



CRANFIELD UNIVERSITY

FINANCIAL STATEMENTS

for the year ended 31st July, 2017

CONTENTS	Page
Operating and financial review	2
Corporate governance	12
Responsibilities of the Council of Cranfield University	15
Independent auditor's report for the members of Cranfield University	18
Principal accounting policies	20
Consolidated statement of comprehensive income	24
Consolidated statement of changes in reserves	25
Balance sheets	27
Statement of consolidated cash flows	28
Notes to the accounts	29

CRANFIELD UNIVERSITY
OPERATING AND FINANCIAL REVIEW
FOR THE YEAR ENDED 31ST JULY, 2017

Cranfield University is a research intensive, postgraduate university with a mission to create leaders in technology and management, unlocking the potential of people and organisations by partnering with business and governments to deliver transformational research, postgraduate education and professional development.

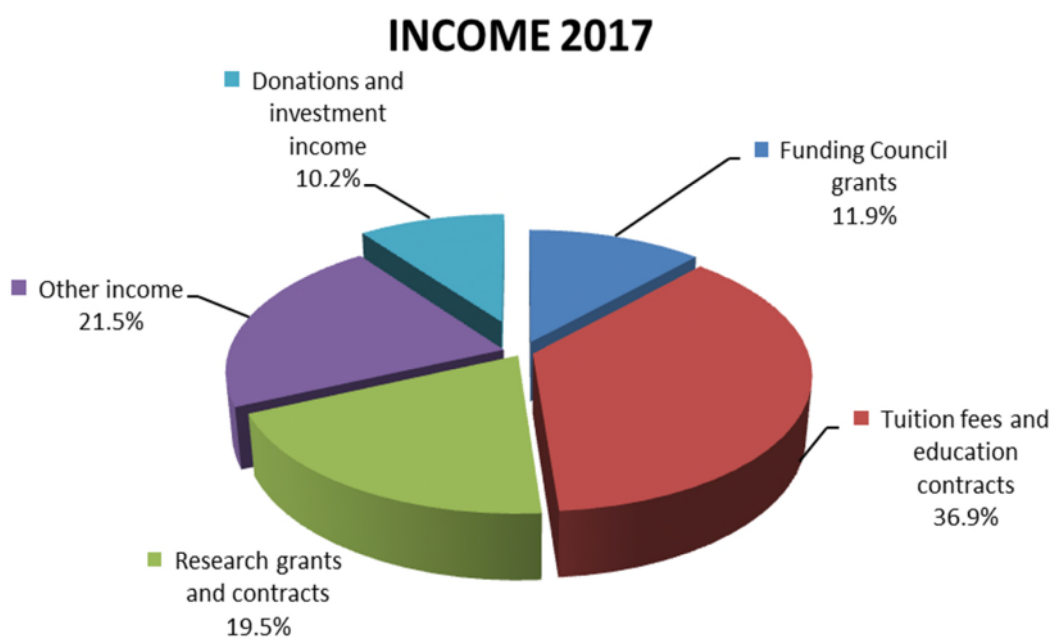
The activities of the University include teaching, research, design and development work in the themes of Aerospace, Defence and Security, Energy and Power, Environment and Agrifood, Management, Manufacturing, Transport Systems and Water. Operations are primarily carried out on campus at Cranfield in Bedfordshire and the facility at Shrivenham in Oxfordshire. The University is an exempt charity subject to the Charities Act 2011.

The financial statements comprise the consolidated results of the University and its subsidiaries. Subsidiary companies undertake activities which, for legal and commercial reasons, are more appropriately channelled through a limited company and include the development of activities emanating from Cranfield University.

Results for the year and position at year end

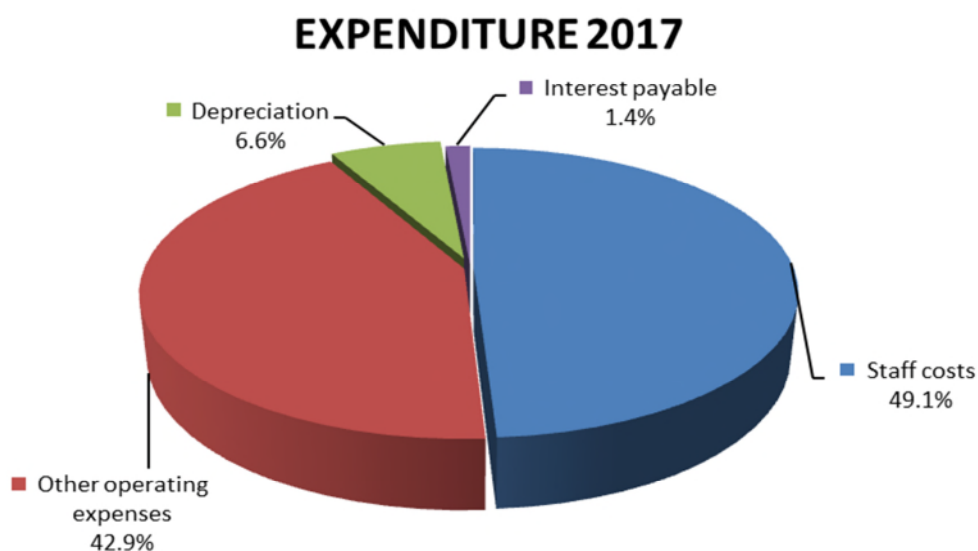
The consolidated results for the year ended 31st July, 2017 are summarised below:-

	2017	2016
	£'000	£'000
Income	176,359	176,243
Expenditure	(174,757)	(176,135)
Operating surplus for the year	<u>1,602</u>	<u>108</u>



CRANFIELD UNIVERSITY
OPERATING AND FINANCIAL REVIEW
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

Results for the year and position at year end *(continued...)*



Income was 0.07% higher compared to the previous year. Although donations and other income increased in the year, funding council grants, tuition fees and education contracts and research all declined. The total comprehensive income for the year retained in unrestricted reserves was £8,013,000 (2016 £2,163,000).

Capital expenditure in the year amounted to £19,952,000 (2016 - £30,042,000). This continues to reflect Cranfield's success in winning a number of key infrastructure projects, including the Aircraft Integration Research Centre and the Autonomous Vehicle teaching facility which were completed and became operational during the year. These projects were over 70% funded by external parties with this income now included within donations. In addition, the University has received the third and final contractual payment amounting to £1,000,000 (2016 - £2,000,000) relating to a reorganisation of the use of the airport during the year as detailed in Note 3.

The statement of consolidated cash flow shows a decrease in cash of £8,473,000. Net cash outflows from operating activities were £979,000. This was generated by changes in the working capital profile with reduced professional development income leading to a fall in income in advance.

Consolidated total reserves increased by £8,240,000 (2016 – increase by £1,865,000) as explained in the statement of changes in reserves on page 25. Included in arriving at this figure, there is an increase of £6,935,000 relating to the movement on the University defined benefit pension schemes (Universities Superannuation Scheme and Bedfordshire County Council pension fund) as shown in Note 16.

However it has been a disappointing financial year at the operating level, with the underlying operating position showing a significant deficit which has led to the University introducing a cost reduction scheme across the University during the autumn of 2017.

Principal risks and uncertainties

The University receives a smaller proportion of its income from HEFCE, which was 11.9% (2015/16 - 12.9%) for the 2016/17 year, than the majority of the sector. This reflects the distinctive mission of Cranfield as a wholly postgraduate University. However, it also receives a significant amount of income from other organisations that are directly or indirectly impacted by the general state of public finances and the economy.

CRANFIELD UNIVERSITY
OPERATING AND FINANCIAL REVIEW
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

Principal risks and uncertainties (continued...)

The BREXIT vote in June 2016 added significantly to the Universities' short and medium term risk profile as significant student numbers come from within the EC alongside EC research funding. Uncertainty has also been seen in the professional development market with companies continuing to hold back on training budgets until the actual BREXIT impacts start to become clearer.

As with other Higher Education Institutions, Cranfield is subject to decisions made by HEFCE, Research Councils and other Government bodies. Cranfield has traditionally received significant specialist institution funding. Cranfield has continued to be deemed a world leading specialist institution by HEFCE in their 2015/16 review, but due to a reassessment of the funding of specialist institutions, funding was significantly reduced in 2016/17 and will be further reduced in 2017/18.

The University has a long term contract with the MoD for the provision of teaching services at postgraduate level. This contract has 11 years to run but is currently under review with MoD to align with their future needs.

The University is at risk from cost inflation, especially those related to employment costs. Pension costs continue to rise and a tight control of salary costs is vital to ensure the University is fit for the future. To assist with the control of salary costs proposals have been developed to reduce the number of staff across the University in 2017/18.

Key Performance Indicators (KPI's):-

The University benchmarks its performance against the rest of the sector, where comparable information is available:-

	Cranfield Actual 2017	Cranfield Actual 2016	Mean Average HEFCE funded HEI* Forecast 2015
Income growth / (reduction)	0.0%	4.9%	5.2%
Operating surplus for year as a % of total income	0.9%	0.06%	5.0%
Staff costs before exceptional costs and USS pension provision movement as a % of total income	50.1%	47.7%	52.6%
Cash flow from operating activities as a % of total income	(0.6%)	(5.4%)	8.4%
Net liquidity as number of days expenditure	9	15	122
External borrowings as a % of total income	13.4%	8.9%	26.2%
Discretionary reserves as a % of total income	55.4%	50.9%	64.4%

*Source: HEFCE Sept 2015

The table above reflects that it has been a challenging year, however, the University retains a sound financial balance sheet. Of particular note, is that the University's financial policy of restricting borrowing only to finance capital projects with a strong direct income stream to make the repayments, positions Cranfield with significantly lower relative borrowings than the majority of the sector.

CRANFIELD UNIVERSITY
OPERATING AND FINANCIAL REVIEW
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

Pensions

The University implemented the provisions of FRS 102 in 2015 and therefore continues to take onto the consolidated balance sheet the actuarial valuation of the pension liability in respect of its share of the Bedfordshire County Council Pension Fund. It also has to recognise on balance sheet the obligation for its share of the University Superannuation Scheme (USS). The USS has deficit recovery plans in place covering the period following each triennial valuation which include additional employer contributions to correct the shortfall in the scheme.

The total USS pension deficit across the sector has been calculated. The University share of the deficit has been estimated as at 31 July, 2017 and there is a net pension liability of £11,182,000 (2016 - £14,908,000) applicable to the University. Details are provided in Note 22.

The share of underlying assets and liabilities of the Local Government Pension Scheme (LGPS) is able to be identified as at 31st July, 2017 and there is a net pension liability of £54,404,000 (2016 - £57,613,000) applicable to the University. Details are provided in Note 22.

Trading activities of subsidiaries

The venture companies are financially independent from the University and are administered through Cranfield Group Holdings Ltd. In addition to these companies, there are other subsidiaries undertaking certain teaching, research and residential activities for the University. During the year there has been a restructuring within the group with five dormant companies having been formally closed.

