protection of evidence mean people can speak to us freely about what happened in an accident

without fear of prosecution.

³ Paragraph 5.4, Annex 13 to the Convention on International Civil Aviation; Chapter 16 International Maritime Organization Casualty Investigation Code

Our people

The Commission is a small independent Crown entity, fully funded We are a small by the Crown. Members of the Commission have two roles: as independent Crown Commissioners, to determine the circumstances and causes of the entity, fully funded by accidents and incidents before them; and as the Board of the the Crown Transport Accident Investigation Commission, to fulfil the requirements of the Crown Entities Act 2004. The Commission schedules two sitting days per month from February through to December each year. Usually at least 75 per cent of the Commission's time is devoted to hearing cases, with the remaining time for board matters. The Commission may also sit at other times or consider papers out of session, as required to progress inquiries. The Commission had The Governor-General appoints the members of the Commission. On 30 June 2022, there were four Commissioners: four members on 30 June 2022 Ms Jane Meares Chief Commissioner (first appointed a Commissioner in February 2015, and Chief Commissioner in November 2016; term expires in November 2026). • Mr Stephen Davies Howard Deputy Chief Commissioner (first appointed a Commissioner in August 2015, and appointed

- Deputy Chief Commissioner in November 2018; term expires in October 2023).
 Mr Richard Marchant Commissioner (appointed in November
- Mr Richard Marchant Commissioner (appointed in November 2016; term expired in June 2022 and extended until later in 2022).
- **Ms Paula Rose QSO** Commissioner (appointed in May 2017; term expires in June 2024).

A Chief Executive and 31 staff support the Commissioners A small organisation supports the Commissioners, who employ a Chief Executive. On 30 June 2022, the Chief Executive had an establishment of 31 staff covering:

- Investigation Services (17 investigators and specialist staff)
- Business Services (11 support roles including legal, finance, IT, communications, and others)
- office management services (3).

Because of our small size, we rely on external service providers in many areas of operation; for example, we use a medical consultant and other subject matter experts to support investigations when required; and human resources expertise and IT consultants and providers to provide some business services.

Our work Ā mātou mahi

The Commission's work follows established procedures

The Commission's work follows an established procedure of formal fact-finding The general areas of the Commission's work are: activation through notifications of accidents and incidents followed by investigation, inquiry, and communication.

Figure 1 below summarises these general areas of work. The numbers to the right are for the reporting year, 2021/22, and indicate the scale of our work.

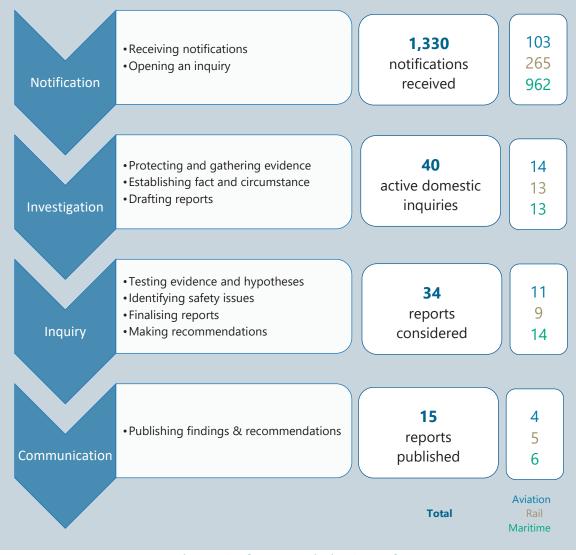


Figure 1: The Commission's work activation, investigation, inquiry, and knowledge transfer

Notifications: activating an inquiry

Notifications come mainly from transport sector regulators	The Commission receives notifications – mostly from transport sector regulators – of certain incidents and accidents in the aviation, rail, and maritime transport modes.
	The notifications process is a statutory one. Under the respective legislation for each mode, participants in each sector must report certain safety-related events to the regulator. The regulator must notify the Commission of events that meet a certain threshold of severity. The proportion meeting this threshold is small. For example, the Civil Aviation Authority receives thousands of notifications each year and passes to us 70 to 100; the Commission launches an average of four to five aviation inquiries a year.
The Commission investigates if we think we can improve safety	The Commission investigates an accident or incident if we believe the circumstances have, or are likely to have, significant implications for transport safety; or if an investigation could allow us to make findings or recommendations to improve transport safety.
	The process for deciding whether to investigate includes classifying events according to the safety risk they represent. The classification looks beyond the event itself. Even a minor incident represents a high risk if it could have resulted in an accident and remaining barriers (that is, those that had not come into play to prevent the event) were minimal or ineffective.
	The Commission then considers a range of other factors in the decision whether to investigate or not. Examples are trends in the types of events notified, and whether there is an international expectation to investigate.

Investigations: establishing facts and circumstances

The Commission's investigators gather and analyse evidence

The Commission's investigators are delegated legal powers to protect and gather evidence. Evidence collection is broad to support the many routes that an investigation could follow. It falls into four broad categories: people, machine, environment, and mission.

Analysis involves sorting, corroborating, and linking evidence and facts to prove, disprove and weigh competing theories. Figure 2 summarises the process.

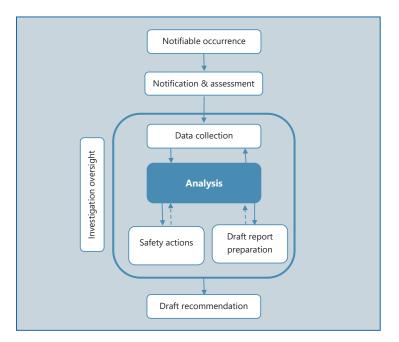


Figure 2: The analysis process

The chain of events leading to an incident or accident may appear to be clear, particularly those facts and factors closest to the occurrence. However, incidents and accidents rarely have a single cause; contributing factors are often complex and reach beyond the accident vehicle and its operation to wider systemic issues.

Inquiries: testing evidence and identifying safety issues

The inquiry process has three distinct elements: considering draft reports, considering submissions, and making recommendations The inquiry process has three distinct elements. First, consideration of the analysis of evidence and draft reports. Commissioners rigorously test the hypotheses and supporting evidence, and direct further investigation if necessary.

Sometimes draft reports state or imply that the conduct of a specified person has contributed to the accident or incident. In these cases, the Commission must⁴ release the report to interested persons⁵ and allow them to comment on, or refute, those findings.

The second element is consideration of final draft reports along with written, or oral, submissions from the interested persons.

The third element is determination of recommendations. Recommendations highlight the most serious safety issues identified in an inquiry and ask for something to be done.

The Commission and the investigation team meet at set milestones in the inquiry process The Commission oversees and directs inquiries; but over time the emphasis moves from the work of the investigation team as they gather and analyse evidence to the Commission's testing of hypotheses and supporting evidence. The Commission and the investigation team meet at set milestones in the inquiry process. The 'touch points' are shown in Figure 3.

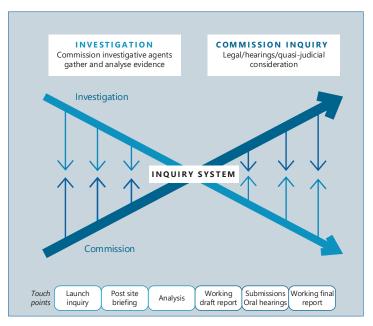


Figure 3: The inquiry process

⁴ Transport Accident Investigation Commission Act 1990, Part 2, s14 (5)

⁵ 'Interested persons' are persons likely to be affected by the report's findings and include the operator, manufacturer of the vehicle or vessel, engine manufacturer, involved state agencies and representatives of injured persons (Transport Accident Investigation Commission Act 1990, Part 2, s9)

Complex inquiries can result in an extended inquiry process

The Commission is mindful of its communications with families and next-of-kin If an inquiry is technically complex, the process can be extended. The Commission may call for further expert advice, receive additional submissions from interested persons, or extend lines of inquiry given the nature of the submissions received.

The Commission's 'Families Programme' aims to keep survivors and families appropriately informed about the progress of an inquiry; however, our legislation constrains us from describing lines of inquiry or findings and recommendations before we have published a report.

For those wanting to know what happened to their loved ones, the legal restrictions on what we can say is understandably frustrating. From the beginning of an inquiry, we try to communicate clearly the restrictions on what we can say.

Knowledge transfer: communicating core inquiry information

Identifying safety issues is the core work of the inquiry process The core work of the inquiry process is to identify safety issues – factors that either have contributed to an accident or are unsafe conditions. Identifying safety issues helps establish common circumstances and causes in repeated types of occurrences.

A written report details, the outcome of the inquiry and contains findings and, when necessary, recommendations to remedy safety issues The inquiry process culminates in a written report. The report details what happened and sets out the analysis to determine the circumstances and causes. It contains core messages about what we learnt, and about what action has been taken or is still needed to avoid a recurrence.

- Findings are the Commission's conclusions after examining the facts.
- The Commission may issue a recommendation to remedy an identified safety issue. ⁶ Often (and ideally), action is taken as part of the investigation process; in other words, knowledge transfer is a continuing process that can occur at any time through the inquiry process. But sometimes safety issues remain unresolved at the end of an inquiry.

The Commission may release an interim report if public interest is high, to communicate important information about the circumstances of an accident, or to make urgent recommendations.

The Watchlist communicates the Commission's highest-priority safety issues.

⁶ See Annex 13, Convention on International Civil Aviation Aircraft Accident and Incident Investigation, (10th Ed.), p 1-2

International engagement

The Commission is part of a global network of transport accident investigation bodies	The Commission is part of a global network of transport accident investigation bodies meeting their States' obligations under international Conventions (see footnote 3 on page 5).	
		In accordance with these Conventions, the Commission participates in inquiries by international peer organisations into events in overseas jurisdictions. This occurs when events involve New Zealand registered or manufactured aircraft, vehicles or components, or a significant number of New Zealanders have died as the result of an accident. Assistance usually takes the form of co-ordinating information flows, but we can also have more in- depth involvement.
International assistance is focused on the Pacific region	Under Annex 13 to the International Civil Aviation (ICAO Convention), the Commission fulfils the New Zealand Government's obligations by assisting another signatory in investigating an incident or accident if that other signatory does not have the expertise or resources. We may also assist outside ICAO Convention obligations. This work is usually in the Pacific region.	
		Examples over recent years are secondments of investigators to Pacific Governments to undertake accident investigations in the Cook Islands (2022) and Kiribati (2018). We have also provided training support to our peer agency in Singapore on digital evidence (2019); and, under the International Maritime Organization (IMO), regional training in Fiji on implementing the IMO's Casualty Investigation Code (2018).
	International engagement is vital for building resilience	Engagement with our international peers enables inter-agency collaboration and helps build resilience against the significant pressures we would face should a major accident happen in New Zealand. In such a situation, the Commission would have to draw on the assistance of international colleagues. Inter-operability with other nations would be critical to a rapid and effective response.

