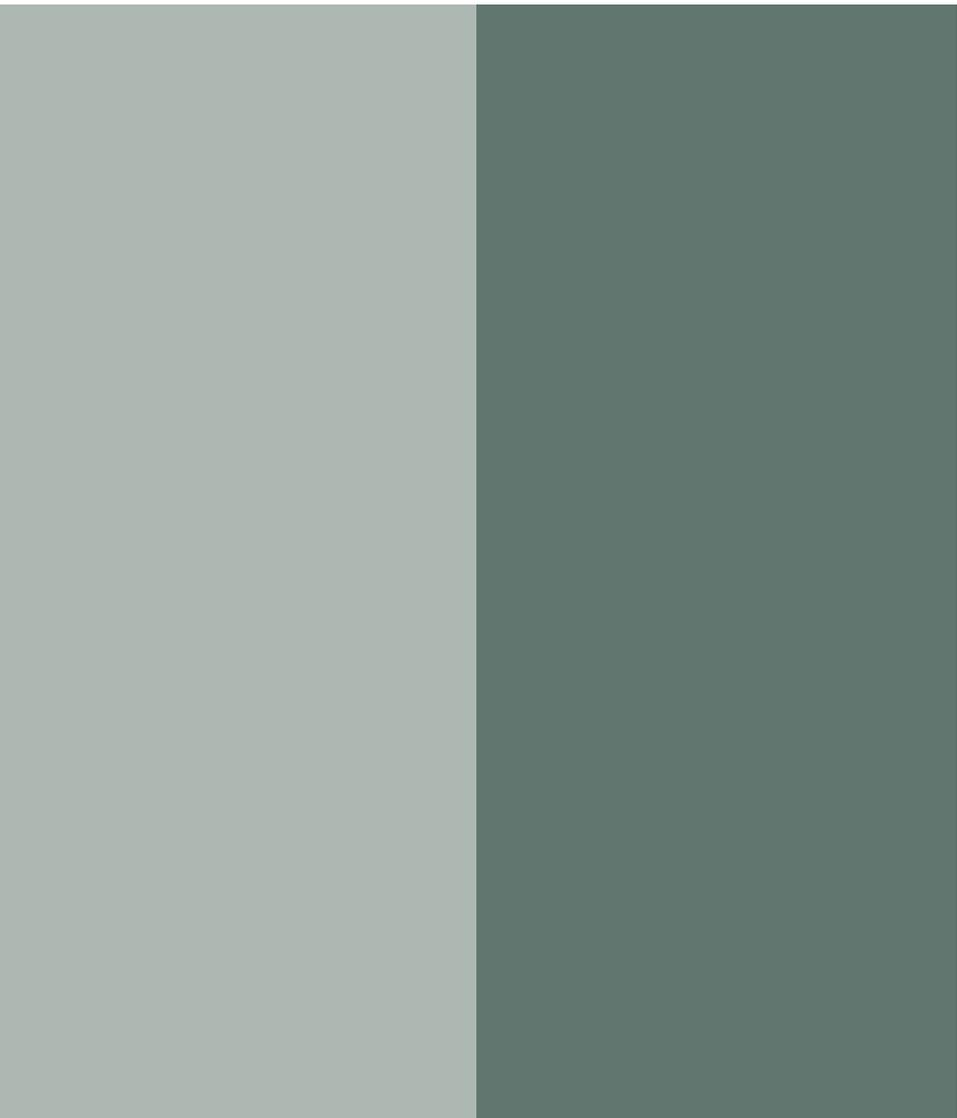




B.29 [18m]

Tertiary education institutions: Results of the 2017 audits





Tertiary education institutions: Results of the 2017 audits

Presented to the House of
Representatives under section 20 of
the Public Audit Act 2001.

November 2018

ISBN 978-0-478-44295-3

Contents

Auditor-General's overview	3
Main campus or headquarters of the 27 tertiary education institutions	7
Types of tertiary education institution	8
Part 1 – Introduction	9
Part 2 – Audit reports for 2017	10
Responsibilities of tertiary education institutions for financial statements	10
Our audits of the financial statements	10
Our audits of the service performance information	12
Providing timely financial and performance information	13
Part 3 – Financial performance of tertiary education institutions	14
Overall financial performance for 2017	14
Part 4 – Financial pressures in institutes of technology and polytechnics	18
Declining revenue from domestic full-time students	18
Changes in international student participation in New Zealand tertiary education	19
Operating costs increasing while revenue is declining	22
Investment decisions	23
Appendices	
1 – Governance and funding arrangements	25
2 – Non-standard audit reports for 2017	27
Figures	
1 – Aggregated operating surpluses and deficits for tertiary education institutions, by type, 2015 to 2017	14
2 – The number of institutes of technology and polytechnics in surplus or deficit, and the combined value of those surpluses and deficits, 2009 to 2017	15
3 – Institutes of technology and polytechnics in surplus or deficit in 2017	16
4 – Number of visas approved for first-time, full-fee-paying students, by nationality and year, 2008/09 to 2017/18	20

Auditor-General's overview

Tertiary education is important to New Zealanders' personal development and economic well-being. Young people, their whānau, adults looking to retrain or learn a new skill, and employers all rely on the quality and stability of tertiary education providers. Tertiary education is also important to New Zealand's economy and is a significant area of public expenditure, with about \$3 billion each year invested in about 650 tertiary training providers.

This report sets out our observations from our audits of the 27 public tertiary education institutions (TEIs). They consist of eight universities, 16 institutes of technology and polytechnics (ITPs), and three wānanga. There were 405,000 people, including 56,000 international students, enrolled at these institutions in 2017.

Main findings

All TEIs are operating in an increasingly challenging environment.

Domestic student enrolments rise and fall relative to unemployment rates – enrolments go down when unemployment rates go down. About 7000 fewer full-time domestic students enrolled at TEIs in 2017 compared to 2016. The Tertiary Education Commission's analysis shows the number of domestic students enrolling at TEIs has fallen by a third in the last 10 years.

The demographics and number of international students are changing, and there is increased domestic and global competition for international students. The Government also expects that its 2018 changes to post-study work visa entitlements might mean fewer international students applying to study some diploma or certificate-level courses in New Zealand.

The operating environment affected each type of TEI differently

Universities and wānanga were, for the most part, financially stable in 2017. The universities' combined surplus in 2017 increased by \$18 million to \$188 million. Although demand from domestic students dropped by 1.1% overall, the number of full-time international students enrolled increased by an average of 6.9%. Only one university had fewer international students in 2017 than in 2016.

Not all ITPs are experiencing financial difficulties. However, the effect of the changes in student numbers have been more strongly felt by ITPs. Demand from domestic students dropped by 8.1% overall, and 10 of the 16 ITPs had fewer international students in 2017 than they had in 2016.

As a result, just seven ITPs broke even or better, down from 11 in 2016. The remaining nine recorded a combined deficit of \$71 million.