Public Benefit report

The University is an exempt charity under the terms of the Charities Act 2011. The objects of the University are to:

- advance, disseminate and apply learning, knowledge and understanding with particular emphasis on the disciplines of the Sciences, Technology, Engineering and Management; and
- promote and encourage the transformation and application of that wisdom, knowledge and learning for the benefit of industry, the public services, and individuals and for the public benefit.

In reviewing the University's activities, Council has had due regard to the Charity Commission's guidance on the reporting of public benefit as amended in December 2011. Of the specific examples of charitable activities highlighted in section 3 of the 2011 Act, Cranfield makes a significant contribution to the majority of them. These include:

- the advancement of education;
for example, through our developing suite of high level apprenticeship courses, known as Masterships;
- the prevention or relief of poverty;
e.g. through our research and MScs in Future Food Sustainability and Food Chain Systems;
- the advancement of health or the saving of lives;
for instance, through the work of Cranfield's world-renowned Safety and Accident Investigation Centre, which was awarded the Queen's Anniversary Prize in 2011;
- the advancement of citizenship or community development;
e.g. through sustained research and education in water sanitation and health culminating in the award of the Queen's Anniversary Prize in 2015;

CRANFIELD UNIVERSITY

OPERATING AND FINANCIAL REVIEW

FOR THE YEAR ENDED 31ST JULY, 2017

(continued...)

- the advancement of the arts, culture, heritage or science;
notably through 70 years at the forefront of aerospace research and education most recently recognised through HEFCE awarding funding for the £35 million Aerospace Integration Research Centre and the £65 million Digital Aviation Research and Technology Centre;
- the advancement of human rights, conflict resolution or reconciliation or the promotion of religious or racial harmony or equality and diversity;
e.g. through the University's work on diplomacy and conflict resolution including the MSc in International Defence and Security;
- the advancement of environmental protection or improvement;
as exemplified by the MScs in Environmental Water Management and Land Restoration and Reclamation;
- the promotion of the efficiency of the armed forces of the Crown, or of the efficiency of the police, fire and rescue services or ambulance services;
for example, through Cranfield's suite of MScs and executive education programmes on forensics.

Cranfield's mission is to create leaders in technology and management. We achieve this through our transformational research and through the quality of our postgraduate teaching.

Our activities are undertaken in support of the University's aims, as referenced in our Charter, and the strategic direction, as outlined in our Corporate Plan.

The University's Charter states:

"The University will be an institute of technology and a teaching, research and examining body with power to grant Degrees.

The objects of the University are to:

- *advance, disseminate and apply learning, knowledge and understanding with particular emphasis on the disciplines of the Sciences, Technology, Engineering and Management; and*
- *promote and encourage the transformation and application of that wisdom, knowledge and learning for the benefit of industry, the public services, and individuals and for the public benefit.*

In fulfilling these objects, the University will give particular attention to the educational needs of industry, commerce and the public services and of people with experience therein who can benefit from an extension of their higher education and thereby be prepared for positions of greater responsibility."

Cranfield's Corporate Plan 2014-2019 'One University – shaping our future' outlines our four strategic priorities:

- To provide a premier learning experience that enhances the capabilities of individuals and their organisations.
- To be recognised for outstanding transformational research that meets the needs of business, government and wider society.
- To grow an efficient, effective and sustainable enterprise.
- To be renowned for our impact and influence - regionally, nationally and internationally.

CRANFIELD UNIVERSITY

OPERATING AND FINANCIAL REVIEW

FOR THE YEAR ENDED 31ST JULY, 2017

(continued...)

During 2016/2017, 2,400 students have graduated from our unique postgraduate institution, their learning experience giving them the opportunity to join some of our distinguished alumni as leaders in their fields. Our alumni include Warren East, CEO of Rolls-Royce; John McFarlane, Executive Chairman of Barclays; Ombola Johnson, Partner at TLcom Capital and formerly Minister for Communication Technology in Nigeria; Sarah Willingham, Entrepreneur; Sir Charlie Mayfield, Chairman, John Lewis Partnership; Dr Andy Palmer, Chief Executive, Aston Martin Lagonda; and Dr Gareth Williams, previously Vice-President – Engineering (Research & Technology), Airbus Group.

Throughout 2016/2017, we have celebrated the development of new facilities that will further enhance the delivery of our mission:

- In January 2017, we completed construction of the £35 million Aerospace Integration Research Centre funded by Rolls-Royce, Airbus, HEFCE and the University. The centre will be home to Cranfield researchers and industrial partners with the aim of investigating ways of integrating advanced technologies and reducing time from academic innovation to industrial application.
- Jo Johnson MP, Minister for Universities, Science, Research and Innovation, officially opened the Cranfield University/NCAS Centre for Atmospheric and Emissions Research in February 2017. The £3m research hub - the result of joint investment from the Natural Environment Research Council (NERC), the National Centre for Atmospheric Science (NCAS and Cranfield - provides a collaborative space for advanced research, and will be home to Cranfield's Centre for Atmospheric Informatics and Emissions Technology (CAIET) and the Facility for Airborne Atmospheric Measurements (FAAM).
- On his visit to Cranfield, Jo Johnson also visited our latest agrifood facilities and spoke to academic staff who are playing a key part in the delivery of the UK's Agritech Strategy. Cranfield is an active partner of two of the UK's four agritech centres (The Agricultural Engineering Precision Innovation Centre and Crop Health and Protection).
- In April 2017, we completed the construction of the Intelligent Mobility Engineering Centre which will enhance Cranfield's position as one of the UK's leading centres for education, training and research for the rapidly growing intelligent mobility and transport systems sector. The facility will also provide a shared teaching space for Cranfield students, key business partners, and other local educational institutions that are focused on transport engineering systems and autonomous vehicle technologies. The Centre will house simulation laboratories, student break-out spaces and deliver practical workshops. Work continues on an intelligent mobility road that will create a mile of 'living laboratory' on campus.
- It was announced in July 2017 that a new £65 million Digital Aviation Research and Technology Centre (DARTeC) will be built at Cranfield to spearhead the UK's research into digital aviation technology. Once constructed, DARTeC will provide research facilities unprecedented in Europe. The Centre will address such research challenges facing the aviation industry as:
 - the integration of drones into civilian airspace
 - increasing the efficiency of airports through technological advances
 - creating safe, secure shared airspace through secure data communication infrastructures
 - increasing the reliability and availability of aircraft through self-sensing, self-aware technologies

CRANFIELD UNIVERSITY
OPERATING AND FINANCIAL REVIEW
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

Our research facilities are, of course, only part of what makes Cranfield a unique institution. As an exclusively postgraduate institution, our educational offering is frequently recognised as one of the best in the world:

- In January 2017, Cranfield School of Management's MBA programme was ranked first in the world for economics in the Financial Times 2017 Full Time Global MBA ranking. The School's Economics group, which was headed by Professor Joe Nellis from 1994 to 2016 and by Dr Catarina Figueira from January 2017, has long been a foundation of the Cranfield MBA.
- We became the first university in the UK to receive full certification from the UK Government Communications Headquarters, GCHQ, for a digital forensics course. The MSc in Digital Forensics, run by Cranfield Forensic Institute, gained its certification at the first attempt.
- Our MSc in Management has been named the best in the UK in a new ranking published by The Economist. The course was listed 7th in the world in the 2017 WhichMBA? Masters in Management (MIM) rankings (published 25 May 2017), the highest ranking for any UK business school.

None of what we achieve as a University would be possible without the dedication and commitment of our staff to realising the ambitions of our institution:

- In November 2016, we recognised the commitment of those who serve as Armed Forces Reservists and those who are part of military families by signing the Armed Forces Covenant in the presence of Defence Minister Mark Lancaster MP.
- We are proud as a University to champion the careers of our female academic and research staff. Our commitment to this issue was recognised in May 2017 when the University was awarded the Bronze Award from Athena Swan.
- Alongside the University's many globally renowned academics, Cranfield has many academics and researchers in the early part of their careers. This year two of our staff, Dr Nadia Abdul-Karim and Simone Weber, were both named in the Daily Telegraph top 50 female engineers under 35.

As an institution, we aim to spread knowledge and learning not just to our learners and research partners but to the wider public:

- In September 2016, to celebrate our 70th anniversary, we hosted a 'Festival of Flight' which featured an air display and an 'open doors' event which included interactive demonstrations from some of our academic staff. Over 5,000 people attended this event and we were also delighted to welcome our Royal Visitor, the Duke of Kent.
- As part of our inaugural Manufacturing 2075 symposium, local schools were invited to participate alongside our academics and business partners in an interactive workshop imagining what UK manufacturing would look like in the future.
- As sponsors of International Women in Engineering Day 2017, Cranfield played a strong role in promoting STEM careers to women. Female students from schools across the region visited Cranfield to take part in interactive displays and tours of Cranfield's world-class facilities.

CRANFIELD UNIVERSITY
OPERATING AND FINANCIAL REVIEW
FOR THE YEAR ENDED 31ST JULY, 2017
 (continued...)

Throughout the year, Cranfield has continued to deliver its mission of creating leaders in technology and management. Our students, business partners and the wider public have benefitted from active demonstrations of our transformational research.

The University is an exempt charity under the terms of the Charities Act 2011. The objects of the University are to:

- advance, disseminate and apply learning, knowledge and understanding with particular emphasis on the disciplines of the Sciences, Technology, Engineering and Management; and
- promote and encourage the transformation and application of that wisdom, knowledge and learning for the benefit of industry, the public services, and individuals and for the public benefit.

Employment of disabled persons

Applications by disabled persons for employment and for admission to courses of study or research are always fully considered, bearing in mind the aptitudes of the applicant concerned. In the event of existing staff and students becoming disabled every effort is made to ensure that their employment or study with the University continues and that appropriate training and support is arranged. It is the policy of the University that the training, career development and promotion and opportunities to undertake study and research should, as far as possible, be identical for all staff and students.

Employee involvement

The University places considerable value on the involvement of its employees and on good communication with them. A regular newsletter is made available to all staff and separate supplements are published when the need arises. Staff are encouraged to participate in formal and informal consultation at University and School levels, sometimes through the membership of formal committees. In addition, information for staff is included on an intranet site.

Environmental issues

The University is committed to sustainable development by integrating environmental issues into all aspects of its work and management processes. Environmental responsibilities are met through the management of the University's campuses and premises, through its dealings with client groups and trading partners, through the design and delivery of its academic, research and professional services and through its interaction with the local community.

Carbon Management Plan

The University has a target to reduce its Carbon emissions by 50% by 2020 compared with a 2005 baseline. From 2005 Carbon emissions were growing; however since the implementation of the plan in 2009 emissions have generally reduced and are now 32% lower than the 2005 level. Our carbon footprint has been restated for previous years in accordance with DEFRA Greenhouse Gas reporting guidelines which take account of changes in our estate and also national conversion factors.