Our impact Ā mātou panga

Contributing to safety outcomes through influence

We contribute to the transport sector outcome of protecting people from transport	The Minister of Transport's letter of expectations for the Commission for 2021/22 sets out four priorities for the transport sector. One of these is safety – delivering a transport system where no-one is killed or seriously injured.
related injuries	Similarly, the 'healthy and safe people' strand of the Transport Outcomes Framework developed by the Ministry of Transport is about protecting people from transport-related injuries.
	The Commission works for systemic improvements in transport safety where users <i>are</i> safe and <i>feel</i> safe, supporting community wellbeing now and into the future. Our work, therefore, directly supports transport sector outcomes and the Minister's priorities.
We contribute by influencing others – mainly regulators – to improve safety	We contribute to a safer transport system by publishing findings and recommendations. Recommendations are signals about systemic safety issues that could contribute to future accidents or incidents. We make recommendations more to regulators than operators because regulators are better able to influence and act on the highly complex system that is the transport sector.
The Watchlist communicates the Commission's highest-priority safety issues	The Watchlist is another way we influence the sector to act. It communicates the Commission's highest-priority safety issues. We consider the sector should be paying particular attention to these matters. The Watchlist currently includes these high-priority safety issues: ⁷
	 impairment from drugs or alcohol of people in safety-critical roles
	 encouraging the use of technologies to track aircraft, ships and boats, and rail vehicles

- the need for recreational boat users to demonstrate they understand and practise safe boating behaviour before getting out on the water
- safety for pedestrians and vehicles crossing rail tracks
- New Zealand's rate of accidents involving Robinson helicopters

⁷ The Watchlist can be found here on our website: <u>Action is needed on these pressing safety concerns | TAIC</u>

Case studies: demonstrating effectiveness

We demonstrate effectiveness through case studies The Commission's mission is safer transport through investigation, learning and influence. We are focused on reducing the likelihood of accidents similar to those we have investigated.

Given the complexities of the transport system, and the nonmandatory nature of our recommendations, we demonstrate our influence on safety outcomes mainly through case studies rather than quantitative assessment.

The case studies on the following pages show how the Commission's work in identifying safety issues, together with a responsive sector, can achieve a safer transport system.

Note: The case studies contain short summaries of inquiries; the full reports are the official record of the Commission's findings and recommendations.

Case study:

Global influence though international forums

	Pilot ladder safety
Background	In July 2021, TAIC and Maritime NZ represented New Zealand at the International Maritime Organization (IMO) Sub-Committee on Implementation of IMO Instruments (III). The sub-committee has a key role in casualty analysis and issuing key lessons from maritime occurrences.
	One of the sub-committee's roles is to identify trends from IMO member states' maritime safety reports; and to escalate safety matters to drive legislative change via codes and conventions. A dedicated working group, the Casualty Analysis Working Group, undertakes this task.
The safety issue	As a member of the Working Group, TAIC submitted a report in 2021 about pilot ladders. An analysis had showed large numbers of low-level incidents where no accident occurred that met the criteria of a very serious or serious maritime casualty – indicating an underlying safety issue.
What changed	The Casualty Analysis Working Group acknowledged the report and decided to continue the research. New Zealand is leading a smaller working group of 18 international participants to look at the issue further.
	The invitation to lead the research – and other work we have been asked to undertake such as reviewing reports from other member States – is testament to the IMO's regard for our maritime team. This is especially notable given that New Zealand has a relatively small fleet of SOLAS vessels under our flag.

Case study:

Unrestrained pilots ejected from balloon baskets

Aviation inquiry	AO 2022 001: Ultramagic, S.A. 250, ZK MET, Pilot ejection from basket on landing Lyndhurst, near Methven 1 January 2022 (interim report)
What happened	In January 2022, a balloon with a pilot and seven passengers on board was on a commercial scenic flight near Methven. The balloon basket tipped over on landing, ejecting and seriously injuring the pilot. The passengers were not injured. The balloon was fitted with a pilot restraint harness, but the pilot was not wearing it during the flight.
	There had been a similar occurrence in July 2021, which is also being investigated by the Commission. ⁸ In that accident, the hot air balloon, was on a commercial scenic flight near Queenstown, with a pilot and 10 passengers. The balloon landed heavily, and the pilot, who was not wearing a pilot restraint harness, was ejected from the basket and sustained moderate injuries.
The safety issue	Under Civil Aviation Rules, balloon pilots in New Zealand are exempt from wearing restraint harnesses during landing.
	The two occurrences being investigated by the Commission have highlighted the need to urgently address this safety issue.
What we said	The Commission recommended that the Director of Civil Aviation take prompt steps to mandate the wearing of pilot restraint harnesses during critical phases of commercial balloon flights.
What changed	The interim report has increased the awareness of operators of commercial hot air balloons about the safety issues identified during the investigation.
	Operators have committed to requiring hot air balloon pilots to use safety harnesses. This is a positive response, which increases the safety of these pilots.

⁸ AO-2021-001: Hot Air Balloon. impact with terrain, Arrowtown, 9 July 2021

Case study:

Safety issues near level crossings

Rail inquiry	RO-2019-108: Level crossing collision, Piako Road, Morrinsville, 7 December 2019
What happened	Two family members died in this tragic accident. They were travelling by car through an area of roadworks near a level crossing. The road was partially coned off to protect contractors painting road markings approaching the level crossing. A traffic controller at the roadworks holding a stop/go sign briefly stopped the car, which was the first in a queue. Once the traffic controller gave the signal to go, the cars began moving through the work area. At about the same time, a train entered a section of track that automatically activated the level crossing warning alarms. The driver of the car did not stop before the level crossing and drove onto the railway line in front of the approaching train. The train and car collided, resulting in the two car occupants suffering fatal injuries.
The safety issue	The Commission found that the approved traffic management plan for the roadworks did not adequately mitigate the risks for road users approaching the level crossing. The roadworks created distracting activity; and a vehicle with flashing amber beacons was parked next to the level crossing warning signals. The proximity of the flashing amber beacons to the level crossing alarms is likely to have confused road users and made the level crossing warning alarms less effective. The confusing scene probably led the driver of the car to think the traffic controller's 'go' signal gave clearance to drive through the entire roadworks area including the level crossing.
What we said	We recommended that Waka Kotahi NZTA review how it audits agencies delegated to approve traffic management plans. Plans for roadworks at level crossings must identify all risks associated with trains <i>and</i> road vehicles. We made another recommendation to the Secretary for Local Government to lead work with local authorities to ensure work in the rail corridor happens only with a permit from the rail access provider.
What changed	Waka Kotahi NZ Transport Agency informed us that it is replacing its current guidance on temporary traffic management. The new guide is taking a different approach to how temporary traffic management is governed, planned for, and operationalised. The document is to be closely aligned with WorkSafe NZ's <i>Good Practice Guide to Road Worker Safety</i> , which is currently being developed. Safety at level crossings is a high-priority concern for the Commission and we will continue to monitor developments.

Influence and knowledge transfer: key achievements 2021/22

The Commission is inquiring into two accidents related to port operations	On direction from the Minister of Transport under section 13(2) of the Transport Accident Investigation Act, we are inquiring into two fatal accidents that occurred during ship loading operations. Occurrences involving the safety of workers loading or unloading ships, are outside our mandate unless the Minister directs us to open an inquiry. The section on activities in the maritime mode has more information.
The maritime team is influencing transport safety nationally, in the Pacific, and internationally	The maritime team is influencing transport safety nationally and internationally.
	 We submitted a report a report on pilot ladders to the International Maritime Organization (IMO) as part of a wider working group. Refer to the case study above.
through the IMO	 In April 2022, we deployed two investigators to the Cook Islands to investigate the grounding on a reef of a cargo ship, the MV Grina II. Rather than being a Commission inquiry, this is assistance to the Cook Islands Government via the secondment of staff, which has been arranged and funded by the Ministry of Foreign Affairs and Trade.
	 Locally, we received feedback, during a submissions process, from a large operator in New Zealand. It commented that the company pays close attention to our reports because they help to improve understanding of safety issues.
	These examples demonstrate the Commission's knowledge transfer and influence, which reach beyond the immediate effects of accident investigation and reporting.
The Commission hosted a transport forum on delegated powers to third parties	In May 2022, the Commission hosted a forum for the Ministry of Transport and the transport sector regulators on powers and functions delegated to third parties. The forum was part of the Commission's programme of engagement with participants in the transport sector. It proved a valuable opportunity for the Commission to better understand the issues that the regulators face in this area, and for the regulators to share how they are managing those issues. Feedback from the forum participants was positive. We intend to hold a similar forum (on another topic)

again next year.

Non-financial reporting Ripoata pūtea kore

Context: our operating environment

The main challenge in our operating environment continues to be the rapid technological changes The accelerating rate of technological change is still the main challenge in our operating environment. The growing use and sophistication of intelligent systems and, increasingly, artificial intelligence means the technological transformation of transport continues to gather pace. The potential safety risks of new technologies increase when they are retrofitted to older systems or aircraft and vehicles, a common practice in New Zealand.

Digital information provides evidence we would not otherwise have	The Commission must be able to respond by adapting how we gather and analyse evidence, which increasingly takes the form of electronic data. Examples include:
	 Information from GPS tracking data and messaging systems was used to determine the sequence of events in a collision between two ships.⁹
	• Data recording systems on a train involved in a fatal collision with a bus provided investigators with important information about the timing of events. ¹⁰
	• Flight data, surveillance data, audio recordings and images of a radar controller's display screens allowed investigators to make a detailed and precise analysis of the events leading up to a loss of separation between two aircraft. ¹¹
	Access to such data means we can obtain evidence about the sequence of events leading up to an accident that we otherwise wouldn't have. We can also add to, and verify, eyewitness accounts
	Currently we have a single forensic data specialist to extract and analyse digital evidence in its various forms. The demand for this specialist work is growing and will continue to do so.
Resilience is the key to adaptability	Resilience is key to adaptability. The capacity and capability to maintain effectiveness in the face of technological change, or in responding to shocks such as a major accident or a natural disaster is the starting point for our business planning.

⁹ MO-2021-203: Collision between Fishing Vessel *Commission* and container ship *Kota Lembah*, 84 nautical miles northeast of Tauranga, Bay of Plenty, New Zealand, 28 July 2021

¹⁰ RO-2020-103: Collision between bus and locomotive, Clevely Line level crossing, Bunnythorpe, 16 September 2020

¹¹ AO-2019-002: Bombardiers DHC-8-311, ZK-NEH and ZK-NEF, Loss of separation near Wellington, New Zealand, 12 March 2019

Our strategic intentions

We learn safety issues from investigations, and transfer that knowledge to others so they can act to improve transport safety The 2021/22 year was the first covered by the Commission's strategic document, the *Statement of Intent 2021–2025*. Our purpose and overall direction remain unchanged from the previous planning cycle, based on our mission of safer transport through investigation, learning and influence.

Influence – our impact on the system – is achieved by having a clear and authoritative voice, which form two of our strategic intentions. We added a third over this planning period, to improve our readiness to respond to a major accident.

Our strategic intentions are therefore to:

- be accessible by making it easier for people or organisations to access our findings and recommendations
- be credible by maintaining the highest standards in investigation processes
- be ready to respond to a large-scale event and enhance our capacity to contribute to national resilience.

We made good progress in achieving our strategic intentions as described in the following pages In the next section we describe key achievements in 2021/22, as well as some of the challenges we faced during the year.

The tables beginning on page 23 describe progress against the measures set out on pages 7-9 of the *Statement of Performance Expectations 2021/22*.

