

UNIVERSITY OF KENT/ESTATE STRATEGY 2015-2025

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1 EXECUTIVE SUMMARY

As a residential University, the University's campuses are an integral part of its offer to students and staff. Kent has long held a reputation of having attractive campus locations and the challenge is to maintain this in the face of past growth in student numbers, increasing students expectations and a large number of buildings built in the 1960's and 1970's that require refurbishment. This will be a especially difficult in an uncertain recruitment and funding environment.

Strategic considerations

The purpose of this document is to review the development of the University of Kent estate in order to support the new Institutional Plan and the Academic Strategy, which encompasses a commitment to quality in teaching, research and innovation.

Current planning projections suggest flat or modest increases in student numbers over the plan period 2015-2025 and the plan is based upon this projection, albeit with some sensitivity analysis.

With this in mind the key drivers of this strategy can be summarised as:

- Coping with past growth in student and staff numbers and the significant challenges facing the sector eg National Student Survey and competition for students.
- Addressing the priorities flowing from the Drake & Kannemeyer (D & K) Condition Survey undertaken in Autumn 2014 (backlog maintenance).
- Maintaining/increasing income from a diverse range of sources, including commercial, in order to preserve sustainability and current levels of employment.
- Supporting the strategic aims of the University by providing an appropriate student learning environment as well as sufficient, quality research space for academic schools.
- Ensuring that the estate remains fit for purpose and provides value for money in its use.
- Introducing flexibility to all new buildings and major refurbishments to promote agility in dealing with a broad range of future growth scenarios, and changes to teaching methodology.
- Improving energy efficiency and reducing the University's carbon footprint.
- Recognising the value of the estate and its facilities for the region, in terms of its focus as a sporting, intellectual and cultural hub and considering the impact of potential public access and use of University premises.
- Improving space utilisation by incorporating new teaching spaces of an appropriate size in new buildings and by developing and agreeing a space management policy.

- Providing a healthy and attractive environment for staff and students and ensuring that access to facilities for those with disabilities is adequate.
- Ensuring that our residential offer is amongst the best in the sector and offers a reasonable range of prices for students.
- Ensuring the operation of the Estates supports the objectives of the Environmental Management System

Against the strategic background noted above, consultation with staff and members of Council, has led to the adoption of set principles upon which future developments will take place, set out in Section 3.6.

Master planning

This strategy should be viewed against the proposed master planning exercise for the Canterbury campus estate that sets out the philosophy and geographic framework for its future development within its current surroundings; recognising its critical relationship with Canterbury and the wider district. The Estate Strategy will identify the business need for new developments, although where they might be located and in what manner, will be explored within the master planning exercise.

Physical resources and future needs

The greatest pressure on space is at the Canterbury campus and the bulk of future planned developments are planned to alleviate shortages in teaching, research and office accommodation.

The approach suggested in this strategy is:

- Rationalise the use of current buildings, refurbishing were economic to do so. Where not economic to maintain or refurbish, buildings will be replaced over time and an asset management policy will be drawn up to inform detailed plans.
- Develop new facilities that will provide academic, social and residential spaces that are flexible and help to meet past and projected growth in activity and improve student satisfaction.

Given the short history of the Medway campus and the less certain forecast of student number growth, the current mix of shared, owned and leased spaces provides medium term flexibility to cope with significant growth or a downturn in numbers. A longer term strategy for space provision will be needed if student numbers increased significantly and sustainably.

1 BIS, International Education: Global Growth and Prosperity, July 2013. See Graph 6 at Appendix 2.

2 Higher Education Funding Council for England

Capital/Development Plans

The University's June 2014 Funding Strategy Paper identified three options for the development of the estate (see Table 1 in Section 13 and Appendix 11). Subsequent work has established an approved 2015/16 Ten Year Capital Programme shown in Table 2 in Section 13 and also Appendix 11. This programme combines Option 1 with elements of Option 2.

The 2015/16 Ten Year Capital Programme is considered affordable from a combination of own reserves combined with new contracted borrowing (from the European Investment Bank). In order to develop more radically over the next 20 years, it is recognised that additional capital funding will be required if we wish to move beyond the programme. Given the declining "real" income per home student, resulting from the lack of inflationary increase to the £9,000 fee, and the lack of significant capital funding from HEFCE² and the Government, this will require unencumbered funds such as those relating to asset sales or new sources of net income feeding through to reserves.

There is also scope to consider a further Public Private Partnership (PPP), particularly with regard to the construction of additional student bedrooms, although the management of

rental levels and the balance between PPP and University funded accommodation will need to be reviewed, before embarking down this road.

The 2015/16 Programme produces a capital development expenditure over the next ten years of around £204m, with an additional £117m for refurbishments and infrastructure. Proposed expenditure on maintenance is c£4.79M pa (revenue and capital) from existing and new budgets, and is subject to annual review. The 2015/16 Programme will, provide a significant improvement in the amount of space for teaching and research, while also providing increased funding for backlog maintenance and refurbishment.

Conclusion

The campus is a key part of the Kent identity and offer, and needs careful management and development to reinforce that sense of place and community that contributes to its attractiveness to students and staff alike. The Strategy focuses on remedying the impact of student growth and an aging estate.





2 INTRODUCTION

An Estate Strategy can be defined as:

'A long-term plan for developing and managing the estate in an optimum way in relation to the university's academic strategy and business needs'.

The Estate Strategy aims to describe in one document:

- The link between the Academic Strategy and the Estate Strategy
- The University's existing estate, its condition and performance
- The current and future requirements of the estate, and the changes required to implement those requirements
- The opportunities for development and rationalisation
- The options available to the University following consultation have resulted in a preferred funded option
- Implementation of the Estate Strategy, including the financing and how this strategic document can be converted into annual plans which enable delivery

Understanding what buildings and facilities will be needed to deliver the Academic Strategy for the University in the 21st century is essential in managing the estate. Close liaison between the estates team and academic leaders will be needed to ensure that changes to teaching methodology, student expectations and trends in research are reflected in the ongoing review of estates requirements. This will need to be against a backdrop of the need to increase efficiency and reduce carbon usage.

This Estate Strategy covers a ten year period from 2014/15-2024/25. It has been prepared in collaboration with Professional Services Directors and Managers; from planning discussions with Heads of Schools and Deans; and members of EG; and presentations to University Council, Kent Union, and Managers Forum (Feb 2014). In addition there has been consultation with local planners, a planning consultant and master planning architects.

The Estate Strategy, based on the 2015/16 Ten Year Capital Programme is considered affordable with currently approved, planned resources (subject to appropriate mitigation of tender price inflation) whilst providing flexibility and being adaptable to future needs. Potential further developments as set out in Options 2 and 3 (see section 13) require further funding and these options and related funding will be investigated over the next two years, as the new University Plan becomes operationalised and the funding environment clearer.

The University has for many years recognised the value of its Canterbury estate and the unique blend of architectural styles located within an historic landscape overlooking a heritage city. It is one of the key selling points of the University for attracting the best students and staff. The Medway campus has been significantly improved over recent years and will, as a result of this strategy, be able to provide a comparable (but not identical) offer to that of Canterbury for students and staff.

The purpose of this strategy is to take a broad overview of the estate needs and policies of the University in order to support its Academic Strategy, to recognise past growth in the numbers of students and staff; and the need to address identified back log maintenance requirements. It must ensure that there is consistency between strategic direction in estate terms, effective management of assets, and the forward programme of intended projects. It is also essential that opportunities for both development and rationalisation are taken into account and planned for in order to maximise value for money and reduce ongoing maintenance costs of the University's property assets. The strategy will form the basis for discussions with local stakeholders, including the community and local authorities, around the business reasons for planned developments, recognising that the longer term master plan will set out the spatial framework for those plans. It will also be the foundation for discussions with potential funders.

The Estate Strategy will be reviewed regularly as part of the planning cycle. Implementation will be reviewed annually, and with a major strategic review in 2020, when a new Institutional Plan will be developed.

3 STRATEGIC CONSIDERATIONS

3.1 Future size and shape of the University

Since 1996/7 the University has nearly trebled its number of students to over 18,000. A key question is whether the institution should or can grow; maintain its current size (but possibly with a different mix of students or activities); or consolidate activities and facilities and decrease in size. Each option will impose different demands on the estate and associated support services.

Given the long planning and building timescales of capital assets, new buildings and major refurbishments should therefore be designed to be flexible in use in order to take advantage of new academic programmes, research and enterprise opportunities, and to encompass changes to teaching delivery. They should also facilitate the introduction of future technologies that improve the learning environment, enhance the student experience, and create a distinctive sense of identity for each of the University's locations.

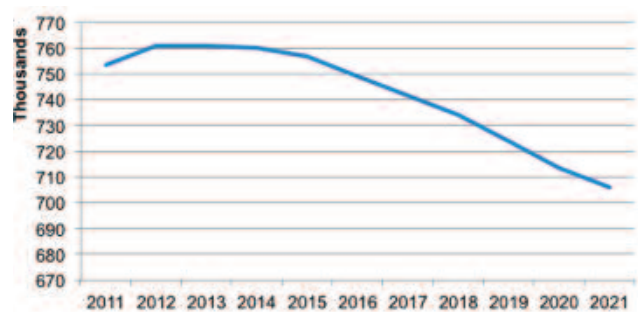
An increasing dependence on international markets for any growth in student numbers will have an impact on the provision of facilities, primarily residential, where many of our competitor institutions are offering a guarantee of accommodation for the duration of study. Cultural differences within our student population may also impact on the type of services that we offer, for example, in the provision of sporting or social activities. This may, for instance, influence the ratio between the creation of indoor versus outdoor facilities and potentially the nature of other social and activities spaces.