Year	2005/06	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12
Tonnes CO2	18,700	18,800	20,400	20,400	18,700	17,600	15,300

Year	2012/13	2013/14	2014/15	2015/16	2016/17
Tonnes CO2	16,100	14,500	14,900	13,400	12,800

CRANFIELD UNIVERSITY
OPERATING AND FINANCIAL REVIEW
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

The decrease since 2007/2008 reflects the significant investment the University has put into energy saving initiatives such as a large Combined Heat and Power unit, a new Biomass boiler, improvements to the district heating system and energy efficient refurbishments to the real estate. This goes alongside significant efforts from “Green Teams” within the staff and student bodies to ensure sector best practice is employed wherever possible.

The emissions reported above include electricity, heating, process fuels and on site vehicle fuels for the whole University estate but excluding Shrivenham Campus. Reporting years are from August to July. Other transport emissions and emissions associated with waste and water are not included at present although there are plans to include these within the footprint for future reports. Further information on the Carbon Management Plan can be found on the University website.

Health and Safety

The University is committed to providing a safe and healthy environment by taking effective means to manage our risks and protect people from being harmed. There is a process of continuous improvement through a programme of rolling out OHSAS 18001 Health and Safety Management accreditation across the University in all areas of work and study. The University achieved full accreditation under OHSAS 18001 in July 2016.

Payment of creditors

It is the University’s policy to obtain the optimum terms for all business and, thus, there is no single policy as to the terms used. The University looks to use small and local suppliers where appropriate and looks to pay them within two weeks of invoice wherever possible. In agreements negotiated with other suppliers, the University endeavours to include and abide by specific payment terms in accordance with best commercial practice.

Corporate governance

The University is committed to following best practice in all aspects of corporate governance and is in full compliance with the CUC Higher Education Code of Governance. This year’s statement appears on pages 12 to 14.

Outlook for 2017/2018

Cranfield will continue to develop around its thematic offerings in Aerospace, Defence and Security, Energy and Power, Environment and Agrifood, Management, Manufacturing, Transport Systems and Water, supported by the professional service units.

The budgeted operating surplus for 2017/18 is based on income remaining static with significant cost reductions during the year to enable the University to get back towards the operating surplus targeted in the five year corporate plan.

New educational initiatives commencing in 2017/18 include the development of a suite of Masterships™ programmes to utilise the Apprenticeship Levy; the first example is an Executive MBA in collaboration with Grant Thornton. Cranfield are working with Muscat University to deliver a suite of MSc courses in Oman from September 2017.

With regard to capital expenditure, Cranfield has continued to be successful in winning high profile investment bids for the development of facilities to support the Digital Airport of the Future facility on the Cranfield campus with £60 million of the £65 million coming from Government and commercial funding.

CRANFIELD UNIVERSITY
OPERATING AND FINANCIAL REVIEW
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

Conclusion

The University faced a challenging financial year with declines in both the recruitment of students and professional development income levels. Strategic reviews have been undertaken across the University and a recovery plan put in place with the objective of reversing these declines in 2018. There remains uncertainty across the sector around student numbers and research income following the BREXIT vote.

The University has had further success with its large infrastructure funding bids to support its Estates strategy and the Corporate Plan and is confident that, through its thematic approach to research, education and executive development, it will continue to add significant value for its students, business and government partners and for the wider public benefit.

C P Fairweather MA FCA
Chair of Finance Committee

2nd November, 2017

CRANFIELD UNIVERSITY

CORPORATE GOVERNANCE

The following statement is given to enable readers of the financial statements to obtain a better understanding of the legal structure of the University and the governance procedures applied by the University's Council.

In March 2013, Her Majesty The Queen in Council approved revisions to the University's Charter and Statutes. The primary impact of these revisions on governance was to make the University Council the unambiguous governing body for the University, in line with the governance guidelines of the Higher Education Funding Council for England. Following the approval of the Charter and Statutes, Council approved a revised set of Ordinances and Senate approved new Regulations; together, the Charter, Statutes, Ordinances and regulations make up the University Laws.

Council's functions, as articulated in the Charter, are to: be ultimately responsible for the affairs of the University; determine the strategic direction of the University; ensure the effective management and control of the University's affairs, property and finances; determine the structure, staffing and overall composition of the University; appoint the Pro-Chancellor; and appoint and dismiss the Vice-Chancellor.

The principal academic and administrative officer of the University is the Chief Executive and Vice-Chancellor who has a general responsibility to the Council for maintaining and promoting the efficiency and good order of the University. Under the terms of the formal Financial Memorandum between the University and the Higher Education Funding Council for England, the Vice-Chancellor is the accountable officer of the University and in that capacity can be summoned to appear before the Public Accounts Committee of the House of Commons.

The University endeavours to conduct its business in accordance with the relevant parts of the UK Corporate Governance Code 2010 issued by the Financial Reporting Council. Whilst the University, being an independent corporation incorporated by Royal Charter and having exempt charitable status, does not fall within the scope of the Code, the Council is satisfied that the University has complied throughout the period with those provisions which can be applied to Universities.

The matters specially reserved to the Council for decision are defined by the University Laws and by custom in line with the Financial Memorandum with the Higher Education Funding Council for England.

The Council has a majority of members from outside the University, (described as independent members), from whom the Chair and Deputy Chair must be drawn. Also included in its membership are staff of the University and a member nominated by the student body. The composition of the Council and the procedures for appointment of members, their tenure and removal from office, are determined by the Statutes of the University.

CRANFIELD UNIVERSITY

CORPORATE GOVERNANCE

(continued ...)

The Council meets at least four times a year and has four standing Committees, Finance, Nominations, Remuneration and Audit. Each of these Committees is formally constituted with terms of reference and comprises mainly independent members of the Council.

- **Finance Committee** - meets at least four times a year and, inter alia, recommends to the Council the University's annual revenue and capital budgets and monitors performance quarterly in relation to the approved budgets. The Committee also reviews the University's annual financial statements for reporting to the Council.
- **Nominations Committee** - considers nominations for vacancies in the independent membership of Council under the relevant Statute and makes recommendations to the Council for such appointments.
- **Remuneration Committee** – meets at least twice a year, setting the objectives and determining the annual remuneration of the Vice-Chancellor and the other members of the University Executive. Remuneration Committee also has oversight of the remuneration of all other members of the Senior Management team and any other staff earning over £100,000 per annum. The Vice-Chancellor is not in attendance during the setting of his own salary.

Base salaries of the VC and other members of the Executive are annually benchmarked.

Under the Executive Performance Bonus Scheme, the Executive are considered for a bonus payment each year with part being attributable to the achievement of University KPIs and part attributable to the achievement of individual objectives. Any performance related pay is considered in October each year based on prior year performance.

Remuneration Committee have agreed that any member of staff who can demonstrate that they have met their life time pension allowance may opt out of the University USS pension scheme and receive a payment in lieu of pension. Such a member is still entitled to obtain life insurance from the pension scheme, with an associated cost to both the individual and the University. The combined cost to the University of the payment in lieu of pension and life insurance is 14.3% of gross salary, compared to 18% if the member of staff had been a full member of the USS pension scheme.

One member of the Executive left during the year to take up another appointment. Accordingly no severance pay was awarded.

- **Audit Committee** - meets on at least three occasions annually to review the work of the internal and external auditors. The Committee considers detailed audit reports, together with recommendations, for the improvement of the University's systems of internal control, governance, risk management and value for money, as well as management's responses and implementation plans.

Most independent members of the Council do not receive any payment, apart from the reimbursement of expenses, for the work they undertake for the University. However, certain members are remunerated for specific responsibilities other than those of the Council membership.

The report of the Chair of Finance Committee is given on pages 2 to 10 and the responsibilities of the Council are outlined on page 14. The annual financial statements are presented in a format which is in accordance with applicable Accounting Standards and the 2007 Statement of Recommended Practice - Accounting for Further and Higher Education.

CRANFIELD UNIVERSITY

CORPORATE GOVERNANCE

(continued ...)

The Council is also responsible for the University's internal control system and for monitoring its effectiveness. Such a system is designed to manage rather than eliminate the risk of failure to achieve the University's overall objective and mission, as well as its annual strategic aims. It can only provide reasonable, but not absolute, assurance against any material misstatement or loss. The key features of the control system are:-

- **Risk management** – whilst it is neither possible nor desirable to eliminate risk from the University's activities, there is an on-going process for the recognition, assessment and management of all significant opportunities and risks. This process has been in place for the year and up to the date of approval of the annual financial statements. The process is reviewed annually by the Audit Committee on behalf of the Council. The Audit Committee reports annually to the Council on its review. Exposure and control analyses, including mitigating factors and counter measures, are prepared annually and are monitored by key performance indicators and controls. The results from these reviews inform the planning, reporting and budgetary control processes. The management of each significant risk is assigned to one or more individuals and built into personal objectives as part of the staff development and appraisal procedures, which identify training needs. Staff generally are asked to report perceived significant risks.
- **Control environment** – clear definitions of the responsibilities of, and the authority delegated to, heads of academic and administrative departments are established. There is a Financial Manual, detailing financial controls and procedures which is approved by the Council as well as other management policies. Compliance with the Financial Manual is a requirement included in contracts of employment. The approach to internal control is risk based and embedded in effective management systems.
- **Information and control systems** – the University has a comprehensive medium and short-term planning process, supplemented by detailed annual revenue, capital and cash flow budgets. There are clearly defined and formalised requirements for approval and control of expenditure with investment decisions involving capital or revenue expenditure being subject to formal detailed appraisal and review according to approval levels set by the Council. There are regular reviews of operating results involving variance reporting and updates of estimated out-turns. In relation to academic information and control systems, the University's Senate, Teaching Committee and Faculty Boards oversee detailed processes to maintain and control the quality and standards of the University's academic work.
- **Monitoring system** – the effectiveness of the information and internal control systems and control environment are monitored by management review, the internal audit function and the Audit Committee, on behalf of the Council. As part of their audit responsibilities, the external auditors also provide reports to the Audit Committee on the operation of aspects of the University's internal control system.

On the basis of the above control system, procedures have been in place for the whole financial year to enable a full statement on internal control to be made for the year and up to the date of the approval of the Financial Statements.