Progress towards strategic intentions: key achievements in 2021/22

Funding for a Knowledge Transfer System is being applied	The Commission received additional baseline funding from 1 July 2020, increasing from \$5.52 million in 2020/21 to \$7.30 million in 2021/22. The purpose of the funding is to support our strategic direction with its focus on knowledge transfer and organisational resilience, and to relieve cost pressures.
	Knowledge transfer is about capturing and organising data and information; and creating and distributing information and knowledge to improve the safety of the transport system. Physical assets, people, and processes work together to enable knowledge transfer.
	The Commission's focus is on the digital aspects of our knowledge transfer. But this is more than IT assets – it includes the people who provide supporting capability and those who can leverage the opportunities for improved organisational performance.
through the strengthening of IT capital	In February 2022, we signed an agreement for a new case management system. The system is the same as that used by the Australian Transport Safety Bureau (ATSB). It was an obvious choice, because our investigation processes are closely aligned with the ATSB's, particularly the approach to analysis. The new system supports and guides investigators through a disciplined application of the analysis process (refer to Figure 2 on page 9).
	We have been fortunate that the ATSB has provided us considerable support and advice in the process of acquiring the system. Their generous assistance has been invaluable and has added significantly to the value we can realise from the investment. This is a good example of how maintaining international relationships, and especially the close relationship with our Australian colleagues, benefits us and New Zealand's transport system.
	The system went 'live' in August 2022. A change management process is in place to stage full implementation over 2022/23.
and human capital	We also made good progress during 2021/22 in other aspects of the Knowledge Transfer System including:
	• recruiting a new staff member funded under the new baseline
	 embedding the Communications Strategy into routine business
	completing the Research Strategy.

The investigation manual is completed to a good working standard

The organisation now has a Major Accident Plan that is fully documented The investigation manual consists of eight processes from assessment of notifications through to publication. When we wrote our statement of intent for 2021/22, we planned to have fully documented one process by the end of the year, adding to the four already completed.

During the year, we decided instead to document all investigation processes to a good working standard and schedule a series of reviews. We considered this was a better use of resources because of the need to balance this work against the demands of ongoing investigations. In addition, we began integrating Tikanga Māori into the investigation processes to improve our protocols for engaging with Māori.

Once we have completed the working document, we will review one to two processes each year so that we continue to improve and update them. Finalising the work to integrate Tikanga Māori is a priority.

When we wrote our Statement of Intent for 2021/22, we planned to have begun documenting plans for a response to a major accident. (The plans are about how the organisation manages its response to a major accident, not about its investigation; the investigation manual discussed above covers scaling of the investigation process for a major accident.)

We raised the priority of this task and by 30 June 2022 we had finalised a Major Accident Plan (what to do in case of a major accident) and a Major Accident Readiness Plan (how to maintain readiness for a major accident). The ATSB reviewed the plan and their comments and suggestions were incorporated.

This was a significant piece of work for the organisation and a major step in achieving our strategic intention to 'be ready'. Work will continue on the actions identified in the Readiness Plan; and the Major Accident Plan will be regularly reviewed and updated.

We met our timeliness targets for 2021/22... As detailed in the statement of performance (page 36), we met our timeliness targets for 2021/22. This is despite some staffing challenges. We reported in last year's annual report that on 30 June 2021, the proportion of investigators who qualified to be an Investigator-in-Charge (that is, having completed core training and with two to three years' experience) was relatively low. We noted that we are contracting external expertise when needed.

In the rail and maritime modes, this has worked well and allowed for increased flexibility in how we manage investigations. Contracted investigators (previous staff members) have led new inquiries as Investigator-in-Charge assisted by more recently recruited investigators.

We are grateful to those previous staff members who have assisted us over the year, in some cases coming out of retirement. We consider this shows a commendable commitment from past and present staff to the Commission's purpose of making transport safer for all.

...but three aviation inquiries have extended timeframes

In the aviation mode, however, contractors able to dedicate enough time to take on the role of Investigator-in-Charge (IIC) were unavailable. This meant experienced staff were carrying a heavy workload as they progressed continuing inquiries and took lead roles in new inquiries.

As a result, on 30 June 2022, five aviation inquiries were older than 440 working days (two years), four led by the same IIC (three investigations is considered a maximum realistic workload). Three investigations were older than 660 working days (three years).

In general, aviation inquiries take longer to complete compared with rail and maritime for several reasons:

- accident sites are more likely to be challenging for evidence gathering, for example, remote mountain sites
- wreckage is more likely to be badly damaged or even totally destroyed, making the technical analysis difficult and the determination of cause challenging and sometimes impossible
- aviation accidents are more likely to have multiple fatalities or injuries, and – especially if a tourism operator is involved – more likely to have witnesses and next-of-kin from multiple nationalities, requiring contact with several international agencies
- aircraft components often come from a range of international manufacturers, also requiring contact with several international agencies.

Nevertheless, the situation is unsatisfactory and affects knowledge transfer. Too much time between an accident and the release of our findings can lessen our ability to influence others to act. It is also stressful for victims and families.¹²

We are giving priority to the older inquiries to complete them as soon as we can. Managers plan to transfer some of the workload to newer staff where appropriate (for example, assisting in drafting inquiry reports).

¹² In the case of the oldest inquiry, the Commission published an interim report in early 2019 (AO-2018-009: MDHI (Hughes) 369D, registration ZK-HOJ, Wanaka, 18 October 2018)

Regulators' reporting on the status of TAIC recommendations was reviewed The Commission no longer 'closes' recommendations. The Ministry of Transport and Commission staff worked together to explore how recipients of recommendations report decisions about, and progress in, implementing recommendations.

A proposed new process was developed, and consulted and agreed with transport sector regulators. It will involve an annual report from the regulators to the Minister on the status of recommendations that have been issued to them by the Commission. The first report will cover the 12 months ended 30 June 2022, and is expected to be completed later in the calendar year. It will be published on the Commission's website.

Measures of progress towards strategic intentions

Indicator	Stakeholder communications supports knowledge transfer
Target 30-Jun-22	 Communications Strategy implementation milestones met: conduct stakeholder survey develop stakeholder engagement plan six-monthly meetings with regulators social media support for selected inquiries
MET	 The 2021/22 milestones for implementing the Communications Strategy have been met. The stakeholder survey was largely completed by 30 June 2022, although some there was some delay because of COVID-19. The stakeholder engagement plan was completed in the first half of the year. It promotes informed decisions in identifying stakeholders and how best to engage with them in support of knowledge transfer. The Chief Executive has regular meetings with the chief executives of transport sector regulators, as well as a range of other stakeholders. See 'key achievements' on page 19 regarding the transport forum. Over the year, we began using social media to support inquiries where appropriate, especially as they launch. For example, when an inquiry is launched, we appeal for witnesses via social media taking advantage of the currency of the event and the media profile.
Indicator	The Research Strategy supports knowledge transfer
Target 30-Jun-22	Research Strategy implementation milestones met (to be specified when the Research Strategy is completed, due mid-2021)
NOT MET	The Research Strategy was completed and approved in August 2021. Its goal is to instil a culture of research, enabling informed decision-making and enhancing knowledge transfer. It aims to provide supporting research for inquiries, including trend monitoring; and to improve performance reporting wherever possible. The strategy contains a high-level implementation plan, but a more detailed plan setting out milestones is better developed once the new investigation management system is implemented. We therefore deferred recruitment of the researcher.

Performance measures for strategic intention to be accessible

Performance measures for strategic intention to be credible

Indicator	Investigation processes are:	
	fully documented	
	integrated with TAIC workflows	
	continually improved	
Target 30-Jun-22	At least one investigation process is documented.	
PARTLY MET	All investigation processes are being documented to a good working standard (rather than fully documenting one at a time). See 'key achievements' beginning on page 22.	
Indicator	TAIC can undertake system risk trend analysis and target case selection to the highest safety risks	
Target 30-Jun-22	Planning begins for developing a risk-based approach to setting criteria for opening inquiries	
MET	A risk-based approach to setting criteria for launching inquiries has been developed using the Event Risk Classification (ERC) model. The ERC model assigns a risk rating for each occurrence we are notified about. As well as identifying higher-risk events, it allows us to capture low-level but high- frequency events, a characteristic of the notifications we receive. It provides a systematic method for assessing risk, an important contributor to the decision on launching an inquiry. Refer to the section on notifications beginning on page 8.	
Indicator	Stakeholders view us positively	
Target 30-Jun-22	Results from the stakeholder survey form baseline results for future Knowledge Transfer System benefits review.	
PARTLY MET	On 30 June 2022, the independent research company had completed the quantitative part of the stakeholder survey and baseline results obtained. The qualitative survey (interviews with industry leaders) was yet to be completed.	
. 1		
Success measures	Judicial reviews Commission inquiries that identify process issues	
Target 1 30-Jun-22	None	
MET	There have been no judicial reviews that identify process issues.	
	Successful challenges from an Ombudsman, the Privacy Commissioner or the Human Rights Commission of an administrative decision or action	
Target 2 30-Jun-22	None	
MET	There have been no successful challenges from an Ombudsman, the Privacy Commissioner or the Human Rights Commission of an administrative decision or action.	

Indicator	We have plans and processes for responding to a major accident							
Target 30-Jun-22	Documentation started.							
MET	A Major Accident Plan has been completed. See 'key achievements' beginning on page 22.							
Indicator	IT systems are scalable							
Target 30-Jun-22	Refer IT capital performance measure below: Data Strategy implementation milestones are met including meeting the requirement of scalability							
Progress	Refer 'IT capital' performance measure below.							
Indicator	The Commission is active in the national community of emergency response agencies and our role and functions are well understood							
Target 1 30-Jun-22	Commission representative attends all meetings of relevant working groups							
MET	TAIC staff continue to be fully engaged in the working groups we are a member of.							
Target 2 30-Jun-22	Commission staff participate in all relevant desktop exercises							
N/A	The timing of exercises depends on external agencies. None were held over the reporting period.							

Performance measures for strategic intention to be ready

Performance measures: organisational health and capability (HR)

Indicator	We have the expertise we need					
Target 30-Jun-22	All new roles funded under the KTS (5) are filled					
PARTLY MET	Over the year, an Applications Developer was recruited. This brings the number of KTS-funded roles to that now filled to four. Recruitment for the researcher role was deferred until work on the new case management system was more advanced.					
Indicator	We have an effective investigation team					
Target 30-Jun-22	New competency-based training package developed for investigators					
MET	Significant work was dedicated to this project over 2021/22. A competency framework has been developed and externally reviewed. Internal consultation has been completed. The framework is yet to be fully rolled out, but it has already been helpful in setting performances objectives and professional development expectations for new staff.					

Performance measures: organisational health and capability (IT)

Indicator	Data and information systems support TAIC's work, including data scaling demands				
Target 30-Jun-22	Data Strategy implementation milestones are met:				
	 IT solution selected that meets KTS guiding principles 				
	development testing and implementation underway				
PARTLY MET	A new case management system went 'live' in August 2022. This was two to three months behind schedule. COVID-19 'lockdown' periods resulted in some delays in contracting expertise to assist us in technical aspects of the implementation. See 'key achievements' beginning on page 22.				

Organisational health and capability

We are committed to being a good employer

The Commission is committed to being a good employer. A range of policies and guidelines help ensure we:

- meet all legal obligations to staff
- are clear about standards and expectations, and fair in implementing them
- build a positive and inclusive work culture.

Policies and guidelines are regularly reviewed, and consulted with staff whenever a change affects them.

Our 2021/22 staffFrom time-to-time, we commission an independent company to
survey showed
positive resultsFrom time-to-time, we commission an independent company to
survey staff for their feedback on workplace culture and how they
feel about working at TAIC. The latest survey, held in
February 2022, had the following results:

- the 97 per cent participation rate is 27 percentage points above the public sector benchmark
- compared with the previous survey (May 2021), the overall organisation score increased 13 percentage points to 76 per cent
- the overall organisation score is 14 percentage points above the public sector benchmark.

The survey also pointed to areas for improvement, particularly building cultural competency and improving IT systems. We continue to work on these areas.