For some time, ITPs have relied on increases in revenue from international students to offset the costs of running the ITPs and to provide new facilities.

However, that reliance brought risks of dependency on students from some countries. The decline in students from those countries, coupled with falling domestic enrolments, has meant that some ITPs were no longer able to cover their expenses. The Crown has had to provide support to these ITPs – sometimes with little warning.

My views

All TEIs are operating in a changing student and policy environment. However, the operating environment for ITPs in particular is challenging, and concerns about the viability of any institution is likely to adversely affect its student population.

The quality of governance and robust financial management are always important but, in the current environment, both need to be exemplary. In particular, I expect ITP councils to focus particular attention on four aspects – the robustness of financial forecasts, the quality of significant business cases for investment in capital assets, strong governance oversight of financial controls and management, and transparent non-financial performance reporting.

Financial forecasts

Student numbers are a critical element of ITP forecasts. My staff noted that some ITPs were optimistic when forecasting the likely number of student enrolments; for example, projecting increases that were not in keeping with previous trends.

Councils need to be aware of this optimism bias and the risks it carries. Some ITPs have been slow to reflect foreseeable changes in demand, such as the cyclical nature of the domestic economy and changing patterns of demand for international education.

Councils should be ensuring they get good quality financial forecasts that include well-evidenced trend and risk analysis at the local, regional, national, and international level. Scenario planning and sensitivity analysis are important aspects of that forecasting.

Business cases to support investment in capital assets

Many ITPs have embarked on capital programmes to build or upgrade facilities. These are long-term investments that carry both opportunity and risk for an institution. ITPs often measured the affordability of these programmes based on increasing student numbers, particularly international students.

We analysed business cases for our 2017 report *Investing in tertiary education assets*. Our analysis showed that the planning assumptions about expected student numbers were not robust, because they failed to take account of the national and global competitive environment for students.

We also saw a lack of “whole-of-sector” thinking for investment decisions more broadly. For example, many ITPs develop their own course content, despite similar courses running elsewhere. There are also multiple information technology systems for managing student enrolments, information and services, and payroll and financial management.

Some TEIs told us that the competitive funding model and regulatory environment made it unlikely that they would work with others. By 2017, few had done so and that continues to be the case.

I encourage councils to thoroughly test investment business cases, especially the financial assumptions underlying the recommended options. Further, because of mounting financial pressures, I encourage ITPs to work together where capital investment is required and it makes good sense to do so.

Strong governance oversight of financial controls

Councils need to be satisfied that financial management controls, including budget monitoring, are working well. Twelve ITPs did not achieve their budgets for 2017.

Of the seven ITPs that returned a financial surplus in 2017, just two met or exceeded the Tertiary Education Commission's low-risk threshold for financial return relative to revenue.

The main reason for budget shortfalls was ITPs not achieving their forecast student numbers. When those enrolments fell short of targets, the ITPs affected did not receive as much funding as planned, but had already committed to costs based on the expected number of student enrolments.

Some ITPs have not been quick to adjust their spending in line with falling income, spending more than planned on expenses at the same time that revenue was decreasing. This has eroded the financial “headroom” ITPs need to be able to invest in meeting the changing expectations of students and employers.

Non-financial reporting

As public organisations, TEIs are accountable for their performance as well as the money they spend. Consequently, TEIs are required to prepare a statement of service performance for their annual reports. A statement of service performance should set out what the TEI expected to achieve, and its actual performance.

Most TEIs' performance reporting gives a reasonable account of their academic results. However, most reported only on the Investment Plan measures (or a sub-set of them) aligned to the funding they receive from the Tertiary Education Commission. Not many of the TEIs have a robust set of measures for their wider strategic goals and objectives. For example, one TEI has an objective to enhance stakeholder relationships, but its measure is to hold two meetings a year.

A few TEIs are also failing to properly highlight significant performance results in their annual reporting. For example, my auditors found discrepancies between the sentiments expressed in the foreword of an annual report and the actual results in the statement of service performance. Often, limited or no explanation was given for a variance from what was expected. In my view, TEIs need to report more transparently when results do not meet targets.

Recent changes to the Education Act 1989 means that the TEIs' 2019 statements of service performance need to comply with generally accepted accounting practice (GAAP). GAAP aims to improve the consistency and transparency of reporting.

If some TEIs do not improve the content of their statements of service performance in keeping with GAAP, they risk receiving a qualified audit opinion.

In our experience, changes in reporting requirements like this take time to settle in and need the commitment of senior management. Councils should consider asking their chief executives to report on the state of readiness for the new requirements. I have asked my auditors to assess the TEIs' 2018 annual reports against GAAP on a "dry-run" basis, to help in identifying any improvements needed. I encourage TEIs to start their own improvement plan now, so that they are better placed to meet the new requirements in 2019.

Possible changes to the organisation of institutes of technology and polytechnics

The Government has asked the Tertiary Education Commission to look at possible changes for ITPs. The *ITP Roadmap 2020* project is considering reshaping the ITP sector. The project aims are to improve sustainability while preserving the strengths of ITPs and regional access to tertiary education. The Minister of Education expects to report to Cabinet on alternatives by the end of 2018.

We will continue to provide assurance on TEIs' financial statements and performance reporting, alert council members to risks where we see them, and recommend improvements where they are needed.



John Ryan
Controller and Auditor-General

21 November 2018

Main campus or headquarters of the 27 tertiary education institutions



Types of tertiary education institution

The characteristics of tertiary education institutions are set out in the Education Act 1989.

Universities (8)	
A university is characterised by a wide diversity of teaching and research, especially at a higher level, that maintains, advances, disseminates, and assists the application of, knowledge, develops intellectual independence, and promotes community learning.	
University of Auckland	Massey University
University of Canterbury	Lincoln University
University of Otago	Victoria University of Wellington
University of Waikato	Auckland University of Technology
Polytechnics (including Institutes of Technology) (16)	
A polytechnic (including Institutes of Technology) is characterised by a wide diversity of continuing education, including vocational training, that contributes to the maintenance, advancement, and dissemination of knowledge and expertise and promotes community learning, and by research, particularly applied and technological research, that aids development.	
Unitec Institute of Technology	Otago Polytechnic
Ara Institute of Canterbury	Southern Institute of Technology
Eastern Institute of Technology	Western Institute of Technology at Taranaki
Wellington Institute of Technology	Waikato Institute of Technology
Universal College of Learning	Whitireia Community Polytechnic
Manukau Institute of Technology	The Open Polytechnic of New Zealand
Nelson Marlborough Institute of Technology	Tai Poutini Polytechnic
Northland Polytechnic	Toi Ohomai Institute of Technology
Wānanga (3)	
A wānanga is characterised by teaching and research that maintains, advances, and disseminates knowledge and develops intellectual independence, and assists the application of knowledge regarding ahuatanga Māori (Māori tradition) according to tikanga Māori (Māori custom).	
Te Wānanga O Raukawa	
Te Wānanga O Aotearoa Te Kuratini O Ngā Waka	
Te Whare Wānanga O Awanuiārangi	