Any growth model will directly impact on the availability of funding to provide new or refurbished facilities in order to maintain the estate in a good physical and functional condition. Current home student demographics would suggest that a greater dependence on EU/overseas students will be required in order to maintain current real income. However, this comes with some risk given the current political debate around immigration and the UK's position within the EU. Together with a shift towards a higher percentage of PGT numbers, a greater volatility in student numbers may be seen and this reinforces the need for flexibility in the estate..

3.2 Student numbers and assumptions

Student number assumptions will inevitably impact on the focus of the Estate Strategy. Graph 1 below shows the demographic trend for 18-24 year olds in the south east of England resulting in a 10% reduction by 2021. Other areas of

the UK fare even worse but our proximity to London may help to mitigate this trend. EU states are also seeing reductions in population, including recent accession countries.



Graph 1: ONS projections for 18-24 year olds in the South East (excluding London) 28 September 2012.

It should be noted that in order to meet the declining real income per head from Home/EU fees, the predicted 7.7% increase in student numbers (graphs 1,2 and 3 Appendix 2) also includes an increased target for overseas student numbers.

Overall student numbers are therefore difficult to predict with any accuracy and, whilst it is important to be aware of demographic trends, the new University plan suggests that there will only be a modest rise in numbers over the next five years.

Canterbury campus numbers are likely to remain relatively static, given current projections, one exception being Kent Business School (KBS), whose profiled growth has been set to fund the development of the new Business and Maths Building in Park Wood Road (see Graph 4 in Appendix 2). There have also been increases in the entry numbers for science courses together with good success in bringing in new research and innovation income and this is producing severe pressure in schools such as Biosciences, where laboratory facilities are now in need of expansion. The University hopes to grow its science numbers further and a Science expansion plan is currently being prepared to set out future targets for both research and student numbers and this will need a response in terms of space provision.

Having increased student entry by around 100 in each of 2013 and 2014, the current strategy for the Medway campus is focused on increasing the number of students taking the University's practice and professional based subjects and a greater interaction between subjects in order to improve the

academic choices and employment options for students. To facilitate this, a lease has been taken on for further academic facilities in the Chatham Historic Dockyard in order to provide space for the growth in KBS programmes, which are key to the new approach, and to free up space for further expansion in other subjects at the Pembroke site. In addition, initiatives to improve the Medway student experience are coming to fruition with the opening of Cargo, the re-development of the Galvanising Shop on the dockyard and the building of a student centre in the old swimming pool building on the Pembroke site (jointly with the University of Greenwich). It will never be possible to replicate the facilities of Canterbury at Medway but the ambition is to create a self-sufficient and self-confident academic community that can provide a distinctive provision to the region, maintaining the quality of education and research that should pervade the entire Kent offer.

In the longer term, once growth has been achieved and consolidated, a phased withdrawal from leased buildings into freehold development on University land should be explored.

The Estate Strategy is based on these student number assumptions and the 2015/16 Ten Year Capital building proposals are only designed to broadly accommodate the growth in staff and student numbers that occurred between 2009 and 2014 and Medway increases that are currently planned.

A sensitivity analysis looking at how much new academic/non-residential space is required for different growth scenarios is given at Section 6.

3.3 Student experience

The introduction of the £9,000 per annum fee (set in 2010 and implemented in 2012) has increased the expectation of students with regard to the delivery of academic and non-academic services across the University. The Estate will need to facilitate ongoing improvements in the following areas:

3.3.1 Teaching and feedback

- the use of technology. Buildings will be designed to support future development in technology through, for example the use of structured cabling systems and adaptable lighting systems.
- information services provision that can be accessed through a range of interactive devices. Buildings will support this through the provision of Wi-Fi, screens and the appropriate distribution of power outlets for charging devices.
- the provision of the appropriate type of physical space to deliver academic facilities, eg state of the art flexible lecture theatres, seminar rooms, spaces that support in-class assessment and examination halls.

- all Building Project Boards include School representatives who actively participate in determining technical specifications.

3.3.2 Social and informal learning spaces

For students resident on campus, the shared kitchen is often the focus for social interaction. However, it is important to recognise that over two thirds of the University's students are currently resident off campus and require good quality social space on campus in order to interact with other students and to provide a base for the day.

Many university programmes require group working with an increasing demand for appropriate space. Such space should support laptops and other personal technology and be accessible to food and beverages and preferably be open 24 hours a day. While the new library extension significantly increases the provision of such space there remains a need for further provision embedded within schools and departments across the campus in order to facilitate student:student interactions and also staff:student engagement.

Extra-curricular activities are key to providing students with a transformational experience of student life. The University of Kent has an active student union with 55 sports clubs and 135 societies based at Canterbury with a further 15 sports clubs and 13 societies based at Medway campus. The space required for these activities has traditionally been provided by identifying spare rooms and other spaces that are distributed across the campus. However there is an emerging demand across the sector (and reflected at Kent) for some dedicated spaces to be located within a fit for purpose facility, available in a safe and 24/7 environment and co-located with advice, volunteering support and other Student Union services.

3.3.3 Coordinated and easy access to advice and student services

Students will access a range of non-academic, university delivered services while studying at Kent. These will include finance, welfare services, careers and employment, and accommodation. These are currently delivered at various locations across campus with each delivery point providing different levels of service, office hours and quality of environment. Often, access to these services is poorly sign posted and in locations that can be inconvenient for students travelling in to campus specifically to attend lectures. Such dispersal not only hampers a co-ordinated approach to service delivery but also prevents economies of scale and other efficiencies to be achieved in the use of technology, space and staff.

3 STRATEGIC CONSIDERATIONS (CONT)

A significant number of universities have constructed dedicated facilities to house all student facing services, sometimes with a single reception and with technology to uniquely track the individual student through the help desk system until the specific issue is resolved. Such a facility is commonly referred to as a “one stop shop” and will invariably contain, or be close to, retail and catering facilities, bookable meeting rooms and informal spaces in order to encourage usage and create a hub of activity. The construction of such a facility at Kent would also relieve serious overcrowding within the Registry building whilst improving efficiency by facilitating the re-engineering of working practices and processes.

3.3.4 Sports facilities

Engagement in sporting activities is recognised to improve student wellbeing in the short and longer term, and to enhance learning capability. It is also seen as a major student attractor in recruitment terms and employability. “Kent Sport” student membership, has increased to 6,931 in 2014/15 (an increase of 53% since 2012/13). This reflects good levels of student sports club membership (around 35%). Despite the construction of additional sports facilities during the period 2009-14, the substantial increase in recreational, inter mural, inter college, and inter university sport, means that there is still a shortfall of provision, notably in wet facilities and outdoor playing surfaces. (Sports and leisure facilities are discussed in detail in section 8: Sport, Arts and Culture).

3.3.5 Employability

Employability after graduation and the quality of support provided by the University to achieve this is now a key deciding factor for students in selecting a university place in the era of £9,000 fees. It is therefore essential that the University provides ready access to appropriate physical resources eg need for studios, Bloomberg Suite (contained within the new SMSAS/Business School building), interview areas and scientific analysis facilities and for student enterprise activities.

3.3.6 Utilising outside spaces

The Canterbury campus, with its location above the historic heritage city, is one of the University’s key assets and is widely regarded as one of the finest within the sector. It is a particularly important recruiting tool for overseas students. However, the campus landscapes also have the potential to form part of the formal and informal learning environment. To this end the Creative Campus initiative was established in 2008 with funding from the HEA Change Academy and is now supported through internal budgets.

3.3.7 High quality residential provision

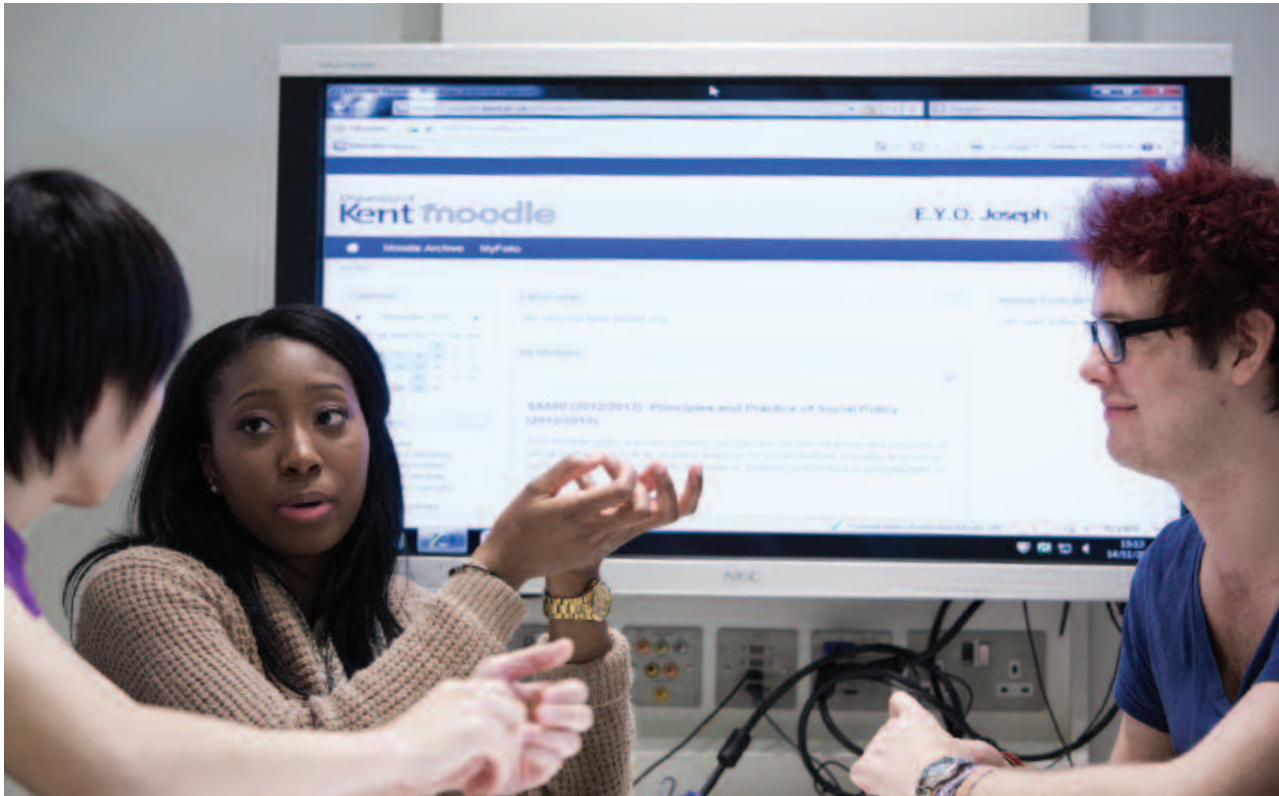
The University is a campus based institution and competes with similarly campus based institutions that have been investing heavily in facilities and accommodation. Ideally, the University would wish to offer overseas and postgraduate students accommodation on campus for all years of their study as they are a key source of new income and there is a competitive challenge from other institutions both in the UK and abroad for these students, with many universities offering a better residential guarantee than that of Kent. There is a need to offer a range of types and prices for accommodation so that students are not deterred by high non-academic costs.