Our workforce profile is similar to last year's

Table 1 shows the demographic profile of TAIC staff.

Table 1: Employee workforce composition

		As at 30 June				As at 30 June	
		2022	2021			2022	2021
Total staff		31	27	Total staff		31	27
Gender	Male	14	16	Disability	Yes	0	0
	Female	17	10		No	31	27
Ethnicity	European	26	25	Age	<41	5	5
	Māori	1	0		41-50	10	6
	Asian	3	2		51-55	7	6
	Pacific	0	0		56-60	5	5
	Other	1	0		>60	4	4
	Unstated	0	0		Unstated	0	1

Recruitment processes are sensitive to diversity	The Commission widely advertises vacant positions and conducts a comprehensive recruitment process so we can make the best appointments possible.
	All new employees and other workers, for example contract staff, have an individualised induction process to help them assimilate into the organisation. This includes the online learning module Mana Āki. Our expectations include those set out in the Public Service Code of Conduct as well the Commission's values.
Our training programme ensures all staff have the knowledge and skills	The Commission supports training and professional development across the organisation. We ensure investigation and corporate staff develop and maintain the knowledge and skills essential to their specialist work.
essential to their specialist work	For investigators, it takes at least two years to become trained and experienced enough to be regarded as fully effective. They require transport sector experience and technical knowledge supported by strong investigative and analytical skills. Traditionally, we have sent investigators to train in general and mode-specific investigation methods at Cranfield University in the UK. Alternatives had been found while COVID-19 travel restrictions were in place. With restrictions now lifted, investigator training at Cranfield has resumed.
As a smaller organisation, we need a flexible workforce	As a smaller organisation, the Commission requires a flexible workforce to quickly respond to operational needs. Investigators especially need to work outside normal office hours at times. To balance these demands, the Commission allows flexible working hours and time in lieu (that is, additional to alternative holidays) to employees who are required to work in the weekends.
Our remuneration system is designed to attract and retain high- performing employees	The Commission offers a pay-for-performance remuneration system designed to attract and retain high-performing employees. The remuneration system incorporates options for providing rewards and recognition, as well as leave entitlements.
We promote a safe and healthy working environment	The Commission promotes a safe and healthy working environment for employees. Health and safety is risk-based. It focusses on ensuring a health and safety management system is in place and followed at accident sites, our wreckage facility, and other in-the-field investigation management activities.
	Each month the Commission receives a health and safety report from the Chief Investigator of Accidents on any issues or incidents related to deployment. The Chief Executive reports on general

	matters of health and safety. Commissioners meet with health and safety staff representatives quarterly and hear from the TAIC Health and Safety Committee chairperson.
	Our next steps are to implement a Wellbeing Programme to support mental health, particularly for those who deal with distressing situations as part of their work.
	We are mindful also of the health and safety of others with whom we have contact during an investigation. For example, when we finish our work at an accident site, or release wreckage back to its owner, we ensure chemicals or other hazards have been minimised and, where possible, removed.
Harassment and bullying are not tolerated	The Commission has a zero-tolerance approach to harassment and bullying. This is clearly set out in a suite of policies, guidelines and procedures related to professional conduct and behaviour. This includes the Code of Conduct, which is based on the Public Service Commission's guidelines.
	The monthly health and safety report includes any incidents of bullying, unfair discrimination, harassment, or privacy breaches.
We continue to adapt our COVID-19 plans as circumstances change	At various times and places over 2021/22, the Government implemented raised alert levels in some parts of New Zealand to manage the COVID-19 pandemic. The raising of alert levels provided opportunities to re-test and improve our COVID-19 action plan, protocols, and guidance.
	Over the year COVID-19 affected some staff and their families, but to date, we are fortunate that no staff member has been severely affected. New waves are likely. We continue to clarify and update guidance for our staff as necessary and as circumstances change. Managers are vigilant about the mental health of their teams especially those who are isolated or caring for others.
We signed a lease for new premises	Over the year, we signed a lease for new premises in central Wellington. The new building has a New Building Standard rating significantly higher than our current premises (130 per cent compared with 34 per cent) and a high sustainability rating. The rent is less than the current premises.

Diversity and inclusion

We undertook work in in each of the five commitment areas of the Public Service The five commitment areas of the Public Service (Papa Pounamu) and the progress we have made against each are shown below.

Table 2: Activities over 2021/22 for enhancing diversity and inclusion

Commitment	Activities 2021/22		
Te Urupare i te Mariu J Addressing Bias We are using the Mana Āki cultural competence learning module a part of our diversity and inclusion programme. New staff take the cas part of their induction; other staff are encouraged to complete it part of their performance and development agreements.			
Te āheinga ā-ahurea Cultural	In 2020/21, we developed a three-year programme aimed at increasing the cultural awareness and competency of staff. The programme draws on advice and guidance from Te Arawhiti, Te Taura Whiti i te Reo Māori and Te Kawa Mataaho Public Service Commission. The aim is for staff to achieve at least a 'comfortable' level of competency.		
Competence	We surveyed staff late in 2020/21 to assess levels of cultural competency. Results from a repeat survey in 2021/22 showed improvements of about ten percentage points in each of the areas measured. Further work is planned to achieve a 'comfortable' level of competency for staff.		
Ngā tūhononga e kōkiritia ana e ngā kaimahi Employee- led Networks	Throughout 2021/22, we supported various voluntary activities to create a diverse workplace. These included Matariki celebrations, and activities for mental health awareness week and Māori Language Week.		
Hautūtanga Ngākau Tuwhera Inclusive	Being a small organisation enables us to hold regular all-staff meetings where everyone is encouraged to participate and team successes are celebrated. From the beginning of 2021/22 regular managers' meetings have been expanded to include a broader range of staff.		
Leadership	The results of our staff survey suggest we have a positive and inclusive style of leadership. The highest scoring category was 'leadership and culture' with an overall average score of 84 per cent.		
Te whaka- whanaungatanga Building Relationships	Work began in 2021/22 on integrating Tikanga Māori into the investigation processes. Improving our protocols for engaging with Māori will be a significant enhancement to our processes. We are engaging external expertise to help us in this task.		

Māori Crown relationships

The Board and senior staff have given careful consideration to the application of Treaty obligations Over the year, the Board and senior managers held discussions to consider Te Tiriti o Waitangi obligations and how they apply to the Commission and its functions and operations.

The Board and senior managers have committed to a programme of education and awareness about the history of Te Tiriti including workshops and making time available for staff to view and discuss videos. We are pleased that staff have responded positively to these opportunities and participation rates have been high.

Māori language planning

Use of te reo is encouraged at all levels of the organisation During the year, we completed incorporating te reo into our formal internal and external document templates and into our standard email greetings. We also developed and implemented bilingual signage guidelines.

Regular te reo lessons are held for Commissioners and staff, and common greetings in te reo are encouraged and modelled by managers, who also use karakia and mihimihi to open and close meetings, including Commission and Board meetings.

Statement of responsibility Te tauākī kawenga

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 2022.

Jane Meares Chief Commissioner

Stephen Davies Howard **Deputy Chief Commissioner**

23 March 2023

Statement of performance Ngā pūrongo whakatutukinga

Output class: accident or incident investigation and reporting

The Commission has one output class: accident or incident investigation and reporting The Commission has one output class: accident or incident investigation and reporting. The appropriation for this output class intends to achieve the conduct and completion of independent inquiries into selected aviation, rail, and maritime accidents and incidents with a view to avoiding recurrences.

This section provides an overview of the Commission's performance results for the 2021/22 financial year.

Table 3 on page 37 reports outcomes against the targets and expectations set out on page 2 of the *Statement of Performance Expectations 2021/22*.

Table 4 on page 38 summarises the costs of this output class.

Service performance measures have been carried forward into the *Statement of Performance Expectations 2022/23*. Page 14 of that documents sets out the judgements and assumptions we have made in choosing those service performance measures.¹³

COVID-19 has not affected delivery of core functions, but has delayed some projects The COVID-19 pandemic had minimal effect on our ability to deliver our statutory functions, but there were the expected effects on productivity when staff have been unwell or looking after others; for example, the delivery of some projects such as cultural competency and other training were delayed. We have noted disruptions where relevant in this document.

With our cloud and conferencing systems, we can transition smoothly between office-based and remote working as circumstances require. Investigators have continued to deploy to accidents and we were able to meet our performance targets for the 2021/22 year. The Commission itself has been holding its hearings and board meetings online when necessary.

However, the pandemic places ongoing demands on the executive team as they manage staff availability and welfare, explore alternative arrangements for critical functions, and continually review policies and practices to ensure they reflect changing circumstances.

¹³ The Statement of Performance Expectations 2022/23 is here on our website: Strategy and performance | TAIC

Table 3: Output measures against Statement of PerformanceExpectations 2021/22 targets and expectations

	-	-			
Financial	Instrument	Actual 2021/22	Target 2021/22	Actual 2020/21	
Average cost of domestic inquiries closed*	Timesheet and financial data analysis	\$438K	\$350–400K	\$409K	
Volume	Instrument	Actual 2021/22	Expected 2021/22	Actual 2020/21	
Number of reports published for domestic inquiries (incl. interim reports)*	Casebook analysis, manual count	15	15–25	10	
Number of inquiries by overseas jurisdictions assisted*	Casebook data analysis	9	4–8	9	
Number of domestic inquiries in progress at each month's end (12 month rolling average, as at 30 June)	Casebook data analysis	26	30	24	
Timeliness	Instrument	Actual 2021/22	Target 2021/22	Actual 2020/21	
Proportion of closed domestic inquiries completed within 440 working days*	Casebook data analysis	71%	70%	55%	
* Performance mea	* Performance measure for the appropriation for this output class.				

Table 4: Cost of service statement and reporting againstappropriations

Output class summary	Actual 2021/22 \$000	Budget 2021/22 \$000	Actual 2020/21 \$000			
Accident or incident investiga	Accident or incident investigation and reporting					
Revenue – Crown	7,247	7,092	6,070			
Revenue – other	147	51	50			
Costs	(7,788)	(7,143)	(5,986)			
Surplus/deficit	(394)	-	134			
Non-departmental output exp	enses					
Accident or incident investigation and reporting – operating	7,247	7,092	6,070			
Non-departmental capital expenditure – equipment and furniture This appropriation is limited to capital expenditure to accommodate new staff						
Capital contribution from the Crown	-	-	18			
Expenditure on equipment and furniture	-	-	18			
Assessment of performance	Actual standard of performance 2021/22	Budget standard of performance 2021/22	Actual 2020/21 \$000			
TAIC's premises at 80 The Terrace are equipped to accommodate expanded staff by 30 September 2020	-	-	100%			

Average cost of inquiries

Overall, we did not meet our target for the cost of inquiries	The average cost of an inquiry is calculated when the final report is published by allocating all costs incurred (including general overheads). A proportion of overheads is allocated to all inquiries in progress. A further proportion is allocated according to time spent on each inquiry. The cost of an inquiry is taken over the whole of its life.
	The target for 2021/22 was increased to account for new funding associated with the Knowledge Transfer System project. This new funding is allocated across inquiries as an overhead.
Two aviation inquiries were particularly	Figure 4 below shows the time to publication and cost of each inquiry published in 2021/22.
expensive because of the time they took	In general, higher costs are associated with an extended time to publication and/or a high number of staff hours rather than direct

publication and/or a high number of staff hours rather than direct costs.