Introduction

- 1.1 Tertiary education is important to New Zealand's economy and to New Zealanders' personal development and economic wellbeing. The *Tertiary Education Strategy 2014-2019* states that:

Skilled, knowledgeable individuals are essential to the success of businesses and other organisations. Access to skilled workers allows businesses to increase the value of their products and services and to pay higher wages. In turn, people are better off, healthier and happier, and New Zealand is a more attractive place to live and work.¹

- 1.2 A 2017 working paper prepared for the Organisation for Economic Co-operation and Development on adapting to the changing labour market in New Zealand states that:

Young New Zealanders will need to continue their education to higher levels than in the past and acquire skills that are more highly valued in the labour market. To maintain valuable skills, workers of all ages will need to engage more in lifelong learning. Some will need to retrain when their occupation becomes obsolete.²

- 1.3 Tertiary education includes all types of post-school education and training, such as adult community education, vocational education and training, degree-level study, and research. The Tertiary Education Commission (TEC) invests more than \$3 billion annually into about 650 tertiary education organisations, including 216 private training establishments and 11 industry training organisations.
- 1.4 This report summarises our audits of the 27 public tertiary education institutions (TEIs) that provide training, education, and research services. These 27 TEIs consist of eight universities, 16 institutes of technology and polytechnics (ITPs), and three wānanga. The quality of teaching and learning at TEIs is outside of the scope of this report.³
- 1.5 Appendix 1 explains the governance and funding arrangements for TEIs.
- 1.6 Wherever possible, data in this report comes from audited financial statements and statements of service performance in the TEIs' annual reports. However, some TEIs do not report separately on domestic and international full-time students, and we have had to calculate those numbers from other published but unaudited information in the TEIs' annual reports.

1 Published by the Ministry of Education and the Ministry of Business, Innovation and Employment, March 2014, Wellington.

2 Carey, D. (2017), "Adapting to the changing labour market in New Zealand", OECD Economics Department Working Papers, No. 1420, OECD Publishing, Paris. Working papers. The opinions expressed and arguments employed are those of the author(s).

3 The New Zealand Qualifications Agency uses external evaluation and review (EER) to review the current quality of performance within tertiary education organisations. After each EER, NZQA publishes a report on its website.

2

Audit reports for 2017

Responsibilities of tertiary education institutions for financial statements

- 2.1 Under the Crown Entities Act 2004, TEIs are responsible for preparing annual financial statements for their organisations.
- 2.2 Two members of the governing body (the council) must sign a “statement of responsibility” that says that those members were responsible for:
- the preparation of the financial statements and statement of service performance and for the judgements in them;
 - providing reasonable assurance on the integrity and reliability of the financial and performance reporting, which fairly reflected the financial position and operations of the TEI; and
 - any end-of-year information provided by the TEI under the Public Finance Act 1989, regardless of whether that information was included in the TEI’s annual report.
- 2.3 By default, TEIs prepare their annual reports using the “going concern” assumption. This means that, in preparing its financial statements, the TEI had assessed that it did not intend or need to stop or materially cut back its operations in the foreseeable future. The foreseeable future is defined as 12 months from the TEI’s reporting date.⁴
- 2.4 If, when making this assessment, the TEI was aware of uncertainties related to events or conditions that could cast significant doubt on the TEI’s ability to continue as a going concern, it should disclose those uncertainties in notes to the financial statements.

Our audits of the financial statements

- 2.5 The Auditor-General appoints auditors to carry out annual audits on his behalf. An annual audit in the public sector includes:
- examining a public organisation’s financial statements, performance information, and other information that must be audited, including a statement of service performance;
 - assessing the results of that examination against a recognised framework – for TEIs’ financial statements, this is generally accepted accounting practice (GAAP); and
 - expressing an audit opinion.

⁴ The definition is in an international public sector accounting standard on the presentation of financial statements, referred to as IPSAS1.

- 2.6 Auditing TEIs involves obtaining reasonable assurance that the financial statements and other information are not materially misstated. Where we are satisfied, we issue a standard audit report with an unmodified opinion.

Standard audit reports – unmodified audit opinions

- 2.7 We issued standard audit reports with unmodified opinions for 25 of the 27 TEIs. This means that, in our view, the financial statements that we audited complied with GAAP and fairly reflected each TEI's financial position and the results of its operations and cash flows for 2017.

Non-standard audit report – unmodified audit opinion

- 2.8 If we consider a TEI to be in serious financial difficulty based on the information presented for audit, we will check that the TEI has disclosed this uncertainty in its financial statements. We draw attention to these disclosures by issuing a non-standard audit report containing an "emphasis of matter" paragraph. Using an emphasis of matter paragraph does not change, or modify, the audit opinion because the information is still fairly represented.
- 2.9 We issued a non-standard audit report for Unitec Institute of Technology (Unitec), drawing attention to disclosures in the financial statements about the ongoing financial viability of Unitec.

Non-standard audit report – qualified opinion

- 2.10 We qualify the audit opinion only where we consider that the financial statements or statements of service performance could be misleading. Where this happens, we issue a qualified audit opinion, and explain why in our audit report. We issued one qualified audit opinion for Tai Poutini Polytechnic (Tai Poutini), because of the way it had accounted for revenue and debt in 2016 and 2017.
- 2.11 We also included an emphasis of matter paragraph in Tai Poutini's audit report, drawing attention to disclosures in the financial statements about Tai Poutini's ongoing financial viability.
- 2.12 Appendix 2 describes in more detail the events that led us to issue non-standard reports for Tai Poutini and Unitec.

Our audits of the service performance information

- 2.13 We also audit the statement of service performance in the TEIs' annual reports. This means that readers can be confident that the information reported by TEIs in their statements of service performance fairly reflect their achievement of the performance targets they have chosen to report on.
- 2.14 We have been auditing the content of statements of service performance for some years, but there has been no legal compulsion for these statements to comply with GAAP. This meant that we could not qualify our audit opinion unless we considered there were serious deficiencies⁵ in the information reported. We were limited to making recommendations for change.
- 2.15 For example, we made several suggestions to individual TEI councils and managers to further improve their performance reporting. These suggestions included:
- more clearly reporting on progress against the TEIs' strategic objectives, as well as achievement of investment plan measures;
 - providing more context to inform the reader about why certain measures were important, and what good performance would look like; and
 - providing clearer explanations where there was variation between actual results and targets.
- 2.16 A few TEIs were failing to highlight significant performance results in their annual reporting. We saw some discrepancies between the sentiments expressed in the forewords of annual reports and the actual results in the statements of service performance. Often, limited or no explanation was given for a variance from what was expected. We expect more transparency when results do not meet targets.
- 2.17 In compiling the analysis for this report, we noticed that some non-financial information is expressed in ways that makes comparison difficult. For example, not all TEIs consistently report the number of students enrolled. Some report on headcounts and others use the "full-time equivalent student" measure.⁶
- 2.18 Recent changes to the Education Act 1989 mean that the TEIs' statements of service performance will have to comply with GAAP for 2019 and beyond. Consequently, some TEIs may be at risk of having their audit opinions qualified because of inadequate statements of service performance.