3.3.8 The University as a key economic and cultural resource

Approximately £0.7bn is contributed to the local economy and around 7,000 jobs (both at the university and in the community) depend upon its ongoing success. However, the University recognises the impact of the numbers of students on the local community, in terms of availability of affordable rented accommodation for locals and issues relating to the behaviour of a minority of students. Increasing the amount of residential accommodation available on the Canterbury campus may require the expansion of the built area on the campus in order to do so. Such accommodation will also increase the number of rooms available for vacation letting: presently around 165,000 bednights are sold each year, bringing visitors into the City and increasing its brand reach. A high quality all year round conference trade has been shown to be viable and the longer term ambition is still to develop a conference centre that will allow the University to offer academic conferences and part-time full fee postgraduate modular courses. Further developments are planned for the Gulbenkian Arts complex which incorporates the Colyer-Fergusson Concert Hall, that will provide further facilities for students, local organisations and contribute to the improving regional arts offer. The University’s success in achieving Arts Council England National Portfolio Organisation status allows it to compete for relevant capital funding, albeit with a matched funding requirement from the University.

3.4 High quality environment for staff

The core business of the University is to provide an exceptional higher education experience to our students and top quality research by our staff. Because of this, our staff, both academic and professional services, are our biggest asset. The Estate Strategy can provide a framework to support our staff in delivering that experience in the following ways:



- Enabling technology and new ways of working through smart design.
- Creating state of the art research facilities that are sufficiently generic and adaptable to accommodate fluctuating needs.
- Promoting interaction between academic peers and between academics and professional services staff that will help build work place relationships and result in the more effective delivery of the student experience and cutting edge research.
- Promoting formal and informal interaction between academic staff and students. This can be achieved by designing appropriate facilities into new and refurbished academic buildings.
- Creating a sense of School identity, through consolidating Schools into fit for purpose buildings that have a 'front door' and dedicated facilities.
- Creating good quality, bookable space that can be used for both modular (timetabled academic) and non-modular use. The latter might include staff meetings and extracurricular events.
- Providing good quality social facilities for all staff, and appropriate visitor facilities. The latter might include serviced office/hot desking facilities for visiting academics or guests who need to remain productive whilst on campus.
- Provide facilities that support partnership working and other external opportunities.
- Identify overcrowding in existing facilities, eg the Registry, and design new buildings that relieve it through extra space and a design that allows re-engineering of working practices to enhance the student experience and allow economy. The proposed Student Administration Building is an example of this.
- Recognising that the physical built environment is part of a wider set of facilities that are provided to students and staff and ensuring that colleagues in academic schools and support services eg Information Services are fully brought into projects in order to ensure that there is alignment between strategic developments in ways of teaching and supporting students and staff.

3 STRATEGIC CONSIDERATIONS (CONT)

3.5 Condition of the existing estate

Section 5 sets out the results of the Condition Survey undertaken in Autumn 2014. While the overall potential costs of dealing with backlog maintenance has increased, the percentage rated as high risk has reduced significantly. Nevertheless, with a 50 year old campus it is inevitable that some services and buildings will require refurbishment or replacement.

3.6 Efficiency and carbon reduction

In a challenging funding environment there is a need to reduce the whole-life costs of buildings and the estate more widely. Efficiency in the design and use of buildings will be essential. So too, will containing the cost of utilities and complying with the requirement to reduce the University's carbon footprint.

3.7 Key principles emerging

The above considerations have led to the adoption of a set of key principles that support the objectives and therefore underpin the Estate Strategy:

- Campuses to be a "mixed economy": academic, professional services and residential space, as distinct from being radically zoned or segregated by activity. "Community feel" is an asset.
- Co-location of schools and departments into mixed academic space in buildings, where feasible to include academic offices and meetings space, teaching spaces, informal learning and social space etc. Based upon a "standard" template/s, recognising that critical mass is needed in order to achieve efficiency.
- Schools to be relocated over time where space is not fit for purpose – eg from Rutherford and Eliot – other benefits include the return to their original use of more "basic" additional study bedrooms and focused student facilities.
- Improving student facilities: co-location of student facing services, more activity and social space, sports and recreational facilities and informal learning areas.
- Drake & Kannemeyer Condition Survey priorities to be embedded into the programme of both maintenance and Capital works in order to reduce 'high risk' items to <5% over the period of the strategy.

- Achieving fitness for purpose: only refurbishing existing space where an appropriate use, cost and acceptable quality can be achieved.
- Enhancing Value for Money – in construction costs, efficiency of utilisation of new and existing buildings and improving sustainability/energy use.
- Building flexibility and resilience into new buildings and significant refurbishments – increasing adaptability to respond to future changes in user requirements, environment and technology. Focus on "whole life" costs and benefits across the University. Consider possible future alternative uses when commissioning projects.
- Achieving good design – to ensure that buildings are attractive and distinctive, while bearing in mind cost.
- Making best use of external spaces – efficiency of use of assets and building a "creative" campus.
- Reinforce economic and social role – enable community interaction and collaboration with industry and commerce.

These principles are the basic criteria that will inform project briefs in order to satisfy the objectives of the Strategy. As part of ongoing work to deliver the strategy, we will develop suitable annual reporting metrics to accompany the strategy so that progress may be monitored effectively, to be agreed by 20 December 2016.





4 2009-2014 STRATEGY AND PROGRESS TO DATE

The 2009-2014 strategy took a formulaic approach to assessing new building requirements resulting from growth in student numbers. Based on the assumption that the University was functioning adequately with the current number of buildings (in 2009), a space per student FTE was calculated by simply dividing the net internal area (NIA) of the non-residential estate by the total number of student FTEs. This produced a figure of 6.43m² per student which could be divided between different types of space in the following proportions: academic space 66%; support space 29%; and leased space 5%. Thus, multiplying any increase in student FTE numbers by 6.43m² would indicate the area of new buildings required to maintain the space per student at 6.43m².

The Strategy identified three student number growth scenarios: flat line; modest; and optimistic.

4.1 Canterbury campus

At the Canterbury campus the projected 2019/2020 student numbers, using the most optimistic growth model were achieved in 2012/2013 (seven years early). Using the formula, this identified a requirement to construct 38,767m² of new residential buildings. However, including buildings currently under construction and the new Kent Business School and SMSAS building, the University will only have built 23,776m² by 2016/2017, a shortfall of 14,991m². This is roughly equivalent to six Jarman buildings. Graphs 1, 2 and 3 in Appendix 8 show the impact on the space per student.

The failure to adequately meet staff and student growth demands has resulted in the space per student reducing to 5.5 m² which has placed Kent significantly below all but one of nine competitors in the ex-1994 group of universities as shown in Graph 1 in Appendix 7. The 2015-2025 Strategy will therefore need to address this shortfall.

The 2015/16 Capital Programme of the Capital Plan primarily deals with student number growth from 2009 to the present whilst Options 2 and 3 allow for future additional numbers and replacement of existing buildings. Section 6 sets out the calculations.

4.2 Medway campus

The growth model identified an additional 4560m² of non-residential buildings by 2013/14. Since 2009, an additional 3845m² has been added through the leasing of six additional buildings on the Chatham Historic Dockyard at a refurbishment cost of £8.3m. This leaves a current shortfall of some 715m² which will be covered by the leasing of additional space in the Sail and Colour Loft and the leasing of the Dockyard Church as a lecture theatre.

The decision to lease space rather than build on University owned land at Medway was taken due to uncertainties around future student recruitment. It provides a flexible solution to growing or reducing space as needs demand, as there are break points every five years following the initial eight year break clause. Any future Medway Academic Strategy should therefore take account of the timing of these break clauses.



5 CURRENT ESTATE CHALLENGES

Summary:

• Coping with past growth

Response – build more buildings within the timeframe of the approved Capital Plan to restore the space per student to 6.43 m². See sections 4, 6 and 12.