CRANFIELD UNIVERSITY

PRIMARY RESPONSIBILITIES OF COUNCIL

The Council is the supreme governing body of the University. Its principal responsibilities are based on the Model Statement taken from the Committee of University Chairs(CUC) Higher Education Code of Governance (2014), adapted to reflect the powers and responsibilities that Council derives from the University Laws. These responsibilities are to:

- approve the mission and strategic vision of the University, the long-term strategic and business plans including key performance indicators, and to ensure that these meet the interests of stakeholders;
- appoint, on the recommendation of a Joint Appointing Committee of Council and Senate, the Vice-Chancellor as Chief Executive of the University and to establish the conditions of appointment and the arrangements for monitoring their performance;
- be responsible for the removal of the Vice Chancellor for good cause in accordance with the University Laws;
- delegate authority to the Vice-Chancellor for the academic, corporate, financial, estate and human resource management of the institution;
- establish and keep under regular review the policies, procedures and limits within such management functions as will be undertaken by and under the authority of the Vice-Chancellor;
- ensure the establishment and monitoring of systems of control and accountability, including financial and operational controls and risk assessment, and procedures for handling internal grievances and for managing conflicts of interest;
- ensure that processes are in place to monitor and evaluate the performance and effectiveness of Cranfield University against the plans and approved key performance indicators, which will, where possible and appropriate, be benchmarked against other comparable institutions;
- establish processes to monitor and evaluate the performance and effectiveness of the Council;
- conduct its business in accordance with best practice in higher education corporate governance and with the principles of public life drawn up by the Committee on Standards in Public Life;
- safeguard the good name and values of the institution;
- appoint a Secretary to Council, on the recommendation of a Joint Appointing Committee of Council and Senate and to ensure that if the person appointed has managerial responsibilities in the University, there is an appropriate separation in the lines of accountability;
- be the employing authority for all staff in the University and to be responsible for ensuring the establishment of a human resources strategy;
- be the principal financial and business authority of the University, to ensure that proper books of account are kept, to approve the annual budget and financial statements, and to have overall responsibility for the University's assets, property and estate;
- be the University's legal authority and, as such, to ensure that systems are in place for meeting all the University's legal obligations, including those arising from contracts and other legal commitments made in the University's name;

PRIMARY RESPONSIBILITIES OF THE COUNCIL

(continued ...)

- receive assurance that adequate provision has been made for the general welfare of students;
- act as trustee for any property, legacy, endowment, bequest or gift in support of the work and welfare of the University; and
- ensure that the University's Laws are followed at all times and that appropriate advice is available to enable this to happen.

Members of Council

The following members served throughout the period from 1st August 2016 to 26th October 2017 unless otherwise stated:

Name	Sub-Cttee Mbrship#	Position	Period
Dame Deirdre Hutton*	R, N,	Pro-Chancellor & Chair of Council	
Baroness Young of Old Scone*		Chancellor	
Professor Sir Peter Gregson*	F, R, N	Chief Executive & Vice-Chancellor	
Professor Jackie Akhavan			until 30 September 2016
Mr Ali Alderete			from 1 May 2017
Mr Kelechi Anyaoha			until 30 April 2017
Sir David Arculus	F		
Dr Tracey Bailey			until 30 September 2016
Professor Graham Braithwaite			
Mr Anthony Carey	A	Chair of Audit Committee	
Mrs Caroline Carter			from 1 September 2017
Mr Colin Day	F		from 1 June 2017
Mr Paul Fairweather	F, R	Chair of Finance Committee	
Mr Iain Ferguson	F, R, N	Deputy Chair of Council	
Mr Dougie Hunter	F		
Mr Mark Lewis			from 1 October 2016
Mrs Moni Mannings	A, N		
Dr Maxine Mayhew	A		
Dr Andreas Raffel	F, R, N		until 31 May 2017
Mrs Louise Redmond	A, R		
Professor Lynette Ryals			
Mr Bill Thomas	A		
Dr Christine Thompson			from 1 October 2016

*Ex-officio

A – Audit Committee Member, F – Finance Committee Member, N- Nominations Committee Member, R – Remuneration Committee Member

The Council is required to present audited financial statements for each financial year and for keeping proper accounting records which disclose with reasonable accuracy at any time the financial position of the University and to enable it to ensure that the financial statements are prepared in accordance with the Statutes of the University, the 2015 Statement of Recommended Practice - Accounting for Further and Higher Education and other relevant Accounting Standards. In addition, within the terms and conditions of a Financial Memorandum agreed between the Higher Education Funding Council for England and the Council of Cranfield University, the Council, through its designated office holder, is required to prepare financial statements for each financial year which give a true and fair view of the state of affairs of the University and the Group and of the surplus or deficit and cash flows for that year.

PRIMARY RESPONSIBILITIES OF THE COUNCIL

(continued ...)

In causing the financial statements to be prepared, Council has ensured that:

- suitable accounting policies are selected and applied consistently;
- judgements and estimates are made that are reasonable and prudent;
- applicable Accounting Standards have been followed, subject to any material departures disclosed and explained in the financial statements; and
- financial statements are prepared on the going concern basis unless it is inappropriate to presume that the University will continue in operation. The Council is satisfied that the University has adequate resources to continue in operation for the foreseeable future: for this reason the going concern basis continues to be adopted in the preparation of the financial statements.

The Council has taken reasonable steps to:

- ensure that funds from the Higher Education Funding Council for England are used only for the purposes for which they have been given and in accordance with the Financial Memorandum with the Funding Council and any other conditions which the Funding Council may from time to time prescribe;
- ensure that there are appropriate financial and management controls in place to safeguard public funds and funds from other sources;
- safeguard the assets of the University and the Group and prevent and detect fraud; and
- secure the economical, efficient and effective management of the University's resources and expenditure.

INDEPENDENT AUDITOR'S REPORT TO THE COUNCIL OF CRANFIELD UNIVERSITY

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Opinion

We have audited the financial statements of Cranfield University ("the University") for the year ended 31st July 2017 which comprise the consolidated statement of comprehensive income and expenditure, consolidated statement of changes in reserves, balance sheets, statement of consolidated cash flows and related notes, including the accounting policies.

In our opinion the financial statements:

- give a true and fair view of the state of the Group's and the University's affairs as at 31st July, 2017, and of the Group's and the University's income and expenditure, gains and losses and changes in reserves, and of the Group's cash flows, for the year then ended;
- have been properly prepared in accordance with UK accounting standards, including FRS 102 *The Financial Reporting Standard applicable in the UK and Republic of Ireland*, and with the 2015 *Statement of Recommended Practice – Accounting for Further and Higher Education*; and
- meet the requirements of HEFCE's Accounts Direction to higher education institutions for 2016-17 financial statements.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities are described below. We have fulfilled our ethical responsibilities under, and are independent of the group in accordance with, UK ethical requirements including the FRC Ethical Standard. We believe that the audit evidence we have obtained is a sufficient and appropriate basis for our opinion.

Going concern

We are required to report to you if we have concluded that the use of the going concern basis of accounting is inappropriate or there is an undisclosed material uncertainty that may cast significant doubt over the use of that basis for a period of at least twelve months from the date of approval of the financial statements. We have nothing to report in these respects.

Other information

The Council is responsible for the other information, which comprises the Operating and Financial review and Corporate Governance Statement. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or any form of assurance conclusion thereon.

Our responsibility is to read the other information and, in doing so, consider whether, based on our financial statements audit work, the information therein is materially misstated or inconsistent with the financial statements or our audit knowledge. Based solely on that work, we have not identified material misstatements in the other information.

Council responsibilities

As explained more fully in their statement set out on page 14, the Council is responsible for: the preparation of the financial statements and for being satisfied that they give a true and fair view; such internal control as it determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error; assessing the group and parent University's ability to continue as a going concern, disclosing, as applicable, matters related to going concern; and using the going concern basis of accounting unless it either intends to liquidate the group or the parent University or to cease operations, or has no realistic alternative but to do so.

Auditor's responsibilities

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue our opinion in an auditor's report. Reasonable assurance is a high level of assurance, but does not guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it

exists. Misstatements can arise from fraud or error and are considered material if, individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

A fuller description of our responsibilities is provided on the FRC's website at www.frc.org.uk/auditorsresponsibilities

REPORT ON OTHER LEGAL AND REGULATORY REQUIREMENTS

We are required to report on the following matters under the HEFCE Audit Code of Practice (effective 1 August 2016) issued under the Further and Higher Education Act 1992.

In our opinion, in all material respects:

- funds from whatever source administered by the Group or the University for specific purposes have been properly applied to those purposes and managed in accordance with relevant legislation;
- income has been applied in accordance with the University's Statutes and
- funds provided by HEFCE have been applied in accordance with the Memorandum of Assurance and Accountability and any other terms and conditions attached to them.

THE PURPOSE OF OUR AUDIT WORK AND TO WHOM WE OWE OUR RESPONSIBILITIES

This report is made solely to the Council, in accordance with the Charters, Statutes or Ordinances of the institution. Our audit work has been undertaken so that we might state to the Council those matters we are required to state to them in an auditor's report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the University and the Council for our audit work, for this report, or for the opinions we have formed.

Andrew Argyle
for and on behalf of KPMG LLP, Statutory Auditor
Chartered Accountants
One Snowhill
Snow Hill Queensway
Birmingham
B4 6GH

CRANFIELD UNIVERSITY
PRINCIPAL ACCOUNTING POLICIES

1. Basis of accounting and preparation

These financial statements have been prepared in accordance with the Statement of Recommended Practice (SORP): Accounting for Further and Higher Education 2015 and in accordance with Financial Reporting Standards (FRS 102). The University is a public benefit entity and therefore has applied the relevant public benefit requirements of FRS 102. The financial statements are prepared in accordance with the historical cost convention (modified by the revaluation of land fixed assets). The following exemption available under FRS 102 has been applied to these financial statements:

- Disclosures in respect of transactions with wholly owned subsidiaries.

2. Basis of consolidation

The consolidated financial statements include the financial statements of the University and all its subsidiaries prepared up to the end of the financial year. They do not include the financial statements of student associations as it is considered the University has limited financial interest and no control or significant influence over policy decisions.

3. Foreign currencies

Transactions denominated in foreign currencies are recorded at the rate of exchange ruling at the dates of the transactions. Monetary assets and liabilities in foreign currencies are translated into sterling at the rate of exchange ruling at the balance sheet date. The resulting exchange differences are reflected in the income and expenditure account for the financial year.

4. Recognition of income

Income from the sale of goods and services is credited to the Consolidated Statement of Comprehensive Income and Expenditure when the goods or services are supplied to the external customers or the terms of the contract have been satisfied. Other income received in relation to the utilisation of the university estate is recognised in accordance with the terms of the underlying transaction.

Tuition fee income is stated gross of any expenditure over the period in which the students are studying. Bursaries and scholarships are accounted for gross as expenditure and not deducted from income.

Investment income is credited to the Consolidated Statement of Comprehensive Income and Expenditure on a receivable basis.

(1) Grant Funding

Grant funding including Funding Council block grant, research grants from government sources, grants (including research grants) from non government sources are recognised as income when the University is entitled to the income and performance related conditions have been met. Income received in advance of performance related conditions being met is recognised as deferred income within creditors on the balance sheet and released to income as the conditions are met.