⁵ Examples of a serious deficiency would be the complete omission of any service performance information, significant and persistent errors in what was presented, or an inability to show how the information had been calculated.

⁶ The equivalent full-time student measure is for funding purposes. Headcounts count the actual number of students. For example, two half-time students would be counted as one equivalent full-time student, but a headcount would count them separately.

- 2.19 We encourage TEIs to discuss the new reporting requirements with their auditors. We have asked auditors to assess the TEIs' 2018 audit reporting to highlight where improvements are needed before the new requirements are in place. This should give TEIs some time to realign their reporting with the new requirements.

Providing timely financial and performance information

- 2.20 It is important that TEIs recognise that accountability is not achieved until audited financial and service performance information is made publicly available. Consequently, an important part of the performance and accountability of public organisations is issuing audited financial statements and performance information within statutory time frames. For the 2017 TEI audits, the statutory deadline was 30 April 2018.
- 2.21 Three TEIs breached the statutory reporting deadline – Unitec, Tai Poutini, and Southern Institute of Technology. Unitec and Tai Poutini's breaches were related to the going concern issues referred to above. Southern Institute of Technology was late because one of its subsidiaries was unable to prepare its financial statements for audit in a timely way.

3

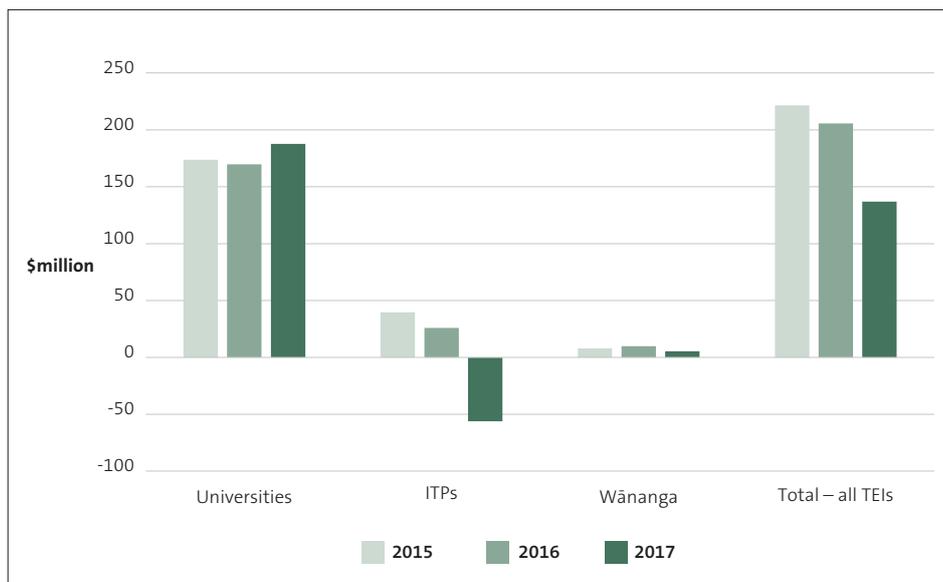
Financial performance of tertiary education institutions

Overall financial performance for 2017

3.1 It is important that TEIs are financially stable, to support the consistent delivery of high-quality education that students can have confidence in. An operating surplus is one indicator of financial health. Figure 1 shows the aggregated surplus or deficit returned by each part of the tertiary education sector in 2017.

Figure 1
Aggregated operating surpluses and deficits for tertiary education institutions, by type, 2015 to 2017

The financial results for ITPs show a decline from a combined \$26 million surplus in 2016 to a combined \$56 million deficit in 2017.



Source: Office of the Auditor-General database of financial statements.

Note: The aggregated figures in Figure 1 reflect the total surpluses and deficits recorded at the TEIs' "group" level. This might include revenue and expenditure from activities other than teaching, learning, and research.

3.2 The TEC has a framework to monitor the financial viability of TEIs. One measure the TEC uses is operating surplus as a percentage of revenue. The TEC sets its low-risk threshold at 3% or above.⁷

Financial performance of universities and wānanga

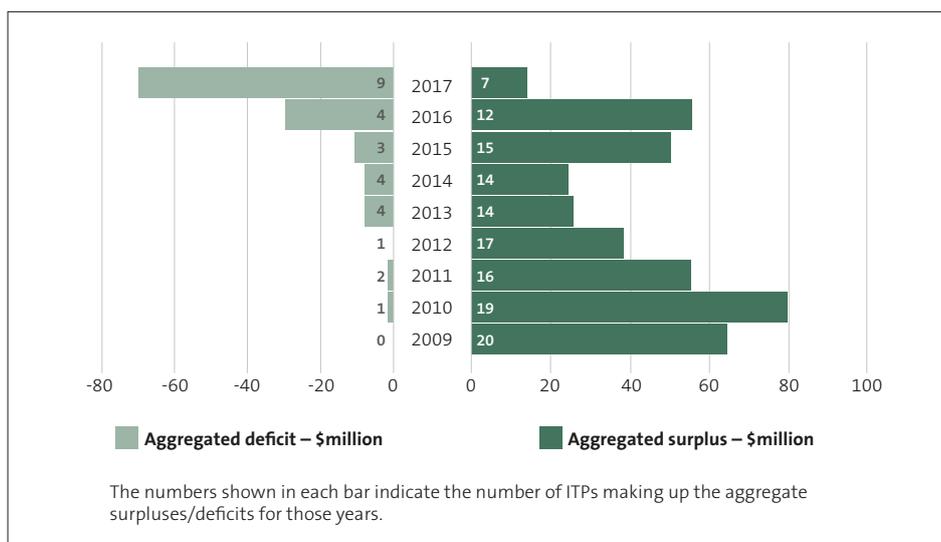
- 3.3 Most of the universities are financially sound. Figure 1 shows they collectively increased their operating surpluses from \$170 million in 2016 to \$188 million in 2017. Two universities are in their last year of receiving Crown support⁸ after the Canterbury earthquakes of 2010 and 2011. These two universities are below the 3% operating surplus guideline, but the remainder are meeting or exceeding it.
- 3.4 The three wānanga also returned a combined surplus in 2015, 2016, and 2017. None recorded a deficit for 2017, although the combined surplus declined to \$5.5 million from \$9.9 million in 2016. Two wānanga did not achieve their own budgeted surplus or the TEC’s operating surplus guideline.

Financial performance of the institutes of technology and polytechnics

- 3.5 In Figure 1, the financial results for ITPs show a decline from a combined \$40 million surplus in 2015 to \$26 million in 2016, and then a deficit of \$56 million in 2017.