• Addressing backlog maintenance requirements

Response – increasing maintenance budgets and developing an Asset Management Policy. See 5.1 below.

• Supporting changing teaching methodology

Response – building facilities that are flexible and adaptable to future teaching needs. Improving monitoring of space usage to improve utilisation rates, and matching the size of teaching rooms more closely to demand. See 5.2 below. Involvement of academic staff and IS when designing buildings.

• Improving efficiency of use

Response – building new and refurbishing existing office accommodation that is cost-effective, delivers a good working environment and is sufficiently adaptable to accommodate different future uses. Challenging cultural norms (eg one person per office) through consultation, pilot schemes and inspirational designs. See 5.2 below and section 12.

• Meeting student expectations

Response – delivering good quality, inspirational teaching and learning environments; informal learning and social spaces; providing student facing services in a single, accessible location; providing good quality residential accommodation with a range of price bands; and delivering a good choice of quality sporting, social and cultural activities. See sections 5, 7, 8, and 12.

• Meeting staff expectations

Appropriate office and informal environments and sufficient, fit for purpose research facilities.

5.1 Condition of the Estate/backlog maintenance

A key challenge for all universities is to maintain or replace their existing stock of buildings and other site infrastructure against a much reduced HEFCE capital funding allocation. After 50 years, many of the early buildings and site services at Kent require upgrading or renewal. In order to inform the programme for backlog maintenance, a condition survey was undertaken by Drake and Kannemeyer and reported to the University in the autumn of 2014.

The Drake and Kannemeyer survey is summarised in Table 1 below with a comparison to 2008, the date of the previous survey. Items considered to require major replacement or repair (condition grade C, D or DX) within the medium term or sooner are shown together with those that are needed to meet

legislative compliance. A formal programme, matched by funding, will be developed.

Buildings are surveyed on an elemental basis with a condition grade being given to each element. These grades are defined as follows:

Condition A – As new condition

Condition B – Sound, operationally safe, and exhibiting only minor deterioration

Condition C – Operational but major repair or replacement needed in the short to medium-term (generally three years)

Condition D & DX – Inoperable or serious risk of major failure or breakdown

A cost is attached to each element in DX, D and C condition to bring it up to A/B condition. The total cost for all such elements in a building is divided by the insurance replacement value (IRV)³ of that building to reach an overall grading for the building. Both non-residential (academic and professional services) and residential buildings are assessed. The percentage of buildings in A/B condition versus C/D condition is calculated by dividing the total floor areas of the buildings in those conditions by the total floor areas of all buildings. The figures for non-residential buildings are published in EMR (Estate Management Record) data submissions which are in the public domain.

Assuming that phase 3 of the Library project (refurbishment of the existing East wing) is carried out in line with the approved Capital Plan (circa £11.4 million), 61% of the non-residential estate will be in A/B condition which would still place Kent below our peer group institutions. Overall, the report concludes that the non-residential estate has deteriorated since the last survey whilst the residential estate has improved. The University's residential strategy, agreed in 2001 and then updated in 2008, introduced a formal, funded, cyclical maintenance plan that has over the last six years, reduced the amount and percentage of C, D and DX items.

Table 1: Total backlog maintenance costs 2014 and 2008

	2014 Summary £m (gross)		2008 Summary £m (gross)	
	Academic	Residential	Academic	Residential
Condition (C, D, DX)	61.1	15.8	38.2	19.4
Legislative + Compliance	4.6	5.3	3.7	10.3
Total	65.7	21.1	41.9	29.7
		86.8		71.6
Of which high risk items		17%		60%

³ C,D and DX grades is equivalent to 0.9% IRV

It is worth noting that only two whole buildings have been classified as condition DX – major risk of failure. They were the Old Pavilion (now replaced by the new Pavilion but still used for some activities) and Cornwallis West, which has been the subject of a major refurbishment in summer 2015.

Darwin remains an ongoing problem because of access as well of backlog maintenance issues and an options appraisal is currently being developed to provide the most cost-effective solution to its future.

Significant capital works have already been commenced or planned for Ingram, Stacey and the Templeman Library with approved/identified capital budgets that will address some or all of the backlog maintenance that is required on these buildings.

In both academic buildings and the campus infrastructure, approximately 62% of the cost of backlog maintenance identified by Drake and Kannemeyer can be attributed to building services related systems (heating, ventilation and electrical installations) and no significant impact can be made unless these services – many being the original installations – are replaced. This replacement would not be economically viable unless there is a programme of vacating entire buildings and relocating the occupants to allow removal of all asbestos, replacement of all services and a major refurbishment of the building. Careful planning is therefore essential and such works will be incorporated into refurbishment projects. The backlog maintenance costs for the major non-residential buildings on Canterbury campus are shown within the Fitness for Purpose table at Appendix 10.

Mitigation strategy

In order to address the backlog maintenance in academic buildings, new budgets totalling £1.3m pa have been allocated. Furthermore, currently available budgets have been identified in the financial forecasts to assist with backlog maintenance to services and facilities. In total, available 'recurrent' and capital budgets total £30 million over five years and £53 million over 10 years which are in addition to major project expenditures. Such budgets will be prioritised to address key issues within the Drake and Kannemeyer report. It should be noted that while overall backlog maintenance is estimated to have increased between 2008 and 2014, the percentage of high risk items has decreased significantly as indicated in Table 1. High risk, legislative items will be cleared using existing budgets by the end of year 2 of the Strategy.

Asbestos

As the 1960/70's buildings continue to be refurbished or altered, additional asbestos risks, currently unknown could be revealed and the asbestos will need to be contained or removed as a priority and will require additional budget.

The D&K March 2015 report highlighted that the University does not have a specific budget for asbestos management and therefore work is funded by the General LTM budget. In response to this, an annual budget of £250k has been allocated for this purpose. This budget and the project contingency budget will significantly assist the University to actively manage its asbestos legacy.

Asset management/fitness for purpose

Effective asset management is one of the key elements in successfully delivering cost-effective improvements to the Estate. In this way we seek to make the most from existing building stock by making improvements where it is prudent to do so to capitalise on a building's continued potential usability. This process is therefore in part informed by a robust assessment of a building's fitness for purpose, and in simple terms seeks to determine whether to demolish, refurbish or simply carry on using a particular building.

Estates will develop an asset assessment methodology and prepare proposals surrounding the future of selected buildings, which will be presented for discussion at future planning rounds. This will include, where appropriate, consideration of the different options available for replacing buildings, including selfbuild and public-private partnerships (PPP).

The first building to be addressed as part of this asset management exercise will be Darwin College, where an intrusive survey will be commissioned to identify the true remedial costs associated with the building. In this case the future options could include a major refurbishment, a self-funded replacement building or a PPP redevelopment of the site. This will be completed by July 2016.

5.2 Efficiency/fitness for purpose

5.2.1 Efficient Space Management: The University of Kent approach to space utilisation

Space is the second highest cost to HE institutions after salaries, making it vital that this asset is utilised effectively. Effective space management is becoming increasingly important in the HE sector as institutions look at opportunities to save costs, and increase sustainability. A holistic approach is needed to make progress in this area, one which seeks to actively manage the demand for all types of space, but particularly teaching and office (academic and administrative)

5 CURRENT ESTATE CHALLENGES (CONT)

space. This includes a review and the re-engineering of existing working practices to address the need to make increasingly efficient use of existing resources, that will take place during 2016.

5.2.2 Review of teaching and learning requirements

Making more efficient use of our existing resources and obtaining best value from capital investment in new buildings will require an in-depth review of existing working practices. This is not just about the space that we occupy, but also about how we work and how we support the delivery of both academic and administrative outputs – teaching, research and support services. Ensuring the fitness for purpose and long term flexibility of new buildings will be a key aim.

The review will include the establishment of an HEI appropriate evidence base (including a consideration of relevant practice in the commercial sector), and a wide-ranging discussion within the University on the opportunities available to re-engineer existing working practices to address the need to become more efficient in the use of resources. This will include working with the PVC Education on the implications of innovations and developments in teaching practice and curriculum delivery and their effect on the use of space. In addition, external reviews of existing practices will be undertaken to objectively inform the discussion, as evidenced by the University's recent appointment of PwC Consultants to undertake a review of key administrative processes.

5.2.3 Provision of appropriate teaching space

All of the issues raised in this section are addressed in significantly more detail in the Teaching Space Overview (TCO) document (Appendix 5), also available at www.kent.ac.uk/estates/policies/index.html, with only the major issues, general conclusions and recommendations for further action included below.

Renewal, perception and NSS

Teaching space is one of the most important types of space at the University, and can impact greatly on the student experience. The National Student Survey (NSS) results have contained a number of negative perceptions of the existing stock of teaching rooms. It is key therefore not only to have well managed, but also well-funded teaching facilities to improve comfort, capacities and utilisation.

A commitment to an enhanced programme of replacement and renewal is required to both improve our existing stock through cyclical refurbishment, to allow decommissioning of

the worst spaces through new build replacement – either stand alone or as part of the provision of each new academic building, and to recycle suitably located teaching spaces to provide additional academic space for schools to meet the increased expectation of their students. The new extension to the Templeman Library, additional spaces in the KBS/SMSAS building, and the proposed new Economics building will allow these pressures to be met.

Utilisation rates

Currently, the University is providing 3.3m² of teaching space for every 1m² that is actually in use for teaching, as a result of a space utilisation rate of nearly 33%⁴ (ignoring vacation usage). The Space Management Group⁵ (2006) state that this is 'fair' utilisation, with 'poor' utilisation defined as being 25% or lower. It is also a relatively good achievement in comparison with the University's identified peer group (see TCO, Appendix 5, Table 4).