(2) Donations and endowments

Non exchange transactions without performance related conditions are donations and endowments. Donations and endowments with donor imposed restrictions are recognised in income when the University is entitled to the funds. Income is retained within the restricted

CRANFIELD UNIVERSITY

PRINCIPAL ACCOUNTING POLICIES

(continued...)

reserve until such time that it is utilised in line with such restrictions at which point the income is released to general reserves through a reserve transfer.

Donations with no restrictions are recognised in income when the University is entitled to the funds.

Investment income and appreciation of endowments is recorded in income in the year in which it arises and as either restricted or unrestricted income according to the terms applied to the individual endowment fund.

There are four main types of donations and endowments identified in reserves:

1. Restricted donations – the donor has specified that the donation must be used for a particular objective.
2. Unrestricted permanent endowments – the donor has specified that the fund is to be permanently invested to generate an income stream for the general benefit of the University.
3. Restricted expendable endowments – the donor has specified a particular objective other than the purchase or construction of tangible fixed assets, and the University has the power to use the capital
4. Restricted permanent endowments – the donor has specified that the fund is to be permanently invested to generate an income stream to be applied to a particular objective.

(3) Capital grants

Capital grants are recognised in income when the University is entitled to the funds subject to any performance related conditions being met.

5. Research and development

Expenditure on research and development is charged to the income and expenditure account in the year in which it is incurred

6. Tangible fixed assets

(1) Land and buildings

Land is stated at valuation and is revalued triennially. The basis of valuation is open market value for existing use, and in the case of the technology park, open market value with vacant possession. The most recent valuation was carried out as at 31st July, 2016 by Gerald Eve LLP. Freehold land is not depreciated as it is considered to have an indefinite useful life. Where land is held for resale and a conditional sale agreement is in place at the year end the land is revalued to the anticipated net proceeds and retained in fixed assets.

Freehold and leasehold buildings are stated at cost and depreciated over their expected useful lives or the life of the lease, whichever is shorter. Where there is a permanent reduction in value, provision is made in the financial statements.

Where buildings are acquired with the aid of specific grants, they are capitalised and depreciated as above.

CRANFIELD UNIVERSITY

PRINCIPAL ACCOUNTING POLICIES

(continued...)

(2) *Equipment*

Equipment costing less than £5,000 per individual item or group of related items is written off in the year of acquisition. All other equipment is capitalised at cost and depreciated over its expected useful life.

Where equipment is acquired with the aid of specific grants or gifts, it is capitalised and depreciated as above.

(3) *Depreciation*

Depreciation is calculated on the original cost of the assets at the following rates:-

Buildings	2% - 5% per annum
Fixtures and fittings	10% per annum
Equipment	20% - 33.33 % per annum
Plant and machinery	5% - 25% per annum

7. **Leases**

Leasing agreements that transfer to the University substantially all the benefits and risks of ownership are considered to be finance leases. All other leases are operating leases.

Fixed assets held under finance leases and the related lease obligations are recorded in the balance sheet at the fair value of the leased assets at the inception of the lease. The excess of lease payments over recorded lease obligations is treated as finance charges which is amortised over each lease term to give a constant rate of charge on the remaining balance of the obligations.

Rental costs under operating leases are charged to expenditure over the periods of the leases.

8. **Investments**

(1) Non current asset investments are held on the Balance Sheet at amortised cost less impairment.

(2) Investment in subsidiaries is included in the balance sheet at cost, less any provisions for impairment.

9. **Stock**

Stock is valued at the lower of cost and net realisable value

10. **Work in progress**

Work in progress is stated at cost plus attributable overheads less provisions for any known or anticipated deficits and payments on account receivable.

CRANFIELD UNIVERSITY

PRINCIPAL ACCOUNTING POLICIES

(continued...)

11. **Taxation status**

The University is an exempt charity within the meaning of Schedule 2 of the Charities Act 1993 and as such is a charity within the meaning of the Taxes Act 1988. Accordingly, the University is potentially exempt from corporation tax and capital gains tax to the extent that such income or gains are applied to exclusively charitable purposes.

The University receives no similar exemption in respect of Value Added Tax. The University's subsidiary companies are subject to corporation tax and Value Added Tax in the same way as any commercial organisation.

12. **Deferred taxation**

Deferred taxation is recognised as a liability or asset if transactions or events have occurred by the balance sheet date that give rise to an obligation to pay more taxation, or a right to pay less taxation, in future. An asset is not recognised to the extent that the transfer of economic benefits in future is uncertain. Deferred tax assets and liabilities recognised are not discounted.

13. **Maintenance of premises**

The cost of all maintenance is charged to the income and expenditure account as incurred. Provisions are made for dilapidation of leasehold property where an appropriate obligation exists.

14. **Pension schemes**

The two principal pension schemes of the University's employees are the Universities Superannuation Scheme (USS) and the Local Government Pension Scheme (LGPS) administered by Bedfordshire County Council.

Details of the schemes are included in Note 22. For defined benefit schemes, pension costs are assessed on the latest actuarial valuations of the schemes and are accounted for on the basis of charging the cost of providing pensions over the period during which the University benefits from the employees' services.

15. **Provisions**

Provisions are recognised when the University has a present legal or constructive obligation as a result of a past event and it is probable that a transfer of economic benefit will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

16. **Going concern**

The University considers that it has sufficient financial resources and is confident that its future income streams will maintain these resources. Council believe that the University is well placed to effectively manage its business risks, despite the current uncertain economic situation.

Council have a reasonable expectation that the University has adequate resources to continue operating in existence for the foreseeable future. Thus, they continue to adopt the going concern basis in preparing the financial statements.

CRANFIELD UNIVERSITY

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME AND EXPENDITURE

FOR THE YEAR ENDED 31ST JULY, 2017

		CONSOLIDATED		UNIVERSITY	
		2017	2016	2017	2016
	Notes	£'000	£'000	£'000	£'000
Income					
Funding Council grants	1	20,975	22,688	20,975	22,688
Tuition fees and education contracts	2	65,096	69,702	53,198	57,326
Research grants and contracts		34,420	39,083	33,932	38,879
Other income	3	37,944	35,354	32,064	32,311
Investment income	4	159	370	169	382
Donations and endowments	5	17,765	9,046	17,765	9,046
Total income		176,359	176,243	158,103	160,632
Expenditure					
Staff costs					
Operating staff costs	6	88,920	84,104	79,253	74,433
USS pension provision movement	22	(3,158)	1,052	(3,152)	1,061
Total staff costs		85,762	85,156	76,101	75,494
Other operating expenses		73,260	77,344	66,342	71,286
Depreciation	10	11,490	10,354	10,795	9,586
Interest and other finance costs	8	2,523	3,360	2,534	3,385
Total expenditure	7	173,035	176,214	155,772	159,751
Surplus before other gains and losses		3,324	29	2,331	881
Profit/(loss) on disposal of assets		1,405	(25)	1,407	(25)
Gain/(loss) on investments		43	(3)	3	(3)
Surplus before tax		4,772	1	3,741	853
Taxation	9	(12)	(945)	-	(929)
Surplus/(deficit) for the year		4,760	(944)	3,741	(76)
Unrealised surplus on revaluation of land and buildings		-	10,624	-	10,624
Actuarial gain(loss) in respect of pension schemes	22	3,480	(7,815)	3,480	(7,815)
Total comprehensive income for the year		8,240	1,865	7,221	2,733
Represented by:					
Endowment comprehensive profit/(loss) for the year		227	(298)	227	(298)
Unrestricted comprehensive income for the year		8,013	2,163	6,994	3,031
		8,240	1,865	7,221	2,733
Operating surplus before USS pension provision movements					
Surplus/(deficit) for the year		4,760	(944)	3,741	853
Movement on USS pension provision		(3,158)	1,052	(3,152)	1,061
Operating surplus for the year		1,602	108	589	1,914

The notes on pages 29 to 48 form part of these accounts.

CRANFIELD UNIVERSITY

CONSOLIDATED STATEMENT OF CHANGES IN RESERVES
FOR THE YEAR ENDED 31ST JULY, 2017

Consolidated	Income and expenditure account			Revaluation reserve	Total
	Endowment	Restricted	Unrestricted		
	£'000	£'000	£'000	£'000	£'000
Balance at 1 August 2015	6,187	-	45,088	42,407	93,682
Surplus/(deficit) from the income and expenditure statement	(298)	-	(646)	-	(944)
Other comprehensive income	-	-	2,809	-	2,809
Transfers between revaluation and income and expenditure reserve	-	-	(10,624)	10,624	-
Release of restricted funds spent in year	-	-	-	-	-
Total comprehensive loss for the year	(298)	-	(8,461)	10,624	1,865
Balance at 1 August 2016	5,889	-	36,627	53,031	95,547
Surplus/(deficit) from the income and expenditure statement	227	-	4,533	-	4,760
Other comprehensive income	-	-	3,480	-	3,480
Transfers between revaluation and income and expenditure reserve	-	-	-	-	-
Release of restricted funds spent in year	-	-	-	-	-
Total comprehensive income for the year	227	-	8,013	-	8,240
Balance at 31 July 2017	6,116	-	44,640	53,031	103,787

University	Income and expenditure account			Revaluation reserve	Total
	<i>Endowment</i>	<i>Restricted</i>	<i>Unrestricted</i>		
	£'000	£'000	£'000		
Balance at 1 August 2015	6,187	-	43,926	42,407	92,520
Surplus/(deficit) from the income and expenditure statement	(298)	-	222	-	(76)
Other comprehensive income	-	-	2,809	-	2,809
Transfers between revaluation and income and expenditure reserve	-	-	(10,624)	10,624	-
Release of restricted funds spent in year	-	-	-	-	-
Total comprehensive loss for the year	(298)	-	(7,593)	10,624	2,733
Balance at 1 August 2016	5,889	-	36,333	53,031	95,253
Surplus/(deficit) from the income and expenditure statement	227	-	3,514	-	3,741
Other comprehensive income	-	-	3,480	-	3,480
Transfers between revaluation and income and expenditure reserve	-	-	-	-	-
Release of restricted funds spent in year	-	-	-	-	-
Total comprehensive income for the year	227	-	6,994	-	7,221
Balance at 31 July 2017	6,116	-	43,327	53,031	102,474

The notes on pages 29 to 48 form part of these accounts.