Figure 2
The number of institutes of technology and polytechnics in surplus or deficit, and the combined value of those surpluses and deficits, 2009 to 2017

Not all ITPs are in financial difficulty, but the combined deficit for nine of the 16 ITPs in 2017 was almost \$70 million.



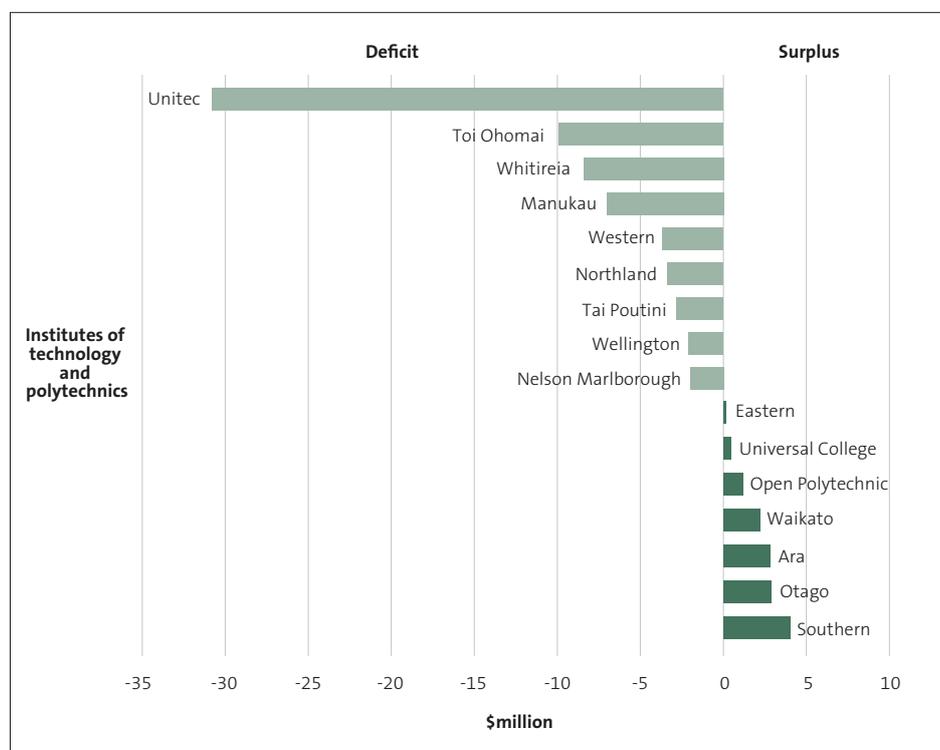
Source: Office of the Auditor-General database of financial statements.
Note: The number of ITPs has reduced through mergers since 2009.

⁸ The Crown agreed that the University of Canterbury and Lincoln University would not have to repay funding received if those universities did not achieve the funded number of student enrolments after the Canterbury earthquakes, up to and including 2018. These two universities are discussing potential partnership options.

- 3.6 Not all ITPs are in financial difficulty, but Figure 2 shows an increasing number of ITPs in deficit since 2009, with a significant increase between 2016 and 2017. Figure 2 also shows that the combined deficit is getting bigger. In 2017, nine ITPs (up from four in 2016) returned a combined deficit of almost \$70 million (up from a \$30 million deficit in 2016).
- 3.7 Just seven ITPs returned a surplus in 2017, and one of those was marginal. This result was down from 12 ITPs in surplus in 2016. Only two ITPs (Southern Institute of Technology and Otago Polytechnic) returned an operating surplus of 3% of revenue or more. Figure 3 shows which ITPs returned a surplus or deficit in 2017, together with the size of that surplus or deficit.

Figure 3
Institutes of technology and polytechnics in surplus or deficit in 2017

In 2017, Unitec Institute of Technology had the largest deficit and Southern Institute of Technology had the largest surplus.



Source: Office of the Auditor-General database of financial statements.

- 3.8 By October 2018, four ITPs were subject to intervention from the Crown because of severe financial difficulty. Others had enhanced support in place, such as Crown-appointed financial advisors.
- 3.9 We were concerned by the sudden deterioration in financial outlook for two of these ITPs, after the financial year-end and after we had issued our audit report. Our concerns related to the quality and timeliness of the financial forecasts provided to the ITPs' council. Our annual audits give reasonable assurance that TEIs have appropriate financial controls and systems in place to produce their financial statements. However, it is the role of council members to ensure that the chief executive and their staff use those systems to provide the good quality and timely information that council members need to oversee performance.
- 3.10 The TEC forecasts that most ITPs and one university will be in a deficit position by 2020. The TEC is leading a project called the ITP Roadmap 2020, to explore options for reshaping the ITP sector. The project is partly to improve the financial viability of ITPs while retaining their strong regional contribution to skills and the economy. The Minister of Education expects to report to Cabinet by the end of 2018.
- 3.11 As a consequence of the increasing financial pressures in the ITP sector, we expect consideration of going concern issues will feature more in our work and our reporting on the 2018 audits. In Part 4, we discuss the causes of the financial pressures in more detail, and highlight areas where councils need to remain vigilant.

4

Financial pressures in institutes of technology and polytechnics

Summary of our observations

- 4.1 As well as drawing attention to going concern issues at two ITPs, our reporting to the councils of several other ITPs highlighted increasing financial pressures.
- 4.2 In our view, financial sustainability is the most significant challenge for many of the TEIs, but in particular the ITPs. These financial challenges are contributing to a climate of pressure that can increase risks to the delivery of high-quality education and training for students.
- 4.3 The main causes of those pressures were:
- declining domestic student enrolments;
 - changes in international student participation in New Zealand tertiary education;
 - operating costs increasing while revenue was declining; and
 - the effects of previous decisions to invest in assets, made when revenue was higher.
- 4.4 ITPs need to improve their financial forecasting, governance oversight of financial controls, and investment in assets.

Declining revenue from domestic full-time students

- 4.5 The number of domestic students has been declining overall for some years. TEC analysis shows that the number of domestic students has fallen by a third in the last 10 years. The TEC notes that more young people are choosing to directly enter the labour market or choosing to stay longer at secondary school.
- 4.6 The TEC allocates government funding to TEIs based on domestic full-time student enrolments set out in their investment plans. This Student Achievement Component funding is agreed in advance, based on projected enrolments in TEIs' investment plans, and revised as actual enrolment data becomes available.
- 4.7 If data gathered during the year suggests that a TEI will fail to achieve the agreed number of enrolments, an "in-plan" adjustment is made to reduce the amount of funding due. If the funding has already been paid, the TEI needs to repay any overfunded amount to the TEC.⁹ In some instances, amendments during the year can increase funding because of higher demand. The TEC determines the final funding amounts, along with any repayments, after the end of the year, when TEIs submit their final enrolment data.

⁹ TEIs have to pay back funding if the total dollar value of the provision that was delivered within the funding year is less than 99% of the total value.