Clearly, there are costs associated with this relative inefficiency in space usage, with the potential to reduce Capital, maintenance and services costs if the estate were used more effectively.

There are various factors contributing to the utilisation level, of which the most critical are appropriate size to match need, quality and location, including preference and co-location to antecedent and precedent events (eg lectures and seminars).

A clear need has been identified for more seminar rooms of capacity 1 to 20 persons and spaces for lectures accommodating between 100 to 200 and 200+ students.

Departmentally owned space

Schools which currently 'own' departmental teaching space could potentially make a saving on their space charge by transferring ownership to central timetabling, allowing the cost of the space to be split across several Schools, whilst also providing an opportunity to improve the utilisation rate of these rooms. A more detailed analysis of the utilisation of teaching space (see TCO), demonstrates a poorer utilisation rate (21%) for departmentally owned space, the data for which includes the majority of seminar type spaces with schools using the CMIS (timetabling) system to record events. Whilst further work needs to be done in terms of collecting and analysing comparative data, there is potential here to drive up efficiency, once actual usage is correctly recorded.

4 All utilisation statistics quoted in this document are extracted from the teaching room utilisation survey which was conducted in the 2012-13 academic year and submitted to HESA as part of the Estate Management Statistics (EMS) return. This is the latest dataset published by HESA to allow for comparison against other institutions.

5 The UK Higher Education Space Management Group (SMG) was set up in 2002 to assist higher education institutions implement best practice in the management of space.

Demand and its management – flexible spaces are required

Currently, there is significant pressure on teaching rooms with capacities of 200+, to the extent that in the current year they are effectively oversubscribed. All other capacity spaces are very busy, with only the 40-50 seat range showing any sort of additional capacity at present. However, and as the more detailed analysis shows (see TCO), this is a moveable feast and dependent on academic mix, delivery methods and cohort sizes. In order to respond, either a move to more flexible spaces, with the ability to be opened out/subdivided as required, or a larger range of available room sizes is required. Future new build projects will play a part in providing this space, through the incorporation of additional teaching space provision, using current timetable and survey data to inform the size and type.

A first step to making better use of existing resources will be to analyse demand and to ensure that all available slots across the week are used evenly. Related issues of uneven demand over the whole teaching year will be examined.

The return on investment in teaching rooms at Canterbury is enhanced by their use as conference facilities outside of the academic year which generates valuable additional income, but which does not currently contribute to utilisation scores. Collecting data on vacation usage will be undertaken in order to assess the full picture.

5.2.4 Office space – fit for purpose and value for money

Current trends

There is a trend across the UK to move towards less space per person, and to provide less individual and enclosed spaces but higher quality shared spaces and amenities (British Institute of Facilities Management, 2013). This concept has already been applied to the Cornwallis East build for the School of Social Policy, Sociology and Social Research, where large elements of the building are designed for a more flexible approach to working. Evidence to support this trend includes a report from the British Council for Offices (2013), which suggests that the average employee is allocated 10.9m² of the net internal area (NIA), which includes their individual or shared workspace, as well as all support services and amenities, down from 11.8m² in 2009.

This presents problems in a sector where individual offices for academic staff are considered essential to allow private study and meetings with students. More jointly used dedicated meeting rooms and well equipped private study areas may mitigate this requirement and further work is being undertaken

to establish how new building formats may help the development of new ways of working and studying, while increasing efficiency of use of space.

Once we understand the correlation between these proposals and the impact on costs per m² (or per person) for new builds, and/or the likely overall reduction in space requirements, we can formulate a policy following internal consultation with the aim of improving value for money from the capital programme.

Wellbeing

In addition to the benefits of better utilisation and value for money, well designed spaces can have a positive impact on the wellbeing of staff. Wellbeing is holistic and integrates the physical, cognitive and psychological needs of people (Steelcase, 2014). Workplaces with a focus on wellbeing gain benefits in terms of reduced cost of absence, with 41% reduced health-related costs for those employers with a thriving wellbeing culture, owing to better employee engagement (Steelcase, 2014). This is a major factor in improving the staff experience and providing a more effective workforce.

Activity based/Agile working

Improved staff wellbeing can be achieved by providing more than simply a workspace within the building, and instead providing a variety of workspaces for activity-based working, and different environments for the different types of tasks that staff carry out. This includes desk space, more informal spaces, social spaces, and the ability to get up and move around the office to encourage collaboration and communication. The interiors of the Cornwallis East and KBS/SMSAS buildings are currently being designed with these benefits in mind. A theoretical template for the ground floor of new academic buildings is shown in Appendix 6 together with some examples of innovative work spaces.

More flexible working approaches can be used to support better space utilisation and staff wellbeing, perhaps amongst staff that are not 'student facing' or otherwise do not have a requirement to be on-campus for the full working week, by introducing hot-desking or shared desk arrangements.

Ancillary space

Ancillary spaces (meeting, social, etc) all contribute to the quality of the working environment and it is essential that they are considered as part of a holistic approach to the provision of appropriate facilities which contribute to the delivery of academic and professional services.

5 CURRENT ESTATE CHALLENGES (CONT)

5.2.5 Moving towards greater efficiency

To address these issues, a draft Space Management Policy, specific to the needs of the University of Kent, is being developed during 15/16 which includes a review of the sector/peer group position, and will make proposals for space standards, and for guidelines and procedures which will go out to consultation over the next year to Schools and Professional Services departments with a view to developing a Space Management Policy appropriate for this University.

A system of charging for space, whereby all Schools are charged for the space that they occupy on a m2 basis, is already in place and helps contribute to a clearer understanding of the cost of space and its financial impact.

The development of a Space Management Policy forms a key element of the new Estate Strategy, primarily because it will provide a management tool to help deliver the following objectives of the Estate Strategy:

- Support the concept of a University community – the policy facilitates the co-locating of related academic disciplines and encourages the sharing of spaces to foster inter-school communication and collaboration. Reducing the amount of often geographically diverse spaces that exist for every school, and creating larger shared spaces will facilitate interactions that may currently not happen, as well as improving overall utilisation.
- Improve student/staff experience and recruitment – by rationalising the estate, it becomes easier to maintain and sustain. It also allows greater investment in fewer spaces, improving the perception and image of the campus for existing students and staff, and potential students at recruitment events. Furthermore, shared spaces provide greater flexibility for the changing needs and working practices of Schools, Faculties and the University.
- Ensure value for money – a more efficient estate with space that is utilised effectively reduces the amount spent on maintenance and services to ensure that buildings are maintained to a high standard.

References

- Steelcase EU (2014). 360° Exploring workplace research, insights and trends. Issue 08
- British Council for Offices (2013). Occupier Density Study. UK, British Council for Offices. Pp4
- British Institute of Facilities Management (2013). Good Practice Guide to Space Planning and Management. UK, British Institute of Facilities Management. Pp5
- Space Management Group (2006). Space Utilisation: practice, performance and guidelines. UK, Higher Education Space Management Project. Pp1



A Space Management Policy would apply to all centrally managed space, including that of all academic Schools and centres and professional service departments within the University.

The table below shows the typical space allocated per FTE member of staff at a range of seniority levels at various institutions within the peer group that have published space standards. Other institutions outside of the peer group are also included by way of comparison.

Table 1: Space standards/norms in other UK institutions (m²)

Academic Staff	University of Durham	University of Leicester	Loughborough University	University of Reading	University of Surrey	London School of Economics	University of Nottingham	"Average value"
Professor / Head of School	15	9-12	13		12-18	13-15	15-18	14
Lecturer / Senior Lecturer	9	9-12		13	8-12	9-12	13-15	11
Early Career / Associate Lecturer	9				5-8	9-12	6-10	9
Visiting / Emeritus Professor	7.5				4-6	4-6		6
Research								
Senior Researcher	7.5					4-6		6
Early Career Research				5		4-6		5
Research Assistant				5	4-6	4-6		5
Postgraduate Student (PGR / PhD)	4.5	3-4		3-5	3-4		4-7	4
Postgraduate Student (PGT)							.5-1.5	1
Professional Services Staff								
Head of Department / Service	7.5				12-18	4-6	9-13	10
Administration Manager	7.5	5-8		7	8-12	4-6	9-13	8
Administrator	7.5	5-8		7	5-8	4-6	6-10	7

This data gives an indication of the amount of space that a member of staff at each level could expect at these institutions. At Kent, allocating a particular figure to each level would be complicated given the wide range of building layouts and sizes. Furthermore, these numbers do not give any indication of the number of people who are expected to share a single space. It is therefore probably more appropriate for the Kent standards to be based on the size of an office in terms of potential capacity, rather than a square metre measurement.

Table 2 shows the current office space occupied by each academic school at Kent⁶, highlighting the average staff FTE per office, and the amount of space per staff FTE in m². Only office space is included in the data shown, allowing broad comparisons across the Schools to be made (this removes the differences in specialist equipment/facilities etc). The space standards would aim to give more consistency to the figures shown below (within the constraints of existing building layouts).

⁶ Information is based on the data returned by Schools on the annual room register as at September 2014. Only includes rooms where the function is listed as 'office'. Results include academic, research and professional staff and PG students where they are allocated a desk/office, as an FTE (not headcount).