CRANFIELD UNIVERSITY
BALANCE SHEETS AT 31ST JULY, 2017

	Notes	CONSOLIDATED		UNIVERSITY	
		2017	2016	2017	2016
		£'000	£'000	£'000	£'000
Non-current assets					
Fixed assets	10	202,830	194,369	197,345	188,546
Investments	11	3,472	3,408	3,472	3,408
Investments in subsidiaries	12	-	-	5,186	5,186
		<u>206,302</u>	<u>197,777</u>	<u>206,003</u>	<u>197,140</u>
Current assets					
Stock		239	245	180	178
Debtors	13	37,586	41,624	34,336	39,378
Cash at bank and in hand		4,041	7,321	-	4,362
		<u>41,866</u>	<u>49,190</u>	<u>34,516</u>	<u>43,918</u>
Less: Creditors: amounts falling due within one year	14	(57,257)	(65,407)	(51,110)	(59,928)
Net current liabilities		<u>(15,391)</u>	<u>(16,217)</u>	<u>(16,594)</u>	<u>(16,010)</u>
Total assets less current liabilities		<u>190,911</u>	<u>181,560</u>	<u>189,409</u>	<u>181,130</u>
Creditors: amounts falling due after more than one year	15	(21,378)	(13,322)	(21,378)	(13,322)
Provisions					
Pension provisions	16	(65,586)	(72,521)	(65,554)	(72,482)
Other provisions	17	(160)	(170)	(3)	(73)
Total net assets		<u>103,787</u>	<u>95,547</u>	<u>102,474</u>	<u>92,523</u>
Financed by:-					
Restricted Reserves					
Income and expenditure reserve – endowment reserve	18	6,116	5,889	6,116	5,889
Income and expenditure reserve – restricted reserve		-	-	-	-
Unrestricted Reserves					
Income and expenditure reserve - unrestricted		44,640	36,627	43,327	36,333
Revaluation reserve		53,031	53,031	53,031	53,031
Total Reserves		<u>103,787</u>	<u>95,547</u>	<u>102,474</u>	<u>95,253</u>

The financial statements on pages 20 to 48 were approved by the Council on 2nd November, 2017 and signed on its behalf by:-

C P FAIRWEATHER MA FCA
TREASURER

PROFESSOR SIR PETER GREGSON FREng
MRIA
CHIEF EXECUTIVE & VICE-CHANCELLOR

I SIBBALD FCA
DIRECTOR OF FINANCE

The notes on pages 29 to 48 form part of these accounts.

CRANFIELD UNIVERSITY
STATEMENT OF CONSOLIDATED CASH FLOWS
FOR THE YEAR ENDED 31ST JULY, 2017

	Notes	2017 £'000	2016 £'000
Cash flow from operating activities			
Surplus/(deficit) for the year		4,760	(944)
Adjustment for non-cash items			
Depreciation	10	11,490	10,354
(Gain)/loss on investments		(43)	3
Exchange loss		329	864
(Increase)/decrease in stock		6	22
Decrease/(increase) in debtors		4,038	(7,955)
Increase/(decrease) in creditors		(1,288)	(14,879)
(Decrease)/Increase in pension provision		(3,455)	9,835
(Decrease)/increase in other provisions		(10)	(754)
Adjustment for investing or financing activities			
Investment income	4	(159)	(370)
Interest payable	8	2,523	3,360
(Profit)/Loss on the sale of fixed assets		(1,405)	25
Capital grant income	5	<u>(17,765)</u>	<u>(9,046)</u>
Net cash outflow from operating activities		<u>(979)</u>	<u>(9,485)</u>
Cash flows from investing activities			
Proceeds from sales of fixed assets		1,407	-
Capital grants receipts		2,000	14,551
Disposal of non-current asset investments		795	85
Investment income		161	437
Payments made to acquire fixed assets		(19,021)	(29,664)
New non-current asset investments		(735)	(1,204)
Total cash flow from investing activities		<u>(15,393)</u>	<u>(15,795)</u>
Cash flows from financing activities			
Interest paid		(187)	(238)
Interest element of finance lease		(262)	(240)
Endowment cash received		765	1,015
New unsecured loans		10,000	-
Repayments of amounts borrowed		(1,953)	(1,628)
Capital element of finance lease and service concession payments		(464)	(292)
Total cash flow from financing activity		<u>7,899</u>	<u>(1,383)</u>
Decrease in cash and cash equivalents in the year		<u>(8,473)</u>	<u>(26,663)</u>
Cash and cash equivalents at beginning of the year	19	7,321	33,984
Cash and cash equivalents at end of the year	19	(1,152)	7,321
Movement in cash		<u>(8,473)</u>	<u>(26,663)</u>

The notes on pages 29 to 48 form part of these accounts.

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017

	CONSOLIDATED		UNIVERSITY	
	2017	2016	2017	2016
	£'000	£'000	£'000	£'000
1. Funding Council grants				
Recurrent grant	15,768	17,528	15,768	17,528
Special initiatives	5,207	5,160	5,207	5,160
	20,975	22,688	20,975	22,688

Grants are receivable from the Higher Education Funding Council for England. In addition to the above, grants were received for capital purposes of £Nil (2016 - £14,551,000).

2. Tuition fees and education contracts

Long course fees	34,191	35,598	34,191	35,598
Professional development courses	17,933	18,923	6,120	6,547
Teaching contract	12,972	15,181	12,887	15,181
	65,096	69,702	53,198	57,326

The University has a long term teaching contract with the MoD for the provision of teaching services at postgraduate level. This contract has 11 years to run. The University is in discussion with the MoD with a view to reducing the scope, coverage and cost of the contracts future years. No material liability has been included within the accounts based on Cranfield's assessment of the financial implications in relation to the operation of the contract.

3. Other income

Residences and conference centres	11,006	10,503	8,879	8,231
Rents from tenant organisations	1,155	1,273	1,807	1,899
Other	25,783	23,578	21,378	22,181
	37,944	35,354	32,064	32,311

Other income includes an exceptional £1,000,000 (2016 - £2,000,000). This reflects the third and final contractual payment relating to a reorganisation of the use of the airport in 2014/15.

4. Investment income

Investment income from endowments	84	94	84	94
Other investment income	75	276	85	288
	159	370	169	382

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

	CONSOLIDATED		UNIVERSITY	
	2017	2016	2017	2016
	£'000	£'000	£'000	£'000
5. Donations and endowments				
New endowments (<i>Note 18</i>)	765	1,015	765	1,015
Donations without restrictions	17,000	8,031	17,000	8,031
	17,765	9,046	17,765	9,046
6. Staff				
a. Staff costs				
Wages and salaries	71,633	69,074	63,649	60,960
Social security costs	7,352	6,199	6,537	5,450
Other pension costs	9,393	8,678	5,373	8,931
	88,378	83,951	75,559	75,341
Exceptional staff restructuring costs	542	153	542	153
	88,920	84,104	76,101	75,494
Emoluments of the Vice-Chancellor				
Base salary	286	285	286	285
Cost of pension opt-out	41	34	41	34
Performance related pay	37	61	37	61
Benefits in kind	-	-	-	-
	364	380	364	380
b. The average number of employees during the year, expressed as full-time equivalents, was as follows:-	Number	Number	Number	Number
Academic	452	413	430	393
Research	233	223	233	223
Technical	173	168	130	126
Other	916	829	717	653
	1,774	1,633	1,510	1,395

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

6. **Staff** *(continued...)*

	CONSOLIDATED		UNIVERSITY	
	2017	2016	2017	2016
	Number	Number	Number	Number
c. Remuneration of other higher paid staff, excluding employer's pension contributions, were as follows:-				
£100,000 - £109,999	11	11	10	10
£110,000 - £119,999	9	13	8	12
£120,000 - £129,999	5	5	5	5
£130,000 - £139,999	6	-	6	-
£140,000 - £149,999	1	1	1	1
£150,000 - £159,999	3	3	3	3
£160,000 - £169,999	2	2	2	2
£170,000 - £179,999	1	1	1	1
£180,000 - £189,999	1	-	-	-
£260,000 - £269,999	-	1	-	1
£270,000 - £279,999	1	-	1	-

Key Management personnel

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the University.

	CONSOLIDATED & UNIVERSITY	
	2017	2016
	£'000	£'000
Key management personnel compensation	1,996	2,105

Council Members

The University's council members are the trustees for charitable law purposes. Due to the nature of the University's operations and the compositions of the Council, it is inevitable that transactions will take place with organisations in which a member of the Council may have an interest. All transactions involving organisations in which a member of Council may have an interest are conducted at arm's length and in accordance with the University's Financial Regulations and usual procurement procedures.

No Council member received any payment for their role as a trustee. Mr P Fairweather has provided consultancy services in the year and was paid, including expenses, £14,357 (2016 £15,425).

The total expenses paid to or on behalf of five council members was £1,813 (2016 £1,089 to five council members). This represents travel and subsistence expenses incurred in attending Council, Committee meetings and Charity events in their official capacity.

CRANFIELD UNIVERSITY

NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

	CONSOLIDATED		UNIVERSITY	
	2017 £'000	2016 £'000	2017 £'000	2016 £'000
7. Other operating amounts charged include:-				
Equipment expensed	2,043	6,407	1,973	6,349
Auditor's remuneration:-				
- external audit	135	124	86	74
- other services including tax	105	72	77	55
Council members' expenses	2	1	2	1
	<hr/>	<hr/>	<hr/>	<hr/>
8. Interest and other finance costs				
Loan interest	206	206	217	233
Finance leases	262	240	262	240
Exchange differences	329	864	329	864
Net charge on Pension scheme	1,726	2,050	1,726	2,048
	<hr/>	<hr/>	<hr/>	<hr/>
	2,523	3,360	2,534	3,385
	<hr/>	<hr/>	<hr/>	<hr/>
9. Taxation				
Recognised in the statement of comprehensive income:-				
Current tax expense	12	929	-	929
Adjustment in respect of Prior years	-	16	-	-
	<hr/>	<hr/>	<hr/>	<hr/>
Total tax expense	12	945	-	929
	<hr/>	<hr/>	<hr/>	<hr/>

The tax assessed for the year is higher than the standard rate of corporation tax in the UK. The differences are explained below:

Surplus on ordinary activities before taxation	4,772	1	3,741	853
	<hr/>	<hr/>	<hr/>	<hr/>
Tax on surplus on ordinary activities multiplied by the lower rate of corporation tax in the UK of 23.67% (2016 – 23.67%)	1,130	1	748	171
Factors affecting charge:				
University surplus exempt from corporation tax	(1,709)	-	(748)	(171)
RDEC tax charge	-	929	-	929
Other permanent differences	591	15	-	-
	<hr/>	<hr/>	<hr/>	<hr/>
Corporation tax charged in the year	12	945	-	929
	<hr/>	<hr/>	<hr/>	<hr/>

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

	Land & Buildings		Equipment	Fixtures, Plant & Machinery	Total
	Freehold	Leasehold			
10. Fixed assets					
<i>a. Consolidated</i>					
Cost/valuation					
At beginning of year	174,846	7,437	43,603	86,076	311,962
Additions	5,486	-	2,902	11,564	19,952
Disposals	-	-	(95)	(229)	(324)
At end of year	180,332	7,437	46,410	97,411	331,590
Consisting of valuation as at:					
31 July 2017	53,370	-	-	-	53,370
Cost	126,962	7,437	46,410	97,411	278,220
Depreciation					
At beginning of year	24,512	4,889	32,987	55,205	117,593
Charge for year	2,219	230	3,563	5,478	11,490
Disposals	-	-	(95)	(228)	(323)
At end of year	26,731	5,119	36,455	60,455	128,760
Net book amount					
At end of year	153,601	2,318	9,955	36,956	202,830
At beginning of year	150,334	2,548	10,616	30,871	194,369