Observations from our audits

- 4.8 Nationally, about 200,000 domestic full-time students enrolled¹⁰ in TEIs in 2017, which is about 7000 fewer than the number of domestic full-time student enrolments in 2016.
- 4.9 The decrease of more than 7000 domestic student enrolments was not evenly spread between the three types of TEIs or within them. Domestic full-time student enrolments declined by 1243 at universities, by 555 at wānanga, and by 5356 at the ITPs. Only the University of Canterbury and Te Wānanga O Raukawa had more domestic students in 2017 than in 2016.
- 4.10 In our view, some of the enrolment projections we have seen in the investment plans are overly optimistic, and some TEIs are not meeting their forecasts in successive years. As Crown entities, TEIs are responsible for the quality of the information and forecasts they produce. However, we understand that the TEC is increasingly challenging the basis for these projections.

Changes in international student participation in New Zealand tertiary education

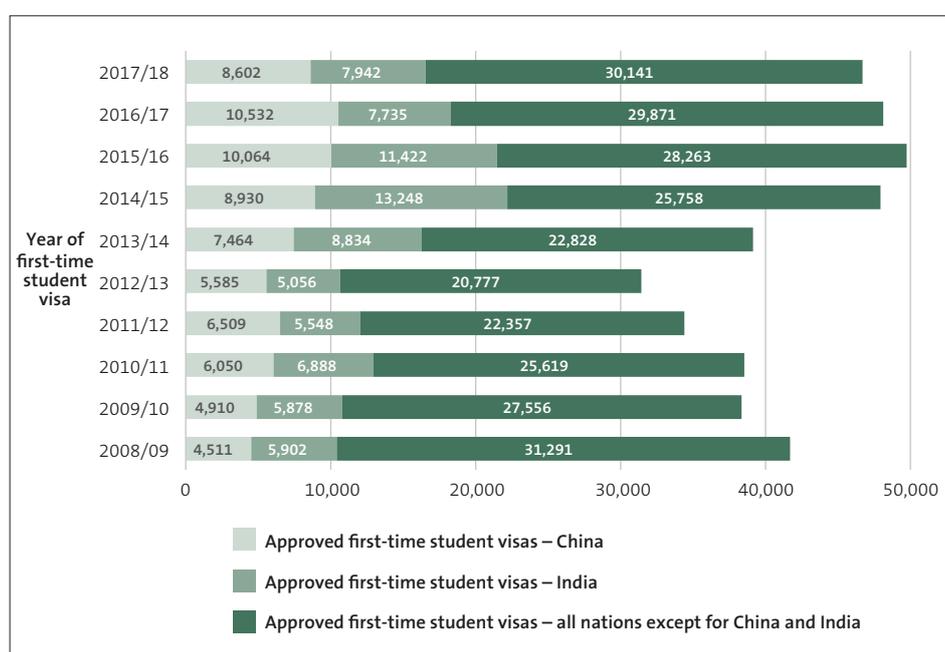
- 4.11 TEIs have historically made up all, or some, of the shortfall in revenue from declining domestic student numbers by attracting international students who pay full fees. Attracting international students has been part of the *Tertiary Education Strategy 2014-2019*.
- 4.12 Figure 4 shows that, overall, Immigration New Zealand issued 46,685 student visas to first-time, full-fee-paying international students in 2017/18.¹¹ This was 1453 fewer than in 2016/17, but the fourth highest in the last 10 years. The total number of visas approved for students from all nations except for China and India was just more than 30,000, the highest in the last nine years. We show these nations separately because they have been the largest and second-largest nationalities accessing education in New Zealand in the recent past.

¹⁰ Where we use the term "domestic full-time students", we are using the EFTS measure.

¹¹ The number of first-time student visas issued does not equate to student enrolments in the same year. Most full-time students will start studying in the year after their visa is approved. Some students might defer their study or not study at all. Also, some students might take courses that are calculated to be less than one equivalent full-time student. The number of students holding a "Valid Student Visa" is higher than the number of students with first-time student visas. This is because the number of valid student visas includes people in all years of study. There were 75,578 valid student visa holders on 30 June 2017.

Figure 4
Number of visas approved for first-time, full-fee-paying students, by nationality and year, 2008/09 to 2017/18

First-time student visas for Chinese students dropped by about 18% in 2017/18. The decrease in first-time student visa approvals for Indian students started in 2015/16.



Source: Immigration New Zealand.

Note: School-age children of other visa holders have a special category of visa (a dependent child student visa) and are not included in these figures.

- 4.13 Figure 4 also shows the decrease in visa approvals for Indian students started in 2015/16. In 2014/15, there were 13,248 first-time student visa approvals, 11,422 in 2015/16, and 7735 in 2016/17. Education New Zealand considers that most of this decrease was students who might have otherwise intended to study at private training establishments. However, a number of ITPs also had fairly high exposure to changes in demand from India.
- 4.14 The number of approved first-time student visas for 2017/18 was marginally higher at 7942. Recent information from Education New Zealand suggests first-time student visa approvals for Indian students have now stabilised.
- 4.15 The other country that provides a large number of international students is China. Figure 4 shows that approvals of first-time student visas for Chinese students dropped by about 18% in 2017/18. The number of visas approved is now just below the number of approvals for study visas in 2014/15.

- 4.16 An independent analysis by the ICEF Monitor¹² highlights that “the college-aged population in China – that is, the 18-24-year-old group – is projected to decrease by more than 40%, from 176 million to 105 million, between 2010 and 2025”. The Government stated in its *International Education Strategy 2018-2030* that it expects the number of Chinese students to decrease further after 2025.¹³ The Government also expects that some countries will move from being providers of international students to providing tertiary education in their own countries. This means that there will be increased competition for international students. Education New Zealand highlights that there is not a single cause for the recent reduction in visa approvals for Chinese students.
- 4.17 The *New Zealand International Education Strategy* stated that the quality of New Zealand’s education experience should be a priority. The Government also announced changes to post-study work visa entitlements. The full effect of the strategy and of the visa changes might not be apparent until the 2019 enrolment numbers are released.

Observations from our audits

- 4.18 In 2017, 1051 more international full-time students enrolled to study in New Zealand than in 2016, but that increase was not evenly distributed among the TEIs.
- 4.19 Seven of the eight universities attracted more full-fee-paying international students in 2017 than in 2016, with the number of full-fee-paying international students up by 1129 or 6.9%.
- 4.20 Overall, there were 12,461 full-fee-paying international students studying at ITPs in 2017, a number largely unchanged from 2016. However, Southern Institute of Technology, Eastern Institute of Technology, and Otago Polytechnic had significant increases, while nine ITPs had fewer students than expected.

Why accurately forecasting student numbers is important for ITPs

- 4.21 Student numbers are a critical element of forecasts. Some ITPs were optimistic when forecasting the likely number of student enrolments. For example, projections for increases for domestic or international students looked optimistic compared to previous trends and some related indicators of future demand. These related indicators, such as the unemployment rate and first-time international student visa approvals, are updated regularly.
- 4.22 Councils need to be aware of this optimism bias and the risks it carries. In our view, some ITPs have been slow to reflect foreseeable changes in demand.