5 CURRENT ESTATE CHALLENGES (CONT)

Table 2: Office space per staff FTE per school

School (Alphabetical A-Z)	Total office space (m ²)	Number of rooms	Average room size (m ²)	Number of Staff FTE	Average FTE per office Space per	FTE (m ²)
Centre for English and World Languages	199.23	18	11.07	22.3	1.24	8.93
Centre for Journalism	115.37	9	12.82	9.5	1.06	12.14
Centre for Professional Practice	201.77	9	22.42	8.4	0.93	24.02
Kent Business School	1224.3	89	13.76	105.73	1.19	11.58
Kent Health	23.29	2	11.65	1.8	0.90	12.94
Kent Law School	1419.76	100	14.20	91.25	0.91	15.56
Kent School of Architecture	337.49	21	16.07	27	1.29	12.50
School of Anthropology and Conservation	572.07	38	15.05	48.27	1.27	11.85
School of Arts	541.7	51	10.62	52.39	1.03	10.34
School of Biosciences	532.53	43	12.38	45.85	1.07	11.61
School of Computing	808.87	54	14.98	59.59	1.10	13.57
School of Economics	462.65	32	14.46	32.7	1.02	14.15
School of Engineering and Digital Arts	532.12	34	15.65	38.9	1.14	13.68
School of English	674.55	51	13.23	51.69	1.01	13.05
School of European Culture and Languages	1135.74	85	13.36	88.1	1.04	12.89
School of History	526.03	39	13.49	39.9	1.02	13.18
School of Mathematics, Statistics and Actuarial Science	847.55	64	13.24	67.18	1.05	12.62
School of Music and Fine Arts	325.52	21	15.50	27.63	1.32	11.78
School of Physical Sciences	700.03	46	15.22	60.56	1.32	11.56
School of Politics and International Relations	572.99	42	13.64	45.25	1.08	12.66
School of Psychology	784.78	61	12.87	58.74	0.96	13.36
School of Social Policy, Sociology and Social Research	1683.29	116	14.51	138.68	1.20	12.14
School of Sports Studies	284.98	17	16.76	24.8	1.46	11.49
				Average:	1.11	12.94

Notes & Assumptions

Only offices where named FTEs are detailed have been included

Any offices which do not have named FTEs have been excluded

Staff that have write up/office space within a lab have been excluded

Total office space only represents where there are named FTEs not the whole amount of office space allocated to the School

Any offices or employees that are denoted as PGR or PGT have been excluded even if they are contracted for a small number of hours

The School of Pharmacy has been excluded as the space is managed by the University of Greenwich FTEs have been verified with HR data received on 26/06/15 and are based on staff contracted hours Any rooms with no employee name have been excluded

Departmental allocation of offices and room type is based on information verified by each school for the Annual University Room Register returns that were received in April 2015

Colour Code

Ave FTE Per Office

- Greater than 1.21 FTE per office
- Between 1.00-1.20 FTE per office
- Less than 1.00 FTE per office

Space Per FTE

- Average office size is less than 10.99 m²
- Average office size is between 11.00-13.99 m²
- Average office size is greater than 14.00 m²



6 RISK MANAGEMENT

6.1 High level risks

The table below sets out the six main high level risks to the full implementation of this Strategy. These risks will apply to all capital projects undertaken. However, each project, as part of its project management plan, will contain a risk register that is specific to that project. These individual risk registers will be managed against their project contingencies and regularly reviewed throughout the duration of the projects.

planning scenarios – +/- 25% current numbers

Risk no	Risk	Risk consequence	Risk mitigation	Risk likelihood 1-5	Risk impact 1-5	Total score
1	Buildings are no longer fit for purpose – poor condition.	Sub-optimum teaching and learning experience. Negative impact on overall student experience. Negative impact on student recruitment.	Implementation of Estates Strategy including increased maintenance investment.	4	5	20
2	Buildings are no longer fit for purpose – space is no longer suitable for intended use.	Sub-optimum teaching and learning experience. Negative impact on overall student experience. Negative impact on student recruitment.	Implementation of Estates Strategy to replace outmoded/inappropriate spaces where it is not cost effective to modify/refurbish them.	4	5	20
3	Construction industry inflation exceeds contingency within Capital Plan.	Inability to fully deliver the Estates Strategy.	1 Review procurement routes eg consider fully designed lump sum, traditional contract to de-risk costs. 2 Reduce scope and/or specification of proposed projects. 3 Defer projects with lower priority.	4	4	16
4	Insufficient experienced, in-house project management resource.	Inadequate oversight of projects leading to projects being delivered over budget and/or delivered late.	1 Identify suitably qualified external project management resources. 2 Recruit additional suitably qualified in-house staff.	3	4	12
5	Current project management and procurement processes may not be adequate for the volume of projects being undertaken.	1 Project cost overruns. 2 Project programme overruns. 3 Contract disputes. 4 Best value is not obtained.	Undertake independent review of project processes. <i>Note: Review was undertaken during 2014.</i>	2	5	10
6	Local Authority Planning Officers/Planning Committee rejects planning applications or request significant changes to projects.	1 Significant delays in delivering facilities. 2 Facilities do not fully meet University's needs. 3 Increase costs.	Early engagement with Local Authority Planning Officers on all major projects.	2	4	8
7	Unable to recruit target student numbers in an uncapped, competitive recruitment environment.	1 Insufficient fee income to fully deliver the Estates Strategy. 2 New facilities are not fully utilised.	1 Defer projects with lower priority. 2 Ensure that facilities are built with flexibility to facilitate easy change of use.	3	4	12
8	Increasing impact of Public Private Partnership (PPP) relationship on University's reputation as number of bedrooms operated by the PPP increases.	1 Service levels impact on National Student Survey scores. 2 Potential pressure on rents could impact on recruitment.	1 Maintain strong oversight of PPP operations. 2 Ensure convergence of desired outcomes in relation to service levels and rent setting.	2	3	6

6.2 Risk mitigation analysis

The 2009 Strategy established a target space per student of 6.43 m². Assuming that one of the key goals of the new Strategy is to re-establish this 'norm', a number of build out options versus growth scenarios have been modelled as follows:

Response A – build-out all projects contained within the 2015/16 capital plan

- a 0.77% annual growth = 6.88 m² per student
- b 3%/3.7% annual growth = 6.19 m² the student
(incorporates a targeted increase in overseas student numbers per new Institutional Plan)

Response B – build out only the projects that are currently on site, ie KBS/SMSAS and Cornwallis East. This option does not provide a resolution to the Registry/Rutherford Annex issue, as it omits the Student Administrative building project (included in the 2015/16 Capital Programme).

- a 0.77% annual growth = 6.07 m² per student
- b 3%/3.7% annual growth = 5.47 m² the student

Response 3 – additional space required to be built beyond KBS/SMSAS and Cornwallis East to achieve 6.43 m²

- a 0.77% annual growth = 6,671 m²
- b 3%/3.7% annual growth = 20,026 m²

Response 4 – if student numbers decline over the next 10 years, how much less of the 2015/16 Capital Programme do we require after the completion of KBS/SMSAS and Cornwallis East to achieve 6.43 m² per student

- a -3% annual growth = -7,649 m²

These options should not be considered in isolation as there will still be an ongoing need to replace facilities that are no longer fit for purpose and to respond to growth opportunities in specific academic areas such as science and innovation. A reduction could allow the return of offices to bedrooms, which although having a one off re-conversion cost, would generate ongoing rental income. Approximately 400 bedrooms are currently used as offices.

6.3 National context

The national context needs to be taken into account in any assessment of the need to build additional space. The University's preferred measure of 6.43m² of non-residential space per student fte, put simply, represents the value at which the University considers it is operating both efficiently and effectively, based on the 2009 Estate Strategy assessment of available physical resources.

In national terms in 2012/13, 6.43m² of non-residential space per student fte would have fallen below the lower quartile aggregate of 8.68m² for the University's identified peer group, with the University's actual allocation being 5.8m² (Estates Management Record data), so by any measure it is a figure very much rooted in an extremely efficient use of space in comparison with the Higher Education sector in general.





7 RESIDENTIAL

7.1 Introduction

The Strategic Plan for Kent Hospitality was first drafted in 2001 and has been regularly reviewed and updated. The most recent developments at Kent and in the HE sector more broadly, listed below, give rise to further consideration:

- Removal of the cap on student recruitment from September 2015.
- The Government confirmation in the 2014 Autumn Statement that HEFCE will allocate £50 million for HEIs to offer bursaries to postgraduates on a match-funded basis. These bursaries will be £10,000, and will benefit 10,000 students.
- Additional 540⁷ study bedrooms rooms on campus from September 2015.
- Potential increase in postgraduate, overseas and pre-entry students, all expecting on-campus accommodation.
- Achievement of Investors in People Gold re-accreditation in 2013.
- Revised Estates Strategy, 2015 and increased pressure on capital expenditure.
- Potential changes to the Pay Framework for Manual Staff in Grades 1-6 from 2015 and increase in the National Minimum Wage.
- Changes in High Street catering trends.
- Construction of new academic buildings at Canterbury with earmarked catering facilities.
- Rental of further buildings at Chatham Historic Dockyard and requirement for catering provision.
- Plans to increase residential take-up at Medway.
- Economic pressure on student budgets.
- Reliance on internet activity for communication and sales in catering, previewing accommodation and student commentary on social network sites.