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

	Land & Buildings		Equipment	Fixtures, Plant & Machinery	Total
	Freehold	Leasehold			
	£'000	£'000			
10. Fixed assets <i>(continued ...)</i>					
<i>b. University</i>					
Cost/valuation					
At beginning of year	168,797	7,437	43,026	78,854	298,114
Additions	5,486	-	2,857	11,251	19,594
Disposals	-	-	(82)	(66)	(148)
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
	174,283	7,437	45,801	90,039	317,560
Consisting of valuation as at:					
31 July 2017	53,370	-	-	-	53,370
Cost	120,913	7,437	45,801	90,039	264,190
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Depreciation					
At beginning of year	22,319	4,889	32,574	49,786	109,568
Charge for year	2,083	230	3,498	4,981	10,795
Disposals	-	-	(82)	(66)	(148)
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
At end of year	24,405	5,119	35,990	54,701	120,215
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
Net book amount					
At end of year	149,878	2,318	9,811	35,338	197,345
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>
At beginning of year	146,478	2,548	10,452	29,068	188,546
	<hr/>	<hr/>	<hr/>	<hr/>	<hr/>

At 31 July, 2017, freehold land and buildings included £53,370,000 (2016 £53,370,000) in respect of freehold land at valuation and is not depreciated.

The net book amounts of tangible fixed assets include £2,318,000 (2016 - £2,548,000) in respect of assets held under finance leases in the consolidated and University accounts respectively. The related depreciation charge for the year was £230,000 (2016 - £230,000). At 31st July 2017, buildings, fixtures and plant included £5,691,000 (2016 - £21,521,000) in respect of assets under construction in the consolidated accounts. In the University assets under construction amounted to £5,691,000 (2016 - £21,521,000).

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

	CONSOLIDATED		UNIVERSITY	
	2017	2016	2017	2016
	£'000	£'000	£'000	£'000
13. Debtors				
Work in progress	11,510	17,735	11,119	17,252
Other trade debtors	22,610	20,396	18,704	16,781
Prepayments and accrued income	3,465	3,321	2,518	2,438
Other taxes	1	172	-	170
Amounts receivable from subsidiary undertakings	-	-	1,995	2,737
	37,586	41,624	34,336	39,378

Included in amounts receivable from subsidiary undertakings is £279,000 (2016 - £559,000) which is recoverable after more than one year.

Work in progress comprises:-

Costs incurred to date				
less foreseeable losses	56,847	68,341	54,593	66,260
Less: progress payments	(45,337)	(50,606)	(43,474)	(49,008)
	11,510	17,735	11,119	17,252

14. Creditors: amounts falling due within one year

Bank overdraft	5,193	-	5,193	-
Secured loans	250	229	250	229
Unsecured loans	1,981	1,715	1,981	1,715
Finance lease obligations	33	464	33	464
Amounts owed to subsidiary undertakings	-	-	350	334
Trade creditors	21,076	18,034	17,674	15,203
Social security costs and other taxation payable	2,763	2,162	2,314	1,790
Accruals and deferred income	25,961	42,803	23,315	40,193
	57,257	65,407	51,110	59,928

15. Creditors: amounts falling due after more than one year

Finance lease obligations	109	142	109	142
Secured loans	1,156	1,406	1,156	1,406
Unsecured loans	20,113	11,774	20,113	11,774
	21,378	13,322	21,378	13,322

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

	CONSOLIDATED		UNIVERSITY	
	2017	2016	2017	2016
	£'000	£'000	£'000	£'000
15. Creditors: amounts falling due after more than one year (continued ...)				
<i>Analysis of secured and unsecured loans due within one year or on demand (note 14)</i>				
	2,231	1,944	2,231	1,944
Between one and two years	2,075	1,700	2,075	1,700
Between two and five years	5,538	4,198	5,538	4,198
Five years or more	13,656	7,282	13,656	7,282
Due after more than one year	21,269	13,180	21,269	13,180
Total secured and unsecured loans	23,500	15,124	23,500	15,124
<i>The net finance lease obligations</i>				
Due within one year or on demand (note 14)	33	464	33	464
Between one and two years	33	33	33	33
Between two and five years	76	98	76	98
Five years or more	-	11	-	11
Due after more than one year	109	142	109	142
Total net finance lease obligations	142	606	142	606

The Group had the following bank loans at 31st July, 2017:-

	Interest Rate	Loan Type	Security	Final Repayment	Loan Outstanding £'000
1.	Euro base + 0.18%	Floating(Euros)	None	15th August 2027	5,146
2.	Sterling base + 0.18%	Floating	None	31st July 2027	6,459
3.	8.71%	Fixed	Land and buildings	14th March 2022	1,406
4.	Interest Free	Salix Fixed	None	1st September 2017	23
5.	Interest Free	Salix Fund	None	1 st September 2018	91
6.	Interest Free	Salix Fund	None	1 st September 2018	375
7.	Sterling LIBOR +1.75%	Floating	None	31 st May 2037	10,000
					23,500

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

16. Pension provisions

Consolidated	Obligation to fund deficit on USS pension £'000	Defined Benefit Obligations (Note 22) £'000	Total Pensions Provisions £'000
At 1 August 2016	14,908	57,613	72,521
Utilised in year	(568)	(1,114)	(1,682)
Reductions	(3,158)	(2,095)	(5,253)
At 31 July 2017	11,182	54,404	65,586

University	Obligation to fund deficit on USS pension £'000	Defined Benefit Obligations (Note 22) £'000	Total Pensions Provisions £'000
At 1 August 2016	14,869	57,613	72,482
Utilised in year	(567)	(1,114)	(1,681)
Reductions	(3,152)	(2,095)	(5,247)
At 31 July 2017	11,150	54,404	65,554

Pension enhancement

The assumptions for calculating the provision for pension enhancements on termination under FRS 102 are as follows:

	Consolidated
Discount rate	2.6
Inflation	2.7

USS deficit

The obligation to fund the past deficit on the University's Superannuation Scheme (USS) arises from the contractual obligation with the pension scheme for total payments relating to benefits arising from past performance. Management have assessed future employees within the USS scheme and salary payment over the period of the contracted obligation in assessing the value of this provision.

CRANFIELD UNIVERSITY
 NOTES TO THE ACCOUNTS
 FOR THE YEAR ENDED 31ST JULY, 2017
 (continued...)

	Staff restructuring	Other	Total
	£'000	£'000	£'000
17. Provisions for liabilities and charges			
<i>a. Consolidated</i>			
At beginning of year	73	97	170
Utilised	(49)	-	(49)
Released	(24)	-	(24)
Charged to income and expenditure account	3	60	63
At end of year	3	157	160
<i>b. University</i>			
At beginning of year	73	-	73
Utilised	(49)	-	(49)
Released	(24)	-	(24)
Charged to income and expenditure account	3	-	3
At end of year	3	-	3

Staff restructuring will be utilised during the next financial year. Other relates to a warranty provision in place over a five year period.

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

18. Endowment reserves

	Expendable endowments	2017 Total	2016 Total
	£'000	£'000	£'000
Balances at 1 August 2016			
Capital	5,721	5,721	6,114
Accumulated income	168	168	73
	<hr/>	<hr/>	<hr/>
	5,889	5,889	6,187
New endowments	765	765	1,015
Investment income	84	84	94
Expenditure	(625)	(625)	(1,404)
Increase/(decrease) in market value of investments	3	3	(3)
	<hr/>	<hr/>	<hr/>
Total endowment comprehensive income for the year	227	227	(298)
	<hr/>	<hr/>	<hr/>
At 31 July 2017	6,116	6,116	5,889
	<hr/>	<hr/>	<hr/>
Represented by:			
Capital	5,984	5,984	5,721
Accumulated income	132	132	168
	<hr/>	<hr/>	<hr/>
	6,116	6,116	5,889
	<hr/>	<hr/>	<hr/>
Analysis by type of purpose:			
Lectureships	864	864	960
Scholarships and bursaries	1,059	1,059	741
Research support	744	744	745
Prize funds	171	171	171
General	3,278	3,278	3,272
	<hr/>	<hr/>	<hr/>
	6,116	6,116	5,889
	<hr/>	<hr/>	<hr/>
Analysis by asset			
Fixed assets	339	339	339
Current and non-current asset investments	2,790	2,790	2,855
Cash & cash equivalents	2,987	2,987	2,695
	<hr/>	<hr/>	<hr/>
	6,116	6,116	5,889
	<hr/>	<hr/>	<hr/>

CRANFIELD UNIVERSITY

NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017

(continued...)

19. Cash and cash equivalents

	Notes	At 1st August 2016 £'000	Cash Flows £'000	31st July 2017 £'000
Consolidated				
Cash and cash equivalents		7,321	(3,280)	4,041
Bank overdraft	14	-	(5,193)	(5,193)
		<u>7,321</u>	<u>(8,473)</u>	<u>(1,152)</u>

	CONSOLIDATED		UNIVERSITY	
	2017	2016	2017	2016
	£'000	£'000	£'000	£'000

20. Lease obligations

Non-cancellable operating lease rentals are payable as follows:

Land and buildings

Within one year	264	264	264	264
Between two and five years	973	1,002	973	1,002
In more than five years	249	471	249	471
	<u>1,486</u>	<u>1,737</u>	<u>1,486</u>	<u>1,737</u>

Other

Within one year	60	65	-	-
Between two and five years	73	53	-	-
In more than five years	-	-	-	-
	<u>133</u>	<u>118</u>	<u>-</u>	<u>-</u>

During the year £324,000 was recognised as an expense in the profit and loss account in respect of operating leases (2016 £284,000).

21. Capital and other commitments

a. Commitments contracted but not provided in the accounts	<u>17,556</u>	<u>18,860</u>	<u>17,556</u>	<u>18,711</u>
b. Commitments authorised but not Contracted for	<u>58,057</u>	<u>11,077</u>	<u>58,057</u>	<u>11,077</u>

CRANFIELD UNIVERSITY

NOTES TO THE ACCOUNTS FOR THE YEAR ENDED 31ST JULY, 2017

(continued...)

22. Pensions

The two pension schemes for the University's staff are the Universities Superannuation Scheme (USS) and the Local Government Pension Scheme (LGPS) administered by Bedfordshire County Council. The assets of the USS are held in a separate trustee-administered fund and a Pension Fund Investment Advisory Panel is responsible for the investment arrangements of the assets of the LGPS. Both schemes are defined benefit schemes, which are externally funded, valued every three years by actuaries using the projected unit method and are contracted out of the State Earnings Related Pensions Scheme. In the intervening years, the actuaries review the progress of the schemes.