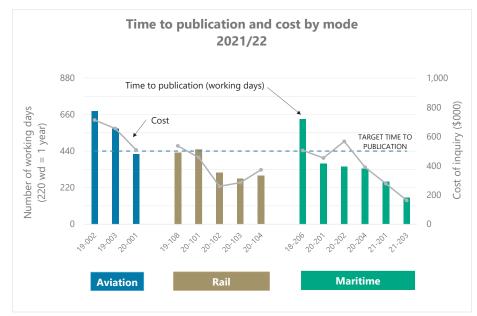


Figure 4: Time to publication and cost

Volume

We published 15 reports, and assisted nine overseas inquiries Volume measures are demand driven and shown as an 'expected' range rather than a 'target'.

The Commission published 15 reports over the year, 14 final and one interim. The Commission maintained progress on 9 inquiries and launched 18.¹⁴ In addition to domestic inquiries, the Commission assisted nine investigations conducted by overseas investigation agencies. Refer to page 13 for our obligations to undertake this work.

Figure 5 below shows the number of active inquiries over each of the last five years.

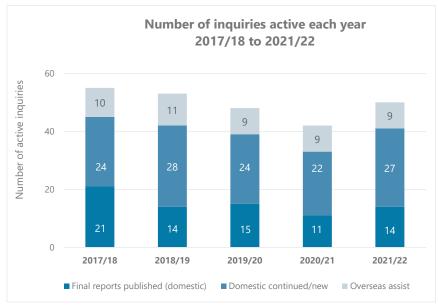


Figure 5: Number of active inquiries over the last five years

¹⁴ One maritime inquiry was launched and final report published within the year. This inquiry is included in both the 'continued/new' and 'published' figures, so the total shown is 41, although 40 domestic inquiries were active.

The number of domestic inquiries in progress at the end of the year increased

On 30 June 2022, the 12-month rolling average of the number of domestic inquiries in progress was 25.8, compared with 23.7 on 30 June 2021. Figure 6 shows the number of inquiries in progress at each month end over the last five years.

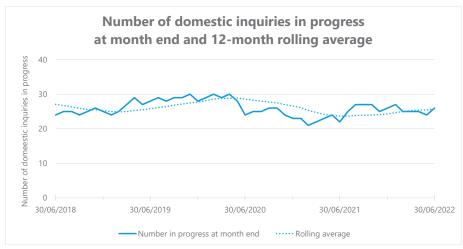


Figure 6: Inquiries in progress

Timeliness: age of inquiries in progress

The average age of inquiries at the end of 2022 is less than at the same time last year...

The performance measure for the age of inquiries in progress is the 12-month rolling average calculated at the end of each month.

We noted in last year's annual report that the average age of inquiries in progress had started to increase in 2020/21 after having been steady for the previous two years. Over the current reporting period, 2021/22, that trend reversed, as shown in Figure 7.

The 12-month rolling average of the age of inquiries in progress on 30 June 2022 was 256 working days. This is a 9 per cent decrease from the same time last year (282).

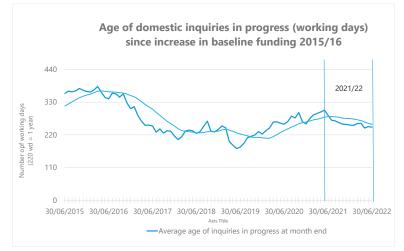


Figure 7: Average age of inquiries in progress

...but there is a greater spread of ages

Although the average age of inquiries in progress decreased over the year, on 30 June 2022 there was a greater range of ages compared with 30 June 2021. There were more 'young' inquiries, but also the 'old' inquiries were older. Figure 8 shows the age of each inquiry in progress on 30 June 2021 and on 30 June 2022.

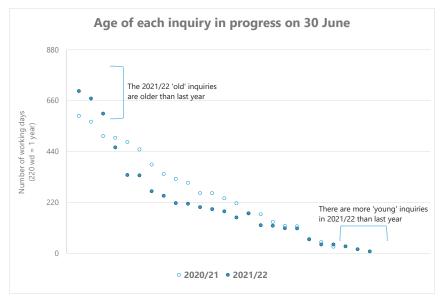


Figure 8: Average age of inquiries in progress

Timeliness: age of inquiries at publication

The timeliness target for completion of inquiries allows for complex inquiries	The timeliness target for publication of final reports is 70 per cent completed within 440 workings days (two years). The Commission aims to publish inquiries within 440 working days; however, more complex inquiries may take longer. Complexity can arise for many reasons such as technical aspects of the occurrence being investigated, or the number and/or substance of submissions received on draft reports.
Overall, we met the target in 2020/21	Fourteen of the 15 reports published during 2021/22 were final reports. Ten of the 14 final reports (71 per cent) were completed within 440 working days, meeting our timeliness target for the year. Of the 14 inquiries:
	• 6 were published in under 18 months (330 working days)
	• 4 were published between 18 months and two years (331–440 working days)
	• 4 took longer than two years (440 working days).
Thora are differences	Table 5 below shows the average age of published inquiries over

There are differences across modes

Table 5 below shows the average age of published inquiries over 2021/22 by mode.

2021/22	Aviation	Rail	Maritime
Number of final reports published	3	5	6
Published within 440 working days	1	4	5
Average age of published inquiries (working days)	559	352	349

Table 5: Average age of published inquiries by mode

Over time, the time to publication for rail and maritime inquiries has reduced, but not for aviation inquiries, as shown in Figure 9. We discuss this more on page 23/24.

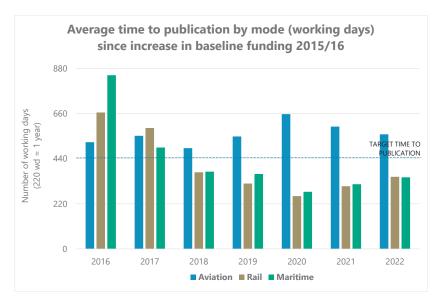


Figure 9: Average time to publication of final reports

Activity by mode Te mahi ā-aratau

Aviation

Aviation inquiries published over 2021/22

Table 6 lists the three aviation inquiries published in 2021/22. Reports for all inquiries can be found here on our website: <u>Investigations | TAIC</u>

Inquiry	Description	Published	Working days to publication
AO-2019-003	Diamond DA42 aeroplane ZK EAP, Controlled flight into terrain, Kaimanawa Range, near Taupō, 23 March 2019	4/11/2021	576
AO-2020-001	Pacific Aerospace Cresco 08-600, ZK-LTK Impact with terrain Kourarau Hill, Masterton, 24 April 2020	24/03/2022	421
AO-2019-002	Bombardiers DHC-8-311, ZK-NEH and ZK-NEF, 'Loss of separation' near Wellington, 12 March 2019	14/04/2022	680

Table 6: Aviation inquiries published over 2021/22

As well as the final reports published, the Commission published an interim report during the year. The interim report contained a recommendation to the Civil Aviation Authority – refer to the case study earlier in this document. No other recommendations were made in the aviation mode.

Aviation inquiries in progress on 30 June 2022

Table 7 lists the 11 aviation inquiries that were in progress on 30 June 2022.

Inquiry	Description	Launched	Age on 30 June 2022 (working days)
AO-2018-009	MDHI (Hughes) 369D, registration ZK-HOJ, Wanaka, 18 October 2018	18/10/2018	814
AO-2019-005	BK-117 helicopter, impact with water, vicinity of Auckland Island, 22 April 2019	23/04/2019	702
AO-2019-006	Cessna 185 and a Tecnam P2002 light aeroplane, mid-air collision, near Hood Aerodrome, Masterton, 16 June 2019	16/06/2019	669
AO-2019-007	Airways, outage, Christchurch, 1 October 2019	2/10/2019	604
AO-2020-002	Schleicher ASK 21 glider, impact with terrain, near Taupo, 31 May 2020	31/05/2020	458
AO-2020-003	Airbus Helicopter EC120, impact with terrain, Kekerengu River mouth, 15 December 2020	15/12/2020	339
AO-2021-001	Hot Air Balloon, impact with terrain, Arrowtown, 9 July 2021	9/07/2021	215
AO-2021-003	Helicopter, Impact with terrain, Lammerlaw Range, 17 October 2021	17/10/2021	154
AO-2022-001	Ultramagic, S.A. N-250, ZK-MET, Pilot ejection from basket on landing, Lyndhurst, near Methven, 1 January 2022	1/01/2022	108
AO-2022-002	Helicopter, Inflight breakup, Karamea, 2 January 2022	2/01/2022	108
AO-2022-005	Boeing 737, fuel tank warning, Auckland, 8 June 2022	16/06/2022	8

Table 7: Aviation inquiries in progress on 30 June 2022

Five of the aviation inquiries in progress were into helicopter accidents. At this stage, there are no common circumstances to report, except for two inquiries into accidents involving commercial hot air balloon flights.¹⁵ In both accidents, the pilot lost control of the balloon during a landing sequence and was ejected from the basket. One of the pilots received moderate injuries, the other serious injuries. In March we published an interim report – refer to the case study earlier in this document.

¹⁵ AO-2021-001 Hot Air Balloon. impact with terrain, Arrowtown, 9 July 2021; and AO-2022-001: Ultramagic, S.A. N-250, ZK-MET, Pilot ejection from basket on landing, Lyndhurst, near Methven, 1 January 2022

Rail

Rail inquiries published over 2021/22

Table 8 lists the five rail inquiries published in 2021/22. Reports for all inquiries can be found here on our website: <u>Investigations | TAIC</u>

Inquiry	Description	Published	Working days to publication
RO-2020-102	Express freight Train 932 strikes hi-rail vehicle at Limeworks Road public level crossing between Milton and Henley, 24 April 2020	23/09/2021	312
RO-2019-108	Level crossing collision, Piako Road, Morrinsville, 7 December 2019	25/11/2021	432
RO-2020-103	Collision between bus and locomotive, Clevely Line level crossing, Bunnythorpe, 16 September 2020	16/12/2021	275
RO-2020-104	Safe Working Irregularity, East Coast Main Trunk Line, Hamilton Eureka, 21 September 2020	20/01/2022	292
RO-2020-101	Level crossing collision, Mulcocks Road, Flaxton, 10 February 2020	24/02/2022	449

Table 8: Rail inquiries published over 2021/22

Four of the five inquiries related to safety at level crossings; the fifth concerned a protected work area. Safety for workers in the rail corridor and level crossing safety continue to be priority rail safety issues for the Commission. Safety at level crossings was introduced onto the Watchlist in 2016.¹⁶

The five inquiries resulted in six recommendations. Five concerned safety at level crossings.

- Two (one to Waka Kotahi NZTA and one to the Secretary for Local Government) were about traffic management plans when road works are undertaken near level crossings. (RO-2019-108 refer to the case study earlier in this document.)
- A third recommendation, to Waka Kotahi NZTA, was to assess whether road user rules adequately cover the risks of level crossings close to road intersections. (RO-2020-103.)
- Two recommendations (one to KiwiRail and one to both KiwiRail and NZTA Waka Kotahi) were about improving the assessment of risk at level crossings. The recommendations aim to improve the accuracy of prioritising level crossings for safety upgrades. (RO-2020-101.)

The sixth recommendation concerned the safety of rail workers:

• The recommendation was to KiwiRail to enhance the safety of rail workers through engineering control measures. It arose from an incident where a miscommunication put rail workers at risk. (RO-2020-104.)

¹⁶ The Watchlist item is here: Safety for pedestrians and vehicles using level crossings | TAIC

Inquiries in progress on 30 June 2022

Table 9 lists the eight rail inquiries that were in progress on 30 June 2022.