Kent Hospitality is self-funding: it bears the space costs (which include utilities, cleaning, maintenance etc), financing and interest charges for areas it occupies; and also needs to generate sufficient funds for capital expenditure on projects to refurbish existing stock. Furthermore, it meets all loan repayment charges relating to residential property from its capital account. There is therefore a trade-off between short term net expenditure and the longer term sustainability of its offer. Revenue from student accommodation is over £17.6m per annum (excluding PPP funded residences which generate a further £11m in rent) and is the single biggest contributor in meeting the overhead costs of the Hospitality operation. Trading delivers sales in excess of £5.4M and produced a net surplus in the region of £240k for 2013/14, before depreciation and capital expenditure are included. Other income generating activities, such as conferences, help to reduce the burden of the high fixed costs of property to the academic users of

Hospitality (students, staff, research visitors) and are essential to the continued upkeep of the infrastructure, both in terms of buildings and staff. Kent Hospitality contributes 14% of the total University income, more than twice the sector norm. This section sets out some of the ongoing strategic residential issues for Hospitality which have a profound impact on the student experience at Kent. Its facilities and service levels are therefore a key issue for everyone in the University. The department recognises the importance of delivering a wide range of accommodation to suit differing budgets and lifestyles as well as responding to academic pressures. Its role with staff and visitors is also important in creating an attractive environment in which to work and engage.

7.2 Student accommodation

Student rents and licence lengths have traditionally been at the lower end of the spectrum for both self-catered and part-board catered provision, particularly for HEIs in the South East. The higher quality accommodation built in 2004 and 2005, Tyler Court B and C blocks and Park Wood flats provided large kitchens and 13sqm en-suite bedrooms, significantly bigger than the sector average, and their rents reflect the higher specification. The rents at Woolf are at the lower end for 51 week postgraduate accommodation, while the new extension at Keynes opened in 2011 and delivered a higher standard in student accommodation, providing study bedrooms in excess of 14sqm, capacious fully equipped kitchens with sofas as well as five Town Houses. These two storey houses were used as a model for Turing, where 282 study bedrooms of the 801 fall into this category. In these houses the showers are shared by two students, and the communal kitchen is typically for 12 residents living in the three floors above the ground floor kitchen.

Given the high marginal contribution that increases in rents bring, it is the single most important driver of funding availability for refurbishment and investment of the residential bedstock.

The residential challenges facing the University are how to fund and deliver new accommodation at Canterbury while at the same time manage aging unpopular bedstock in the Colleges. There are also issues at Medway where supply and demand are not in equilibrium. The accommodation in the Colleges receives regular (but small in number) adverse comments made in the NSS and elsewhere about the lack of proper kitchen facilities and communal spaces. Furthermore there is an acute sensitivity to pricing in an era of pressurised student budgets.

⁷ The residue of Turing College study bedroom units not delivered for 2014/15

7 RESIDENTIAL (CONT)

Table 1: Accommodation: key issues and commentary

Issue	Commentary/Recommendation
What proportion of students should be accommodated on campus (and how can we fund any new requirements?)	The current full time undergraduate and postgraduate degree ratio housed on Canterbury campus is 35.4%, low against our competitor group. This will rise to 36.8% by 2017/18 and 40% is probably a competitive position. The University would reach a ratio in excess of 50% with a further 1,000 study bedrooms completed by 2018, say. There are issues of substitution in the event of the demolition of one College. There are strong reasons to fund future accommodation build by bank loan, although limited by borrowing ratios. These include, control over average rental levels, strong economic return on investment that is being lost to third parties; and, given Turing, probably a better risk profile. Against this, the provision of capital by others if funding is constrained is always attractive. It is felt that the balance would pass the "tipping point" should the next development use a PPP route (from 2015 34% of Canterbury bedrooms will be PPP provided) and bank loans should be considered.
What proportion of our bedstock should be en-suite?	For 2015/16 this will be 45.9% at Canterbury (with a further 327 Town House bedrooms) and 100% at Medway. Current demand at Canterbury indicates 64% of applicants want en-suite accommodation and 21% select Town Houses as their first preference. It is important to maintain a wide range of accommodation types and prices. However the student preferences strongly point to new build being en-suite. Returning students predominantly select this type of accommodation too.
What proportion (realistically) should be self-catered? Do we need to increase our catered offer?	The majority choice is for self-catered – some catered choice though is necessary with 7% of applicants selecting this offer. The Bed and Bistro offer for Keynes and Becket is oversubscribed and new flexible bundles are being piloted at Eliot. These offer accommodation and two meals a day at eight different locations in order to mitigate the shortfall in self-catering facilities in Eliot.
Should there be a "basic" option that provides cheap and cheerful accommodation for those who cannot afford en-suite?	No. All accommodation meets the UUK Student Accommodation Code as a minimum standard and is refurbished on a ten year cycle. The new Town houses provide a benchmark for shared facilities. However, we have to consider the future options of existing, non-ensuite stock and pricing and innovative 'package' solutions will be carefully explored.
Should we have a target of being in a particular quartile of national rental levels?	No. Rents should reflect market rents and the need to finance ongoing refurbishments/improvements. Competitors' rental levels will need to be borne in mind but so should size of room and student demand.
Should we review licence lengths?	Yes, in the light of student demand and competitor behaviour. The current 31/37/39 week model continues to be among the lowest in the sector.
Could refurbishment work take place during term time (ie re-painting and other internal works) if students were given warning and the option to move rooms during the refurbishment period?	Yes, so long as advance warning given and exam revision periods avoided – Spring term may be possible and various works have been implemented in the past in that term.
What proportion of students will need accommodation at Medway? How acceptable is PPP accommodation to students and the long term financial strength of the university?	The PPP arrangements at Medway have provided for 1,100 en-suite study bedrooms and studios. The University's nomination agreement is for 725 bedrooms at 100% occupancy (764 at 95% occupancy, more realistically). This number has proved difficult to meet, with the entry target for new students near to the lower number (734 for 2015/16). With only 66% of new students taking up accommodation (20% lower than at Canterbury) and the administration of Pharmacy fluctuating between Greenwich and Kent significant effort is required to market to returning students to fill the available places. The rental levels are lower than at Canterbury but the University's financial exposure remains high, notwithstanding the University expansion in to Chatham Historic Dockyard. Given the guarantees on Liberty Quays, it is essential that student numbers at Medway increase in order to mitigate the risk of not meeting nominations agreements.

(cont'd)

Table 1: Accommodation: key issues and commentary (cont'd)

Issue	Commentary/Recommendation
Should colleges become non-residential and all accommodation provided in purpose built blocks? The previous Estates strategy followed a policy of separating academic departments from residential areas within College buildings but this is not now being enforced. Over 400 rooms have been transferred from residential stock to academic usage in the period August 2001 – September 2015, spread around colleges.	It is easier to move academic departments out into specialised Teaching Blocks – HEFCE funding more easily used to support this (to the extent available). Also residential rooms do not always lend themselves to use as offices and specialised break out and informal study areas are difficult to provide within a college based school. This weakens school identity and student/staff informal interaction. The 2015/16 Capital Programme includes the relocation of schools currently located in Rutherford to either new or refurbished academic blocks, freeing up 200 bedrooms for student use.
How many bedrooms are required at Canterbury?	Currently (with Turing fully delivered) the University can house all new UG and PG applicants meeting entry requirements by 31 July. Clearing candidates can also be accommodated, leaving a residue of some 150-200 bedrooms. Thus the target (agreed by Council in 2009) of housing overseas fee paying students for duration of study is still some way off and would require considerable extra bedrooms. (September 2014 OS UG entry numbered 586, with 678 set as 2015 entry target). In order to meet this short-term target some 1,500 bedrooms would be required, and with PG growth to be considered it seems prudent to allow for 2,000 in the context that all previous accommodation build has not caught up with increased overall student recruitment and the % change in mix between PGT, OS and UG Home. See Table 2 below.
Selection of suitable sites for new accommodation developments.	Incorporation in a Master Plan document. Review of current low density housing estate to evaluate options for replacement with higher density developments.
What is the future of Darwin College, and what can we do to prolong the residential use of the other Colleges?	In the longer term, Darwin should be demolished. It is expensive to maintain, takes a large footprint of land, is unpopular as a residential choice and its accommodation has no access for students with mobility issues. The bedrooms are dark, smaller than anywhere on Canterbury campus. Many bedrooms and shower rooms also suffer from serious dampness. The teaching spaces and offices are poor too (see section 7.6). An options appraisal to look at the costs of modification and refurbishment versus replacement will be undertaken in 15/16. Any recommendations flowing from the options appraisal of Darwin will require funding and may need some re-prioritisation of currently projected capital projects or the use of partnership funding (ie PPP). The residential lives of Eliot and Rutherford can be prolonged by making attractive catering offers available to students. This is a far cheaper option than attempting to build 40-50 kitchens in 50 year old buildings never designed to accommodate this. Additional communal space may be provided from decommissioned seminar rooms as improved teaching spaces are provided within new build academic spaces. A pilot of bundled offers is being trialled for 2015 entry.

Backlog maintenance

In 1999 the University embarked on a cyclical refurbishment programme for all of its bedstock, and this was realised in full by Summer 2009. From that date the cycle has been repeated, bringing in accommodation that has been erected since 2000. This means that the residential accommodation is in “steady state”, with an ongoing cyclical programme in place for future years. This can be seen from the gradual reduction in backlog maintenance noted in Section 5. This puts Kent ahead of its

competitors where backlog maintenance issues and tired bedstock are still commonplace. Some resolution to this problem has been effected by PPP deals elsewhere in the sector, but for students this approach has been typified by longer licence periods and higher rents. For universities, it removes an important stream of inflation linked income and loss of control over rental levels. However, it does eliminate the occupancy risk from universities and reduces the impact on gearing constraints.