12 ICEF Monitor is an independent market intelligence resource for the international education industry.

13 Education New Zealand (2018), *International Education Strategy 2018-2030*, Wellington.

- 4.23 Councils should be ensuring they get good quality financial forecasts that include well-evidenced trend and risk analysis at the local, regional, national, and international level. As part of the forecasting information, TEIs should be preparing possible scenarios and carrying out sensitivity analysis on those scenarios.
- 4.24 Although some of the ITPs' delivery costs will vary depending on the number of students, many costs are fixed, such as staff costs and course development costs. If the ITP does not attract as many students as it forecast, it will incur losses.
- 4.25 It is important that the ITP understands the factors behind demand for its courses and does not over-invest in capacity that might not be needed. This means maintaining a good understanding of what students want, what employers want, what other ITPs are offering, and the ITP's likely share of that demand.

Operating costs increasing while revenue is declining

Observations from our audits

- 4.26 We looked at actual 2017 group surplus or deficit results against what the ITPs expected to achieve – their budgeted surplus or deficit.
- 4.27 Twelve of the sixteen ITPs did not achieve their budgets for 2017, up from eight in 2016.
- 4.28 The main reason for budget shortfalls was ITPs not achieving the forecast number of enrolled students. When those enrolments fell short of targets, the ITPs affected did not receive as much funding as they had expected. They had often committed to spending based on the expected number of student enrolments.
- 4.29 Some ITPs have not been quick to adjust their spending in line with falling income, spending more than planned on expenses at the same time that revenue was decreasing. This has eroded the financial "headroom", or working capital, those ITPs need to be able to invest in meeting the changing expectations of students and employers.
- 4.30 Working capital is the amount of readily available cash, or assets that can quickly be turned into cash, to pay liabilities due in the next 12 months. A working capital ratio of one or more means the ITP has enough funds from its current assets to pay for its current liabilities. A ratio of less than one means current liabilities exceed current assets, and the ITP might struggle to pay its debts when they are due. The TEC sets an indicator for this ratio in its financial monitoring framework (which it calls the quick ratio) of 1.5. Eleven ITPs have a quick ratio of less than 1.5.

Why is financial monitoring important?

- 4.31 Good financial monitoring should enable the ITPs to make changes during the year if the number of enrolments falls. ITP councils need to be satisfied that financial management controls, including budget monitoring and variance reporting, are working well.
- 4.32 Our analysis indicates that most ITPs struggle to align their operational costs to changes in revenue that happen during the year. For some ITPs, this is probably less concerning in the short-term – but, for ITPs that already have low working capital, it can be a significant issue.
- 4.33 Positive working capital is not just important for paying bills when they are due. It also provides ITPs with some flexibility to make changes to their operations – for example, increasing expenditure in the short term (such as redundancy payments or retraining costs) to achieve long-term savings.
- 4.34 Having low working capital does not mean the ITP is insolvent; it might have significant non-current assets, access to overdraft or loan facilities, and healthy capital reserves. But low working capital can mean ITPs need to borrow money to support current operations while organisational changes are made, and this adds to their overall operational costs. We have noted in some of our audits that ITPs are borrowing to meet operational costs and the costs of organisational change, rather than for investments in long-term assets. In our view, this is unsustainable where the return from organisation change takes too long to achieve.

Investment decisions

- 4.35 In 2017, we published a report *Investing in tertiary education assets*. For that report, we analysed 14 business cases for investments in assets that TEIs had prepared in 2013 and 2014.
- 4.36 The business cases were generally of a high standard. Benefits, risks, and risk-management approaches for the individual university or polytechnic were usually described in detail, and most sections dealing with risk included comments about a range of financial indicators.
- 4.37 However, there was little evidence of the aim in the *Tertiary Education Strategy 2014-2019* to improve the effectiveness of the sector as a whole. In most of the business cases, TEIs did not take account of the investments planned or made by other TEIs, nor did they consider how to make the most of their investments by sharing or using the existing assets of other TEIs.
- 4.38 We reported that, in our view, there was an opportunity for more sector-based investment decisions. However, some TEIs believed that a competitive funding model and regulatory environment made it unlikely that they would work together to improve the efficiency of their investments in assets. Others pointed

to examples where joint investments had been successfully made and the complexities of the funding and regulatory environment were worked through. These diverse views posed both a challenge to the implementation of the *Tertiary Education Strategy 2014-2019* and an opportunity for the sector to consider how to better give effect to the strategy through their investment decisions.

Observations from our audits

- 4.39 During 2017, many TEIs had major campus development projects under way or planned. We noted a substantial amount of spending as TEIs implemented plans to maintain and develop their campuses.
- 4.40 Only a few TEIs were collaborating on campus investments, such as Wellington Institute of Technology and Whitireia Community Polytechnic's arrangement for the Te Kāhui Auaha creative campus in Wellington.¹⁴ Lincoln University, with government support, is collaborating with AgResearch for a new facility at the Lincoln University campus. Five TEIs are investing in a joint online campus (Tertiary Accord New Zealand).
- 4.41 Most of the other capital investment we saw was going into maintaining or expanding existing campus assets, or setting up new campuses in other towns and cities. We are not yet seeing the level of collaboration envisaged by the TEC in 2015/16. In our view, this represents a missed opportunity when viewed from a national perspective.
- 4.42 We also noted reasonably large amounts of capital spending on course development and information technology systems for student management, payroll, and financial management.
- 4.43 Some ITPs were experiencing cash flow challenges related to their capital investment decisions. Some of these decisions had been made when the ITPs expected student numbers to rise.

Why is this important?

- 4.44 Many ITPs have embarked on capital programmes to build or upgrade facilities. These are long-term, intergenerational investments that carry both opportunity and risk for an institution.
- 4.45 In our view, there is a need for greater scrutiny of the business cases to support investment in capital assets. The long-term affordability of capital investments, including depreciation and maintenance, will depend on accurate forecasting of future use. Although we often see a strong educational case for capital investment, councils need to ensure that the financial assumptions are subject to rigorous challenge.

14 Whitireia Community Polytechnic and Wellington Institute of Technology operated under a combined council. A proposal to integrate the two institutes was announced on 6 November 2018.

Appendix 1

Governance and funding arrangements

Governance arrangements

Tertiary education institutions (TEIs) are Crown entities, independently governed by councils with functions that are set out in the Education Act 1989. The Act supports and preserves TEIs' academic freedom and autonomy. TEIs need to balance operating autonomously with being accountable to the public and to the Crown. The Crown monitors the performance and viability of TEIs through the activities of the Ministry of Education, the Tertiary Education Commission (TEC), and the New Zealand Qualifications Authority (NZQA).