Inquiry	Description	Launched	Age on 30 June 2022 (working days)
RO-2021-101	Shunting operations on board ferry <i>Aratere</i> , Wellington, 10 April 2021	10/04/2021	269
RO-2021-102	Train/Utility vehicle collision at level crossing near Marton, 13 May 2021	13/05/2021	249
RO-2021-103	Passenger train Te Huia, parting, Pukekohe,19 July 2021	3/08/2021	200
RO-2021-104	Passenger train, derailment, Waikanae to Wellington Kapiti line, 17 August 2021	17/08/2021	191
RO-2021-105	Locomotive, submerging underwater, Picton, 1 September 2021	2/09/2021	181
RO-2021-106	Freight train, derailment, near Marton, 13 December 2021	14/12/2021	119
RO-2022-101	Passenger train, Fire in auxiliary generator wagon, Palmerston North, 11 May 2022	11/05/2022	30
RO-2022-102	Locomotive DC4605 derailment and roll over, Tamaki Auckland, 01 June 2022	1/06/2022	17

Table 9: Rail inquiries in progress on 30 June 2022

Over the year we launched two inquiries into shunting accidents. We had been monitoring shunting operations because of an upward trend in notifications involving these types of operations. One of the accidents (RO-2021-101) resulted in a worker being seriously injured. In the other (RO-2021-105) a locomotive was submerged in Picton harbour afterit ran over the end of the ferry embarkation linkspan. Nobody was on the train, and nobody was injured.

The resilience of rail infrastructure to adverse weather featured in two inquiries launched over 2021/22 (RO-2021-104 and RO-2021-106). Both were derailments following damage to the line after bad weather. One of the derailed trains was a freight train, the other a passenger train. No-one was injured in either occurrence.

We continue to receive notifications of track occupancy incidents. All have been near misses, but some are similar to the circumstances reported in the Commission's inquiry into a safe working irregularity in September 2020, which was published over the year (RO-2020-104 – refer above for the resulting recommendations).

Maritime

Maritime inquiries published over 2021/22

Table 10 lists the six maritime inquiries published in 2021/22. Reports for all inquiries can be found here on our website: <u>Investigations | TAIC</u>

Inquiry	Description	Published	Working days to publication
MO-2020-201	Collision between bulk carrier <i>Rose Harmony</i> and fishing vessel <i>Leila Jo</i> , Off Lyttelton, 12 January 2020	9/09/2021	365
MO-2018-206	Bulk carrier <i>Alam Seri</i> , contact with seabed, approach to Bluff Harbour, 28 November 2018	14/10/2021	633
MO-2020-202	Bulk log carrier <i>Funing</i> , Loss of manoeuvrability while leaving port, Port of Tauranga, 6 July 2020	3/02/2022	348
MO-2021-203	Collision between Fishing Vessel <i>Commission</i> and container ship <i>Kota Lembah</i> , 84 nautical miles northeast of Tauranga, Bay of Plenty, New Zealand, 28 July 2021	21/04/2022	161
MO-2021-201	Jet boat KJet 8, loss of control, Shotover River, Queenstown, 21 March 2021	19/05/2022	256
MO-2020-204	Container Vessel, <i>Rio De La Plata</i> , serious injury to crew member during unmooring operations, Timaru Port, 14 November 2020	26/05/2022	335

Table 10: Maritime inquiries published over 2021/22

The six published reports contained ten recommendations.

- Two were about watchkeeping practices: one of these recommendations was to an operator to enhance training systems; and the other to Maritime NZ to review operators' training programmes during audits of safety systems. (MO-2020-201.)
- One recommendation was to a port operator and also related to training systems, this time in relation to pilot training and proficiency. (MO-2018-206.)
- We recommended an engine manufacturer ensure the users of its engines are aware of maintenance information. (MO-2020-202.)
- Three recommendations were to operators of fishing vessels and related to training deckhands in watchkeeping practices, and to enhancing fatigue management practices. (MO-2021-203.)
- We recommended Maritime NZ to work with jet boat operators to mitigate the risks to passengers and crew of systems that have a single point of failure that could result in loss of control of a boat. (MO-2021-201.)
- Two recommendations arose from an accident during unmooring operations, which seriously injured a crew member. One was to an overseas port authority to review safety management systems and their implementation on board vessels under its flag; and the

other to the manufacturer of the mooring winch to ensure operators are aware of safety modifications to the equipment. (MO-2020-204.)

Maritime inquiries in progress on 30 June 2022

Table 11 lists the seven maritime inquiries that were in progress on 30 June 2022.

Table 11: Maritime inquiries in progress on 30 June 2022	Table 11: Maritime	inquiries in	progress on	30 June 2022
--	--------------------	--------------	-------------	--------------

Inquiry	Description	Launched	Age on 30 June 2022 (working days)
MO-2020-205	General cargo vessel <i>Kota Bahagia</i> , Cargo hold fire, Napier Port, 18 December 2020	18/12/2020	337
MO-2021-202	Factory fishing trawler, <i>Amaltal Enterprise</i> , engine room fire, 55 nautical miles west of Hokitika, 2 July 2021	5/07/2021	217
MO-2021-204	Recreational vessel, capsize, Manukau Bar, 16 October 2021	16/10/2021	155
MO-2021-205	Container vessel <i>Moana Chie</i> f, gangway incident, Auckland, 10 December 2021	10/12/2021	122
MO-2022-201	Sinking of a fishing vessel, off North Cape, 20 March 2022	21/03/2022	61
MO-2022-202	Port operations accident, Lyttelton Port, 25 April 2022	27/04/2022	39
MO-2022-203	Port operations accident, Port of Auckland, 15 April 2022	27/04/2022	39

The maritime inquiries in progress on 30 June 2022 varied in nature; at this stage of the investigations, there are no common circumstances to report.

In the accident at Ports of Auckland (MO-2020-203) a stevedore reportedly fell from height during loading operations for a container ship. The accident at Lyttelton Port (MO-2020-202) occurred during loading operations aboard a vessel while it was berthed. Tragically, both accidents were fatal. Under section 13(2) of the Transport Accident Investigation Commission Act, the Minister of Transport has directed us to investigate the circumstances and causes of these two accidents to determine any potential system-wide lessons.

Pilot ladders

The maritime team is making a significant contribution to international transport safety through the International Maritime Organization (IMO). See page 19.

International inquiries assisted

The Commission assisted nine international inquiries over the year. Assistance usually takes the form of co-ordinating information flows, but we can also have more in-depth involvement.

Inquiry	Description	Status on 30 June 2022
MO-2020-203	Gulf Livestock 1, loss of vessel, en route to China, 3 September 2020	Assistance ended (22/06/2022)
AO-2018-007	New Zealand-manufactured Pacific Aerospace Ltd 750XL aeroplane, landing gear failure, near Dubendorf, Switzerland, 17 August 2018	Assistance ended (24/11/2021)
AO-2018-003	PAC 750 XL Aeroplane, engine abnormality requiring engine shut-down and glide landing, Sentani Airport, Jayapura, Papua, Indonesia, 21 May 2018	In progress
AO-2021-002	Parachute accident, Hungary, 19 July 2021	In progress
AO-2021-004	Pacific Aerospace, Mambruk Airstrip, Papua Indonesia, 20 April 2021	In progress
AO-2021-005	Boeing B737-36E, ZK-FXK, depressurisation near Darwin Aerodrome, 3 November 2021	In progress
AO-2022-003	P-750XL Runway Excursion Tekin, Sanduan Province, Papua New Guinea, 18 January 2022	In progress
AO-2022-004	Piper -32-300, collision with terrain, Australia, 22 June 2021	In progress
AO-2022-006	Boeing 737, melted plastic on pitot tubes, Auckland, 10 June 2022	In progress

Figure 10: International inquiries assisted over 2021/22

One of these accidents – the loss of the vessel *Gulf Livestock 1* in early September 2020, en route to China – is of particular interest to New Zealand. Forty crew members, including two New Zealanders, remain unaccounted for.

Panama, as the Flag State investigated the accident. Its maritime investigation safety agency, the Panama Maritime Authority, provided us with a confidential draft report and invited us to comment formally, which we did. The final report was released to the families on 5 April 2022 and the Commission ended its assistance in June 2022.

Note: Secondment to the Cook Islands

The secondment of maritime investigators to the Cook Islands' Government (refer page 19) is not a Commission inquiry and is not shown in the list above or included in our performance data.

Financial statements Ngā tauākī pūtea

TRANSPORT ACCIDENT INVESTIGATION COMMISSION

STATEMENT OF COMPREHENSIVE REVENUE AND EXPENSE FOR THE YEAR ENDED 30 JUNE 2022

	Notes	Actual 2022 \$000	Budget 2022 \$000	Actual 2021 \$000
Revenue				
Funding from the Crown		7,247	7,092	6,070
Interest revenue		7	6	5
Other revenue	2	140	45	45
Total Revenue		7,394	7,143	6,120
Expenditure				
Audit Fees		22	22	21
Commissioners' fees	3	285	298	258
Depreciation and amortisation expense	6&7	184	158	151
Lease, rentals and outgoings		1,365	750	740
Personnel costs	3	3,991	4,052	3,536
Other expenses		1,941	1,863	1,280
Total Expenditure		7,788	7,143	5,986
Net Surplus/(Deficit)		(394)	-	134
Other Comprehensive revenue and expense		-	-	-
Total Comprehensive revenue and expense		(394)	-	134

Explanations of major variances against budget are provided in note 15.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION

STATEMENT OF FINANCIAL POSITION AS AT 30 JUNE 2022

Assets	Notes	Actual 2022 \$000	Budget 2022 \$000	Actual 2021 \$000
Current assets				
Cash and cash equivalents	4	2,319	2,173	2,180
Receivables	5	21	2	83
Prepayments		191	35	28
Total current assets		2,531	2,210	2,291
Non-current assets				
Property, plant and equipment	6	482	279	191
Intangible assets	7	22	27	89
Total non-current assets		504	306	280
Total assets		3,035	2,516	2,571
Liabilities and taxpayers' funds Current liabilities	8	461	200	283
Payables Employee entitlements	9	346	345	283
Provisions	10	431		- 202
Total current liabilities	10	1,238	545	565
Non-current liabilities		1		1
Employee entitlements	9	32	28	35
Provisions	10	188	-	-
Total non-current liabilities		220	28	35
Total liabilities		1,458	573	600
Net assets		1,577	1,943	1,971
Equity				
General funds		1,559	1,943	1,953
Capital Contribution		18	-	18
Total equity		1,577	1,943	1,971

Explanations of major variances against budget are provided in note 15.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION

STATEMENT OF CHANGES IN EQUITY FOR THE YEAR ENDED 30 JUNE 2022

	Note	Actual 2022 \$000	Budget 2021 \$000	Actual 2021 \$000
Balance at 1 July		1,971	1,943	1,819
Total comprehensive revenue and expense for the year		(394)	-	134
Total Capital Contributions		-	-	18
Balance at 30 June		1,577	1,943	1,971

Explanations of major variances against budget are provided in note 15.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION

STATEMENT OF CASH FLOWS FOR THE YEAR ENDED 30 JUNE 2022

	Notes	Actual 2022 \$000	Budget 2022 \$000	Actual 2021 \$000
Cash flows from operating activities				
Receipts from the Crown		7,330	7,092	5,987
Interest received		6	6	6
Receipts from other revenue		119	45	51
Payments to suppliers		(3,125)	(2,941)	(2,234)
Payments to employees		(3,930)	(4,052)	(3,574)
GST (net)		42	-	(3)
Net cash flows from operating activities		442	150	233
Cash flows from investing activities				
Purchase of property, plant and equipment		(303)	(65)	(68)
Purchase of intangible assets		-	-	-
Sale of property, plant and equipment		-	-	-
Net cash flows from investing activities		(303)	(65)	(68)
Cash flows from financing activities				
Capital Contribution from the Crown		_	-	18
Net cash flows from financing activities		-	-	-
Net (decrease)/increase in cash and cash equivalents		139	85	183
Cash and cash equivalents at the beginning of the year		2,180	2,088	1,997
Cash and cash equivalents at the end of the year	4	2,319	2,173	2,180

Explanations of major variances against budget are provided in note 15.