Between October 2011 and March 2016 USS provided two schemes, the first for existing members of staff at 30th September 2011 who were existing members of USS, this scheme had benefits based on final pensionable salary for academic and related employees of all universities in the United Kingdom and some other employers, the second for new entrants (other than in some specific, limited circumstances) were provided on a career re-valued benefit basis. From 1 April 2016 one revised career re-valued benefit scheme has been introduced for all academic and related employees.

LGPS provides similar benefits for other staff of the University, based on their final salary.

Pension costs are assessed, in accordance with the advice of the actuary, based on the latest actuarial valuation of the schemes and are accounted for on the basis of charging the cost of providing pensions over the period during which the University benefits from the employees' services.

USS

The University participates in Universities Superannuation Scheme. With effect from 1 October 2016, the scheme changed from a defined benefit only pension scheme to a hybrid pension scheme, providing defined benefits (for all members), as well as defined contribution benefits. The assets of the scheme are held in a separate trustee-administered fund. Because of the mutual nature of the scheme, the assets are not attributed to individual institutions and a scheme-wide contribution rate is set. The University is therefore exposed to actuarial risks associated with other institutions' employees and is unable to identify its share of the underlying assets and liabilities of the scheme on a consistent and reasonable basis. As required by Section 28 of FRS 102 "Employee benefits", the University therefore accounts for the scheme as if it were a wholly defined contribution scheme. As a result, the amount charged to the profit and loss account represents the contributions payable to the scheme. Since the University has entered into an agreement (the Recovery Plan) that determines how each employer within the scheme will fund the overall deficit, the University recognises a liability for the contributions payable that arise from the agreement (to the extent that they relate to the deficit) and therefore an expense is recognised.

FRS 102 makes the distinction between a group plan and a multi-employer scheme. A group plan consists of a collection of entities under common control typically with a sponsoring employer. A multi-employer scheme is a scheme for entities not under common control and represents (typically) an industry-wide scheme such as Universities Superannuation Scheme. The accounting for a multi-employer scheme where the employer has entered into an agreement with the scheme that determines how the employer will fund a deficit results in the recognition of a liability for the contributions payable that arise from the agreement (to the extent that they relate to the deficit) and the resulting expense in profit or loss in accordance with section 28 of FRS 102. The management is satisfied that the scheme provided by Universities Superannuation Scheme meets the definition of a multi-employer scheme and has therefore recognised the discounted fair value of the contractual contributions under the funding plan in existence at the date of approving the financial statements.

CRANFIELD UNIVERSITY

NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017

(continued...)

22. Pensions (continued...)

The latest available full actuarial valuation of the scheme was at 31 March 2014 (the valuation date), which was carried out using the projected unit method. The valuation as at 31 March 2017 is underway.

Since the University cannot identify its share of scheme assets and liabilities, the following disclosures reflect those relevant for the scheme as a whole.

The 2014 valuation was the third valuation for USS under the scheme-specific funding regime introduced by the Pensions Act 2004, which requires schemes to adopt a statutory funding objective, which is to have sufficient and appropriate assets to cover their technical provisions. At the valuation date, the value of the assets of the scheme was £41.6 billion and the value of the scheme's technical provisions was £46.9 billion indicating a shortfall of £5.3 billion. The assets therefore were sufficient to cover 89% of the benefits which had accrued to members after allowing for expected future increases in earnings.

Defined benefit liability numbers for the scheme have been produced using the following assumptions:

	2017	2016
Discount rate	2.57%	3.6%
Pensionable salary growth	n/a	n/a
Pensions increases (CPI)	2.41%	2.2%

The main demographic assumption used relates to the mortality assumptions. Mortality in retirement is assumed to be in line with the Continuous Mortality Investigation's (CMI) S1NA tables as follows:

Male members' mortality	98% of S1NA ["light"] YoB tables – No age rating
Female members' mortality	99% of S1NA ["light"] YoB tables – rated down 1 year

Use of these mortality tables reasonably reflects the actual USS experience. To allow for further improvements in mortality rates the CMI 2014 projections with a 1.5% pa long term rate were also adopted. The current life expectancies on retirement at age 65 are:

	2017	2016
Males currently aged 65 (years)	24.4	24.3
Females currently aged 65 (years)	26.6	26.5
Males currently aged 45 (years)	26.5	26.4
Females currently aged 45 (years)	29.0	28.8

	2017	2016
Scheme assets	£60.0bn	£49.8bn
Total scheme liabilities	£77.5bn	£58.3bn
FRS 102 total scheme deficit	£17.5bn	£8.5bn
FRS 102 total funding level	77%	85%

CRANFIELD UNIVERSITY

NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

22. Pensions (continued...)

		CONSOLIDATED	
		2017	2016
		£'000	£'000
USS pension provision			
At beginning of the year	16	14,908	14,121
Interest payable		358	339
Contributions paid against deficit (Credited)/charged in the year		(926)	(604)
		(3,158)	1,052
At end of the year		11,182	14,908

LGPS

The rate of the University's employer's contributions for LGPS is determined by the actuaries and increased to 18.9% of pensionable salaries with effect from 1st April 2014. Employee rates for LGPS are statutorily prescribed. Variations from regular cost are spread over the expected average remaining working lifetime of members of the scheme after making allowances for future withdrawals.

The figures disclosed below estimated by the actuary as at 31st July, 2017 have been derived by suitable approximation methods from the full actuarial valuation as at 31st March, 2013. Surpluses or deficits that arise may impact on the University's future contribution commitment.

The major assumptions used by the actuary as at 31st July, 2017 are as follows:-

	2017	2016	2015
	%	%	%
Salary scale increases per annum	2.7	2.9	3.3
Pension increases per annum	2.4	1.9	2.4
Discount rate per annum	2.6	2.4	3.5
Members opting for enhanced commutation pre 2008 service	50.0	50.0	50.0
Members opting for enhanced commutation post 2008 service	75.0	75.0	75.0

The assumed life expectations on retirement at age 65 are:-

	2017	2016	2015
Retiring today			
Males	22.4	22.4	22.4
Females	24.5	24.3	24.3
Retiring in 25 years			
Males	24.0	24.4	24.4
Females	26.2	26.8	26.8

CRANFIELD UNIVERSITY
 NOTES TO THE ACCOUNTS
 FOR THE YEAR ENDED 31ST JULY, 2017
 (continued...)

22. Pensions (continued...)

The estimated University share of the assets in the scheme and the expected rates of return were:-

	2017		2016		2015	
	Long term return expected %	Assets £'000	Long term return expected %	Assets £'000	Long term return expected %	Assets £'000
Equities	2.6	49,071	2.4	60,735	3.5	47,570
Property	2.6	7,614	2.4	7,786	3.5	7,695
Bonds	2.6	11,845	2.4	7,008	3.5	11,892
Cash	2.6	16,075	2.4	2,336	3.5	2,798
	<u>2.6</u>	<u>84,605</u>	<u>2.4</u>	<u>77,865</u>	<u>3.5</u>	<u>69,955</u>

There is no provision for unitising the assets of a Fund under LGPS. The asset of the scheme, as a whole, is allocated to participating bodies on a consistent and reasonable basis.

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

22. Pensions (continued ...)

The University's share of the underlying assets and liabilities are as follows:-

	2017 £'000	2016 £'000
Market value of assets	84,605	77,865
Present value of liabilities	(139,009)	(135,478)
Deficit in the scheme – net pension liability recorded within pension provisions (note 16)	(54,404)	(57,613)
Current service cost	3,090	2,430
Loss due to curtailments	16	114
Past service cost	-	-
Total operating charge	3,106	2,544
Analysis of the amount charged to interest payable		
Interest on pension scheme liabilities	3,243	4,169
Expected return on pension scheme assets	(1,874)	(2,459)
Net charge to other finance costs	1,369	1,710
Total income and expenditure account charge	4,475	4,254
Analysis of other comprehensive income		
Gain on assets	4,290	4,846
Change in demographic assumptions	1,259	-
Experience loss on liabilities	3,347	1,676
Loss on liabilities	(5,416)	(14,337)
Total other comprehensive income before deduction for tax	3,480	(7,815)
Cumulative actuarial loss recognised as other comprehensive income for LGPS Scheme		
Cumulative actuarial losses recognised at the start of the year	11,079	3,264
Cumulative actuarial losses recognised at the end of the year	7,599	11,079
Analysis of movement in deficit during the year:		
Deficit in scheme at beginning of the year	(57,613)	(49,617)
Movement in year:		
Current service cost	(3,090)	(2,430)
Contributions	4,204	4,073
Past service cost	-	-
Curtailment cost	(16)	(114)
Other finance charge	(1,369)	(1,710)
Actuarial gain/(loss)	3,480	(7,815)
Deficit in scheme at end of the year	(54,404)	(57,613)

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

22. **Pensions** *(continued ...)*

	2017	2016
	£'000	£'000
Analysis of movements in the present value of the scheme liabilities:-		
Present value at beginning of year	135,478	119,572
Current service cost (net of member contributions)	3,090	2,430
Interest cost	3,243	4,169
Contributions by members (including notional contributions)	612	567
Actuarial losses	810	12,661
Losses on curtailments	16	114
Actual benefits paid	(4,240)	(4,035)
	139,009	135,478
Analysis of movement in the fair value of the scheme assets:-		
Fair value at beginning of year	77,865	69,955
Expected return on assets	1,874	2,459
Contributions by members	612	567
Contributions by the employer	4,204	4,073
Actuarial gains/(losses)	4,290	4,846
Actual benefits paid	(4,240)	(4,035)
	84,605	77,865
Actual return on Scheme assets	14.3%	6.8%
Expected return on Scheme assets	10.1%	10.4%

Estimated contributions for LGPS in the Financial year 2018 is £4,290,000.

In addition to the main schemes described above, some of the subsidiaries operate their own pension schemes, details of which can be found in the individual company accounts.

	£'000	£'000
23. Access funds		
Funding Council grants	-	-
Disbursed to students	-	-
	9	9

Funding Council grants are available solely for students: the University acts only as paying agent. The grants and related disbursements are therefore excluded from the income and expenditure account.

CRANFIELD UNIVERSITY
NOTES TO THE ACCOUNTS
FOR THE YEAR ENDED 31ST JULY, 2017
(continued...)

24. Related party transactions

The following exemptions available under FRS 102 have been applied to these financial statements:

- Disclosures in respect of transactions with wholly owned subsidiaries

Due to the nature of the University's operations and the composition of the Council, it is inevitable that transactions will take place from time to time with organisations in which a Council member may have an interest. All transactions involving organisations in which a member of the Council has an interest are conducted at arm's length and in accordance with the University's Financial Manual and normal procurement procedures.