A university or wānanga council can have between eight and 12 members, and the required number or range is set out in its constitution. In councils of eight or nine members, three of those members are appointed by the Minister of Education (the Minister). The Minister appoints four members in larger university and wānanga councils, and four of the eight council members (including the chairperson) in institutes of technology and polytechnics (ITPs). Appointments are usually for four years. Council members who are appointed by the Minister are not directly accountable to the Minister.

In certain circumstances, the Crown may actively support TEI councils to govern their TEIs. Sections 195A to 195D and 222A to 222F of the Act set out formal intervention powers for the Crown that allow for different levels of support, according to the TEIs' individual situations. The powers range from requiring a TEI to provide specified information about its operation, management, or financial position at a given time, to dissolving the TEI council and appointing a commissioner to govern the TEI.

TEI councils employ only one staff member: the chief executive. Unlike almost all other public organisations, the State Services Commissioner does not have powers to set minimum standards of integrity and conduct for TEIs. Therefore, it is important that councils diligently oversee chief executives, and understand that it is the council's responsibility to set the tone and culture at the top of the organisation. This matters because New Zealanders expect integrity from their public servants. Public trust in government and the public sector can be easily lost.

Roles and responsibilities of tertiary education institutions

Section 159ABA of the Act sets out the planning, funding, and monitoring framework of the tertiary education sector. This framework requires TEIs to prepare plans (currently called investment plans) that set out their responses to the Government's tertiary education priorities and to stakeholder needs. The TEC uses these investment plans to determine the amount of Crown funding for TEIs. TEIs are also required to prepare an annual report that includes, among other information, financial statements and a statement of service performance, which we audit.

How tertiary education institutions are funded by the Crown

Most funding is distributed through a bulk funding arrangement, involving a few separate but closely related funds. These funds are mostly based on TEIs' investment plans and have a three-year baseline that is updated at each budget.

The Student Achievement Component (SAC) funding is the largest source of revenue for TEIs (about \$2 billion in 2017/18). It provides subsidies for teaching and learning for approved tertiary qualifications. Most students pay some tuition or other course-related fees.

SAC funding allocations are based on projected total student enrolments agreed in the TEIs' investment plans. The unit of funding allocation is an "equivalent full-time student" or EFTS. We use the term full-time student when talking about EFTS. The full-time student value is calculated using a formula with funding rates that vary significantly by the type of qualification and its level and duration.

Other funds support a range of core roles, capability needs, and innovation not directly related to student enrolments. The largest of these is the Performance-based research fund (\$309 million for 2017/18). The Performance-based research fund is used to allocate the bulk of the Crown's research funding to TEIs. The TEC allocates this fund based on assessments of research quality. It aims to raise the quality of research done and to help ensure that teaching at the degree level and above is supported by research.

Other sources of revenue for tertiary education institutions

TEIs also receive revenue from research, contracts, fees, and other sources. Student fees are a considerable source of revenue for universities and polytechnics, but make up only a small proportion of revenue for wānanga. International students and other full-fee-paying students bring in additional revenue from fees, but not SAC funding.

Appendix 2

Non-standard audit reports for 2017

Tai Poutini Polytechnic

In August 2018, we issued a non-standard audit report for Tai Poutini for both 2016 and 2017. We qualified our opinion on the financial statements because we considered the financial statements contained material errors. We also drew attention to disclosures in the annual report about Tai Poutini's ability to fund its activities in the future. Tai Poutini also breached the statutory reporting deadlines for 2016 and 2017.

We qualified our opinion because we disagreed with how Tai Poutini accounted for:

- funding it over-claimed from 2010 to 2015; and
- the TEC's debt forgiveness for under-delivering on student numbers projected in its investment plan in 2016.

Funding over-claimed

An investigation by the TEC in 2017 found that Tai Poutini had over-claimed its student achievement component funding in the years 2010 to 2015 by \$18.5 million. Tai Poutini had included the amounts as revenue in the relevant financial years, and so for those years the revenue and the surpluses were overstated (or the deficits were understated).

To correct this overstatement, Tai Poutini should have retrospectively reduced the equity brought forward into its 2016 financial statements by \$18.5 million, and also recorded that it owed the TEC \$18.5 million. This would then have flowed on to the 2017 financial statements.

In 2018, the TEC decided not to seek recovery of any of the amount over-claimed. The effect of TEC's forgiveness of the debt was to restore Tai Poutini's results as though it had not over-claimed any SAC funding. Because Tai Poutini became aware of the decision before it completed its 2016 and 2017 financial statements, it decided not to adjust these financial statements to reflect the overstated revenue in previous years. However, because the TEC made this decision after the 2017 balance date, it should be accounted for in Tai Poutini's 2018 financial statements.

Fewer students than funded for in 2016

In 2018, the TEC also decided not to seek recovery of \$3.1 million, which was repayable because of Tai Poutini having delivered courses to fewer students than it was funded for in 2016.

Tai Poutini decided to recognise the effect of the TEC's decision in its 2017 financial statements by including the \$3.1 million as a capital injection. The correct action would have been for Tai Poutini to make this adjustment in its 2018 financial statements, the year when the TEC made the decision.

Serious financial difficulties

In our audit reports for Tai Poutini, we drew attention to disclosures in its financial statements about its ability to continue as a going concern. Tai Poutini's ability to continue as a going concern is dependent on it meeting all of the funding conditions set by the Crown to receive all of the capital injection. Tai Poutini has submitted a business case to the Minister of Education with options for its future governance and organisational structure. The Minister has deferred his decision pending the Government's decision on the future of the ITP sector.

Unitec Institute of Technology

Unitec's audit report included an explanatory paragraph to highlight the way it had applied the going concern assumption in preparing its financial statements. This paragraph drew attention to Unitec's explanation in its financial statements about uncertainties relating to achieving its financial forecasts and meeting any future cash flow shortfalls. Unitec reported a deficit of \$31 million in 2017.

About our publications

All available on our website

The Auditor-General's reports are available in HTML and PDF format, and often as an epub, on our website – www.oag.govt.nz. We also group reports (for example, by sector, by topic, and by year) to make it easier for you to find content of interest to you.

Our staff are also blogging about our work – see blog.oag.govt.nz.

Notification of new reports

We offer facilities on our website for people to be notified when new reports and public statements are added to the website. The home page has links to our RSS feed, Twitter account, Facebook page, and email subscribers service.

Sustainable publishing

The Office of the Auditor-General has a policy of sustainable publishing practices. This report is printed on environmentally responsible paper stocks manufactured under the environmental management system standard AS/NZS ISO 14001:2004 using Elemental Chlorine Free (ECF) pulp sourced from sustainable well-managed forests.

Processes for manufacture include use of vegetable-based inks and water-based sealants, with disposal and/or recycling of waste materials according to best business practices.

Office of the Auditor-General
PO Box 3928, Wellington 6140

Telephone: (04) 917 1500
Facsimile: (04) 917 1549

Email: reports@oag.govt.nz
Website: www.oag.govt.nz