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.

TRANSPORT ACCIDENT INVESTIGATION COMMISSION NOTES TO THE 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 2022 and were approved by the Board on 23 March 2023.

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 Reduced Disclosure Regime.

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

Significant accounting policies are included in the notes to which they relate.

Significant accounting policies that do not relate to a specific note are outlined below.

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.

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 of 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:

- useful lives and residual values of property, plant, and equipment refer to note 6
- useful lives of acquired software assets refer note 7.

Critical judgements in applying the Commission's accounting policies

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

• leases classification – refer note 12.

2. Revenue

Accounting policy

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 by accruing on a time proportion basis the interest due for the investment.

Rental revenue

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

Breakdown of other revenue and further information

	Actual 2022 \$000	Actual 2021 \$000
Rental revenue from property subleases	41	41
Other revenue	99	4
Total revenue	140	45

3. Personnel Costs

Accounting policy

Superannuation schemes

Defined contribution schemes

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.

Breakdown of personnel costs and further information

	Actual 2022 \$000	Actual 2021 \$000
Salaries and wages	3,624	3,228
Defined contribution plan employer contributions	126	84
Increase/(decrease) in employee entitlements	60	(37)
Recruitment	141	209
Other staff costs	40	52
Total personnel costs	3,991	3,536

Commissioner remuneration

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

Commissioner	Actual 2022 \$000	Actual 2021 \$000
Ms J Meares	107	89
Mr S Davies Howard (Deputy Chief Commissioner)	59	58
Mr R Marchant (Commissioner)	59	55
Ms P Rose QSO (Commissioner)	60	56
Total Commissioner remuneration	285	258

Employee remuneration

	Actual 2022	Actual 2021
Total remuneration paid or payable:		
\$100,000-\$109,999	2	4
\$110,000-\$119,999	4	1
\$120,000-\$129,999	3	3
\$130,000-\$139,999	3	4
\$140,000-\$149,999	1	2
\$150,000-\$159,999	1	1
\$160,000-\$169,999	2	-
\$170,000-\$179,999	1	1
\$180,000-\$189,999	1	-
\$210,000-\$219,999	1	-
\$290,000-\$299,999	1	-
\$300,000-\$309,999	-	1
Total employees	20	17

During the year ended 30 June 2022, 1 employee received compensation and other benefits in relation to cessation totalling \$12,500 (2021: 31,500).

4. Cash and cash equivalents

Accounting policy

Cash and cash equivalents include cash on hand, deposits held on call with banks, and other short-term, highly liquid investments with original maturities of three months or less.

Breakdown of cash and cash equivalents and further information

	Actual 2022 \$000	Actual 2021 \$000
Cash at bank and on hand	1,919	1,427
Short-term deposits maturing in less than 3 months	400	753
Total cash and cash equivalents	2,319	2,180

5. Receivables

Accounting policy

Short-term receivables are recorded at the amount due, less an allowance for credit losses. TAIC applies the simplified expected credit loss model of recognising lifetime expected credit losses for receivables.

In measuring expected credit losses, short-term receivables have been assessed on a collective basis as they possess shared credit risk characteristics. They have been grouped based on the days past due.

Short-term receivables are written off when there is no reasonable expectation of recovery. Indicators that there is no reasonable expectation of recovery include the debtor being in liquidation.

Breakdown of other revenue and further information

	Actual 2022 \$000	Actual 2021 \$000
Receivables (gross)	21	83
Less: Allowance for credit losses	-	-
Receivables	21	83
Receivables comprise:		
Receivables from the sale of goods and services (exchange transactions)	21	83

There have been no changes during the reporting period in the estimation techniques or significant assumptions used in measuring the loss allowance.

6. Property, plant and equipment

Accounting policy

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

All asset 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.

Subsequent costs

Costs incurred subsequent to initial acquisition are capitalised only when 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.

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 writeoff 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	2 – 10	10% to 50%
Furniture and office equipment	2.1 – 14	7% to 48%

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

Impairment of property, plant and equipment

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.

	Buildings \$000	Buildings Computer equipment		Furniture and office equipment	Total
		\$000	\$000	\$000	
Cost					
Balance as at 1 July 2020	356	254	181	791	
Balance at 30 June 2021	356	312	191	859	
Balance at 1 July 2021	356	312	191	859	
Additions	375	23	10	408	
Disposals	-	(118)	-	(118)	
Balance at 30 June 2022	731	217	201	1,149	
Accumulated depreciation					
Balance as at 1 July 2020	212	240	159	611	
Balance at 30 June 2021	235	266	167	668	
Balance at 1 July 2021	235	266	167	668	
Depreciation Expense	78	31	8	117	
Elimination on disposal	-	(118)	-	(118)	
Balance at 30 June 2022	313	179	175	667	
Carrying Amounts					
At 1 July 2020	144	14	22	180	
At 30 June 2021 and 1 July 2021	121	46	24	191	
At 30 June 2022	418	38	26	482	

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

As at year end there was work in progress for the fit out of new office premises at 10 Brandon Street. The fit-out work in progress is recognised at cost and will be depreciated when completed. There is a further capital commitment of \$750k relating to this work (2021: nil).

7. Intangible Assets

Accounting policy

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
Acquired Software	2.1 – 10	10% – 48%

Impairment of intangible assets

Refer to the policy for impairment of property, plant and equipment in note 6. The same approach applies to the impairment of intangible assets.

Breakdown of intangible assets and further information

Movement for each class of intangible assets are as follows:

	Acquired software	Total \$000
	\$000	
Cost		
Balance at 1 July 2020	1,037	1,037
Balance at 30 June 2021 and 1 July 2021	1,037	1,037
Additions	-	-
Disposals	-	-
Balance at 30 June 2022	1,037	1,037
Accumulated amortisation		
Balance at 1 July 2020	854	854
Balance at 30 June 2021 and 1 July 2021	948	948
Amortisation expense	67	67
Disposals	_	-
Balance at 30 June 2022	1,015	1,015
Carrying amounts		
At 1 July 2020	183	183
At 30 June 2021 and 1 July 2021	89	89
At 30 June 2022	22	22

As at year end there was no work in progress or capital commitments (2021: nil)

8. Payables

Accounting policy

Short-term payables are recorded at their face value.

Breakdown of payables

	Actual 2022 \$000	Actual 2021 \$000
Payables under exchange transactions		
Creditors	162	116
Accrued expenses	159	70
Total payables under exchange transactions	311	186
Payables under non-exchange transactions		
Taxes payables (GST, PAYE, and rates)	140	97
Total payables under non-exchange transactions	140	97
Total payables	461	283

9. Employee entitlements

Accounting policy

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.

Long-term employee entitlements

Employee benefits that are due to be settled beyond 12 months after the end of the year in which an employee provides a related service, such as long service leave, have been calculated based on:

- likely future entitlements accruing to employees based on years of service, years to entitlement, the likelihood that employees will reach the point of entitlement, and contractual entitlement information
- the present value of the estimated future cash flows.

Presentation of employee entitlements

Annual leave and vested long service leave are classified as a current liability. Non-vested long service leave expected to be settled within 12 months of balance date is classified as a current liability. All other employee entitlements are classified as non-current liabilities.

Breakdown of employee entitlements

Current portion	Actual 2022 \$000	Actual 2021 \$000
Accrued salaries and wages	120	92
Annual leave	208	177
Long service leave	18	13
Total current portion	346	282

Non-current portion

Long service leave	32	35
Total non-current portion	32	35
Total employee entitlements	378	317

10. Provisions

Accounting policy

General

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 or service potential will be required to settle the obligation, and
- a reliable estimate can be made of the amount of the obligation.

Provisions are measure 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. An increase in the provision due to the passage of time is recognised as a finance cost.

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.

	Actual 2022 \$000	Actual 2021 \$000
Current portion		
Onerous contracts	431	-
Total current portion	431	-
Non-current portion		
Lease make good	100	-
Onerous contracts	88	-
Total non-current portion	188	-
Total provisions	619	-

Onerous contracts provision

TAIC has a non-cancellable lease for office space at 80 The Terrace which will no longer be required from September 2022. This is due to TAIC securing a lease for new office premises at 10 Brandon Street. The lease at 80 The Terrace is due to expire in August 2023. TAIC had planned to sublease 80 The Terrace when it moves to its new office premises, but NBS rating issues have made it difficult to find a sub tenant. A provision has been recognised for the obligation of the future discounted rental payments net of estimated rental revenue.

Lease make-good provision

In respect of its leased premises at 80 The Terrace, TAIC is required to at the expiry of the lease in August 2023 to make good decorating aspects of the floors lease. TAIC has assumed these decorating costs will be incurred in July and August 2023. Further information about TAIC's leasing arrangements is disclosed in Note 12.

11. 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 2022 \$000	Actual 2021 \$000	
Commission Members			
Remuneration	285	258	
Full-time equivalent members	0.83	0.82	
Leadership Team			

Remuneration	708	674
Full-time equivalent members	3	2.95
Total key management personnel remuneration	993	932
Total full-time equivalent personnel	3.83	3.77

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.

12. Operating Leases

Accounting policy

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.

Operating leases as lessee

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

	Actual 2022 \$000	Actual 2021 \$000
Not later than one year	573	503
Later than one year and not later than five years	1,922	573
Later than five years	3,340	-
Total non-cancellable operating leases	5,835	1,076

TAIC leases three properties, the rental of one, is recognised as an onerous lease provision. TAIC also has operating leases for photocopier equipment and meeting room hardware. A significant portion of the total non-cancellable operating lease expense relates to the lease of an office building. The lease expires in September 2034. 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.

13. Financial instruments

Financial instruments categories

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

	Actual 2022 \$000	Actual 2021 \$000
Financial assets measured at amortised cost		
Cash and cash equivalents	2,319	2,180
Receivables	21	83
Total financial assets measured at amortised cost	2,340	2,263
Financial liabilities measured at amortised cost		
Payables (excluding taxes payable)	311	186
Total financial liabilities measured at amortised cost	311	186

TAIC has credit card facilities with the BNZ up to \$200k. A letter of credit up to \$80k is in place with the BNZ for iPayroll Limited, TAIC's payroll services provider.

14. Contingencies

Contingent liabilities

TAIC has a contingent liability relating to make good costs for the lease of new office premises at 10 Brandon Street. Make good costs will only be incurred at the end of the lease if either some of the chattels installed by TAIC are removed, or if the landlord requires TAIC to remove some or all the alterations and/or additions to reinstate the premises. (2021:Nil)

Contingent assets

TAIC has a contingent asset relating to a lease incentive for the new office premises at 10 Brandon Street. The landlord at 10 Brandon Street has agreed to contribute \$400k towards the cost of the fitout works for TAIC's new office premises. This contribution is contingent on the works being complete and a copy of the code of compliance certificate provided to the landlord. This is likely to occur in September 2022. (2021: Nil)

15. Events after the balance date

There were no significant events after balance sheet date.

16. Guarantee

TAIC has a \$10 million guarantee from the Minister of Finance for use in the event of a major transport accident (air, rail or marine) where TAIC would have to hire specialist recovery equipment. This is expected to be a near permanent guarantee.

17. Explanation of major variances against budget

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

Statement of comprehensive revenue and expense

Funding from the Crown

Funding from the Crown is \$155k higher than budgeted due to an expense transfer from 2020/2021 to 2021/2022 for the KTS project.

Other revenue

Other revenue is \$95k higher than budgeted due to revenue received form the Ministry of Foreign Affairs for the provision of maritime investigation assistance in the Cook Islands that was not budgeted for.

Other expenses

Other expenses are \$78k more than budgeted due to a number of contractors used to cover vacancies and provide expertise and assistance with investigations.

Commissioner fees

Commissioner fees are \$13k less than budget due to not all budgeted additional meeting days utilised.

Lease, rentals and outgoings

Lease, rental and outgoings are \$615k more than budget due to the onerous lease and make good provisions for 80 The Terrace office lease.

Depreciation and amortisation expense

Depreciation and amortisation expense is more than budgeted due to depreciation on 80 The Terrace fit out assets adjusted to align with the date when the lease fit out assets were not considered serving their intended use. This date is 5 September 2022, the start of the lease of TAIC's new office premises at 10 Brandon Street.

Statement of financial position

Cash and cash equivalents

Cash and cash equivalents are higher than budgeted mainly due to timing of license fee payments and consultant costs for the KTS. Implementation of the new investigation management system is later than originally budgeted due to availability of the software provider and timing of implementation preparation work required.

Receivables

Receivables are higher than budgeted due to a receivable relating to revenue from the Ministry of Foreign Affairs for the provision of maritime investigation assistance in the Cook Islands that was not budgeted for.

Payables

Payables are higher than budgeted mainly due to timing of creditor payments.

Provisions – Current and Non-current liabilities

Provisions are higher than budget due to the onerous lease and make good provides for 80 The Terrace office lease. When the budget was prepared it was anticipated the office at 80 The Terrace would be subleased for the remaining 14 months of the lease, but earthquake NBS rating issues has made this difficult.

Statement of changes in cash flows

Receipts from other revenue is higher than budget due to revenue received from the Ministry of Foreign Affairs for the provision of maritime investigation assistance in the Cook Islands that was not budgeted for.

Payments to suppliers is \$184k more than budget due to contractors used to cover vacancies.

Payment to employees is \$122k less than budget due to vacancies.

The statement of changes in cash flows shows a net cash flow from investing activities \$238k more than budget due to the work in progress on the fit out of TAIC's new office premises at 10 Brandon Street. Fit out work on the new office premises has commenced earlier than anticipated and budgeted.

18. COVID-19

The effects of the ongoing pandemic on the financial statements are minimal.

Independent auditor's report Ripoata motuhake a te Kaiarotake



To the readers of the Transport Accident Investigation Commission's Financial Statements and Performance Information for the year ended 30 June 2022

The Auditor-General is the auditor of the Transport Accident Investigation Commission (the Commission). The Auditor-General has appointed me, Andrew Steel, using the staff and resources of Moore Markhams Wellington Audit, to carry out the audit of the financial statements and the performance information, including the performance information for appropriations, of the Commission on his behalf.

Opinion

We have audited:

- the financial statements of the Commission on pages 53 to 71, that comprise the statement of financial position as at 30 June 2022, the statement of comprehensive revenue and expenses, 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 36 to 45.

In our opinion:

- the financial statements of the Commission on pages 53 to 71:
 - o present fairly, in all material respects:
 - its financial position as at 30 June 2022; and
 - its financial performance and cash flows for the year then ended; and
 - comply with generally accepted accounting practice in New Zealand in accordance with the Public Benefit Entity International Public Sector Accounting Standards - Reduced Disclosure Regime; and
- the performance information on pages 36 to 45:
 - presents fairly, in all material respects, the performance for the year ended 30 June 2022, including:
 - for each class of reportable outputs:
 - its standards of delivery performance achieved as compared with forecasts included in the performance information expectations for the financial year;

Moore Markhams is a network of independent firms that are each members of Moore Global Network Limited. Member firms in principal cities throughout the world. Moore Markhams Wellington Audit is a partnership of MK Rania and AJ Steel. Moore Markhams independent member firms in New Zealand are in Auckland -Christchurch – Dunedin – Hawke's Bay – Queenstown – Wairarapa – Wanganui – Waverley – Wellington.



- the actual revenue and output expenses as compared with the forecasts included in the performance information expectations for the financial year.
- what has been achieved with the appropriations; and
- the actual expenses or capital expenditure incurred compared with the appropriated forecast expenses or capital expenditure.
- o complies with generally accepted accounting practice in New Zealand.

Our audit was completed on 23 March 2023. This is the date at which our opinion is expressed. We acknowledge that our audit was completed later than required by the Crown Entities Act 2004. This was due to the auditor shortage in New Zealand.

The basis for our opinion is explained below. In addition, we outline the responsibilities of the Commission and our responsibilities relating to the financial statements and the performance information, and we explain our independence.

Basis for our opinion

We carried out our audit in accordance with the Auditor-General's Auditing Standards, which incorporate the Professional and Ethical Standards and the International Standards on Auditing (New Zealand) issued by the New Zealand Auditing and Assurance Standards Board. Our responsibilities under those standards are further described in the Responsibilities of the auditor section of our report.

We have fulfilled our responsibilities in accordance with the Auditor-General's Auditing Standards.

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

Responsibilities of the Commissioners for the financial statements and the performance information

The Commissioners are responsible for preparing financial statements and performance information that are fairly presented and that comply with generally accepted accounting practice in New Zealand.

The Commissioners are responsible for such internal control as it determines is necessary to enable it to prepare financial statements and performance information that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements and the performance information, the Commissioners are responsible for assessing the Commission's ability to continue as a going concern. The Commissioners are also responsible for disclosing, as applicable, matters related to going concern and using the going concern basis of accounting, unless there is an intention to liquidate the Commission or to cease operations, or there is no realistic alternative but to do so.

The Commissioners' responsibilities arise from the Public Finance Act 1989 and the Crown Entities Act 2004.



Responsibilities of the auditor for the audit of the financial statements and the performance information

Our objectives are to obtain reasonable assurance about whether the financial statements and the performance information, as a whole, are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit carried out in accordance with the Auditor-General's Auditing Standards will always detect a material misstatement when it exists. Misstatements are differences or omissions of amounts or disclosures, and can arise from fraud or error. Misstatements are considered material if, individually or in the aggregate, they could reasonably be expected to influence the decisions of readers taken on the basis of these financial statements and performance information.

For the budget information reported in the financial statements and the performance information, our procedures were limited to checking that the information agreed to the Commission's statement of intent.

We did not evaluate the security and controls over the electronic publication of the financial statements and the performance information.

As part of an audit in accordance with the Auditor-General's Auditing Standards, we exercise professional judgement and maintain professional scepticism throughout the audit. Also:

- We identify and assess the risks of material misstatement of the financial statements and the performance information, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- We obtain an understanding of internal control relevant to the audit 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.
- We evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the Commissioners.
- We evaluate the appropriateness of the reported performance information within the Commission's framework for reporting its performance.
- We conclude on the appropriateness of the use of the going concern basis of accounting by the Commission's and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Commission's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements and the performance information or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Commission to cease to continue as a going concern.



• We evaluate the overall presentation, structure and content of the financial statements and the performance information, including the disclosures, and whether the financial statements and the performance information represent the underlying transactions and events in a manner that achieves fair presentation.

We communicate with the Commissioners regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

Our responsibilities arise from the Public Audit Act 2001.

Other Information

The Commissioners are responsible for the other information. The other information comprises the information included on pages 1 to 71 but does not include the financial statements and the performance information, and our auditor's report thereon.

Our opinion on the financial statements and the performance information does not cover the other information and we do not express any form of audit opinion or assurance conclusion thereon.

In connection with our audit of the financial statements and the performance information, our responsibility is to read the other information. In doing so, we consider whether the other information is materially inconsistent with the financial statements and the performance information, or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If, based on our work, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Independence

We are independent of the Commission in accordance with the independence requirements of the Auditor-General's Auditing Standards, which incorporate the independence requirements of Professional and Ethical Standard 1: *International Code of Ethics for Assurance Practitioners* issued by the New Zealand Auditing and Assurance Standards Board.

Andrew Steel Moore Markhams Wellington Audit On behalf of the Auditor-General Wellington, New Zealand

Kōwhaiwhai – Māori scroll designs

TAIC commissioned its four kōwhaiwhai, Māori scroll designs, from artist Sandy Rodgers (Ngāti Raukawa, Tūwharetoa, MacDougal). Sandy began from thinking of the Commission as a vehicle or vessel for seeking knowledge to understand transport accident tragedies and how to avoid them. A 'waka whai mārama' (i te ara haumaru) is 'a vessel/vehicle in pursuit of understanding'. Waka is a metaphor for the Commission. Mārama (from 'te ao mārama' – the world of light) is for the separation of Rangitāne (Sky Father) and Papatūānuku (Earth Mother) by their son Tāne Māhuta (god of man, forests and everything dwelling within), which brought light and thus awareness to the world. 'Te ara' is 'the path' and 'haumaru' is 'safe' or 'risk free'.

Corporate: Te Ara Haumaru - the safe and risk free path



The eye motif looks to the future, watching the path for obstructions. The encased double koru is the mother and child, symbolising protection, safety and guidance. The triple koru represents the three kete of knowledge that Tāne Māhuta collected from the highest of the heavens to pass their wisdom to humanity. The continual wave is the perpetual line of influence. The succession of humps represents the individual inquiries. Sandy acknowledges Tāne Māhuta in the creation of this Kōwhaiwhai.

Aviation: Ngā hau e whā - the four winds



To Sandy, 'Ngā hau e whā' (the four winds), commonly used in Te Reo Māori to refer to people coming together from across Aotearoa, was also redolent of the aviation environment. The design represents the sky, cloud, and wind. There is a manu (bird) form representing the aircraft that move through Aotearoa's 'long white cloud'. The letter 'A' is present, standing for a 'Aviation'. Sandy acknowledges Ranginui (Sky father) and Tāwhirimātea (God of wind) in the creation of this Kōwhaiwhai.

Rail: rerewhenua - flowing across the land



The design represents the fluid movement of trains across Aotearoa. 'Rere' is to flow or fly. 'Whenua' is the land. The koru forms represent the earth, land and flora that trains pass over and through. The letter 'R' is present, standing for 'Rail'. Sandy acknowledges Papatūānuku (Earth Mother) and Tāne Mahuta (God of man and forests and everything that dwells within) in the creation of this Kōwhaiwhai.

Maritime: Ara wai - waterways



The sections of waves flowing across the design represent the many different 'ara wai' (waterways) that ships sail across. The 'V' shape is a ship's prow and its wake. The letter 'M' is present, standing for 'Maritime. Sandy acknowledges Tangaroa (God of the sea) in the creation of this Kōwhaiwhai.

Annual Report 2022

Transport Accident Investigation Commission Te Kōmihana Tirotiro Aituā Waka www.taic.org.nz | inquiries@taic.org.nz Phone +64 4 473 3112 or 0800 188 926 Level 7 | 10 Brandon Street PO Box 10 323 | Wellington 6140 | New Zealand