7 RESIDENTIAL (CONT)

Table 2: Full-time student number projections at Canterbury and ratio of bedrooms

Year	2014/2015	2015/2016	2016/2017	2017/2018
FT UG Numbers	11,531	11,704	11,805	11,919
FT PG Numbers	2,228	2,438	2,548	2,704
Total	13,759	14,142	14,353	14,623
Bedrooms	4,869	5,399	5,390*	5,380*
Ratio	35.39%	38.18%	37.55%	36.79%

*Assumes ongoing programme of converting College bedrooms to staff offices.

Medway

Student number growth at Medway has not delivered the numbers foreshadowed in the Council discussion in July 2011. At that time new student number projections were anticipated to be in excess of 800. These were not delivered largely because of the introduction of the £9K fee. As a consequence the University's nomination agreement at Liberty Quays is above the entry target for recruitment. In order to mitigate the financial exposure over the coming years the University may well need to enter into agreements with other organisations in order to mitigate its own risk of shortfall in occupancy.

When dedicated Kent residences were first offered, the demand for accommodation shot up to ensure that the original Liberty Quays development was full from its first year. The quality of the accommodation is of the very highest standard, and many returning students book to stay for further years of study.

Table 3: Full-time student number projections – Medway

	2014/2015	2015/2016	2016/2017	2017/2018
New UGs	736	783	792	802
All students	2,090	2,236	2,354	2,442
Bedrooms	1,104	1,104	1,104	1,104
Ratio	52.82%	49.37%	46.89%	45.21%

Applying the Canterbury percentage housed, a student population of circa 3,000 is required, given the numbers living away from home.

7.3 Allocation policy

The University currently offers to accommodate all new undergraduate students, including Exchange students and those on short courses – typically the take up from UK domiciled students is 88% – foundation flow-through applicants and all postgraduate students who apply before 31 July. Additionally, spaces are offered to those with certain medical conditions and/or disabilities.

Any rooms that remain unallocated to these groups are offered to returning undergraduate students, normally by ballot.

The Accommodation Office has only offered a campus place to certain groups (such as second year students going in to their final year) to deliberately dampen demand in years where a residue of study bedrooms has been identified. While returning students have not been offered campus accommodation in recent years, the attraction of Park Wood (£3,997 for a 39 week licence to include utilities) over Canterbury private sector accommodation (£4,200 average rental over 48 weeks plus utilities) is obvious.

The University has long recognised that overseas students have greater difficulty in sourcing off-campus accommodation, reflecting their non-domicile basis, and lack of local support network and experience in the UK housing market. For strategic and financial reasons, the University wishes to increase the number of postgraduate and overseas student numbers. If this is achieved, current accommodation will not meet current levels of guarantee, and it is proposed a further 2,000 bedrooms are constructed.

Table 4: University bedroom data

Canterbury campus bedrooms	2014/15	%	2015/16	%
College bedrooms	653	13.4%	635	11.8%
Self-catered bedrooms	4,216	86.6%	4,759	88.2%
Total	4,869	100%	5,394	100%
Standard bedrooms	2,256	46.3%	2,233	46.3%
En-suite bedrooms	2,406	49.4%	2,834	49.4%
Town House bedrooms	207	4.3%	327	4.3%
Total	4,869	100%	5,394	100%

Medway accommodation – May 2015	
Location	Bedrooms
Liberty Quays 100% en-suite	1,106
Total	1,106

Total bedrooms (Medway & Canterbury): 5,975 – 2014/15

Total bedrooms (Medway & Canterbury): 6,500 – 2015/16

7.4 Conference activity

Conference activities contribute between £3-4m towards meeting the overhead costs of Kent Hospitality that would otherwise have to be covered by student rents or other Hospitality income streams (food prices etc). Any improvement in this income can be re-invested back into services available for students and staff, as marginal costs of servicing the trade are relatively low.

Key issues

As the number of bookings that require teaching space expands, pressure is placed on schools and departments to make non-timetabled space available. A significant increase in pre-sessional student numbers during the summer puts further pressure on teaching space, which has not seen matching increase in provision since 2009. Many Conference Office clients book teaching space with accommodation and catering and any non-availability of the former impacts on potential income streams.

Incentives have been paid to departments to encourage them to bring in academic conference activity. In recent years the Conference Office has made available on-line event management services which take administrative burden away from the Schools and generates further income for both Schools and Kent Hospitality. This service, which has been well received, has the opportunity for expansion to include off-campus events. The development of new academic school buildings and the Templeman Library will therefore provide additional teaching spaces that will permit further growth in Conference activity.

The award of the Best University Accommodation for Groups for the last eight years sets the bar ever higher in maintaining quality standards.

The Colyer-Fergusson building and Gulbenkian bring opportunities for income generation based on both music events as well as maximising the use of flat floor space for residential conferences and exhibitions. More effort is required to deliver flexible events and income streams from these activities.

The issue of a conference centre at Canterbury requires separate discussion in light of local authority planning constraints and recent hotel developments in Canterbury. It is clear that there is a market for dedicated large scale all year round conference facilities but, realistically, until planning issues are resolved, and in the light of available capital funding, this project is not being actively pursued at the present.

When building new student accommodation at both Canterbury and Medway, room sizes have been specified to be larger and better fitted out to provide better conference accommodation. Additionally students are prepared to pay premium rates for larger bedrooms, double beds and increased facilities. This will continue as it provides competitive advantage.

As the bedroom numbers have increased so significantly over the last decade while the University dining rooms have closed, pressure is placed on the few remaining venues to provide large scale catering. This pressure is exemplified in Eliot where the dining hall is full to capacity during the summer months, but is unused for catering for the rest of the year. (It could be used as informal learning and teaching space throughout the academic terms).

The catering arrangements at Medway will need review owing to relative overprovision of services as a result of low student numbers and dispersed geographic academic provision; however, it is felt that some subsidy is appropriate given the impact upon student satisfaction.

There is a challenge between facilities use for external activity at the same time as requirements for student recruitment. This reinforces the need for ongoing dialogue and planning balance (ten additional students recruited will deliver £90k fees pa for three years versus conference income and so a review of policy in this area will be undertaken in 2015/16).

7.5 Capital funding

Kent Hospitality has re-invested on average £3m per annum into long term maintenance and refurbishment of its facilities over the last 5/6 years. In addition, it meets the full cost of loan payments in respect of new residential buildings. In order to improve the standard of accommodation further, it will need to increase this average substantially. Investment in catering outlets has in the past been particularly difficult to justify given the need to maintain a range of services and facilities that do not provide a commercial return, but the emphasis placed on enhancing the overall student experience to meet expectations on a campus-based university has justified such expenditure.

7.6 Darwin College

An appraisal of Darwin College was circulated in October 2014. It noted that its current design and layout are significantly 'disabled unfriendly'. While a lift provides access to the 'core' building and social facilities it does not serve the residential facilities or rooms currently used as offices.

The five yearly Drake & Kannemeyer condition appraisal of the residential estate was conducted in Spring 2014 and the ensuing report for the whole estate was delivered in the Summer. This indicated that some £3m (£4m with VAT and fees) should be spent on condition upgrade in the next ten years, with the majority of spend in the next four years. The

7 RESIDENTIAL (CONT)

appraisal concluded that £369k should be spent this year for legislation non-compliance. The indicated expenditure per square metre required to meet steady state condition is about twice the average for all Canterbury student residences, although significantly cheaper than demolishing and rebuilding.

Despite the functional issues with Darwin, refurbishment work has been undertaken in recent years. The external concrete was in such a poor and unsafe condition that it was treated and renovated in summer 2013. The building has largely been rewired and a new HV transformer and switchgear installed. The cold water storage tanks and hot water cylinders have been replaced. Beyond that the heating and mechanical ventilation systems are as originally installed and well beyond their design life. Furthermore there is a significant cost attributed to fittings, electrical installation, roof coverings and the structure.

Work undertaken so far has suggested that the basic requirements for Darwin have not changed much over time although the priorities may have altered:

- study bedroom units: a mix of cluster flats with en-suite bedrooms and those at a lower fee price-point with shared bathrooms. The density to be greater than that demolished, possibly 500-600
- student social space with adjacent bistro/catering outlet
- student activity flat-floor space
- conference suite and break-out rooms
- short-term guest accommodation (50 bedrooms)
- lecture theatres and seminar rooms
- academic and administrative and Master's offices
- housekeeping stores
- staff common room
- staff restaurant / fine dining
- reception and laundrette
- board room (flexible use for University and external visitors).

While not providing any hard costs for future development, an estimate to demolish and rebuild would be around £80m. It should be noted that ongoing maintenance expenditure of some £3m over the next four years is seen as essential. However, a more contained modification might be undertaken and the two options will be developed during 2015/16.



8 SPORTS, ART AND CULTURE

8.1 Sports development

This section sets out to inform the university Estate Strategy of key sports facility requirements to 2020, and provide a direction of travel for Sport & Leisure at Kent beyond this period.

It is also a prelude to the Strategic Framework for Sport 2015-2020, being written over the next 12 months to complement the new Institutional Plan, highlighting the need for further facility developments during this period. Its purpose to provide for the health and wellbeing of our students and staff, and to encourage and support the success of our sports clubs at all levels, and individual participants at all levels.

University context

It is worth noting the current demands on sport at Kent, in order to contextualise its position and popularity/importance within the overall university setting.

- This year Kent Sport has 5,599 (Gold and Silver, 6,931 in total) student members at its Canterbury Campus representing a growth of 53% since 2012/13. This number continues to increase.
- In October 2014 there were 93,167 individual student booked visits to Kent Sport to take part in sports activities compared to 75,398 in October 2013, an increase of 23.5%.
- At time of writing, Kent Sport is on track to exceed these numbers in 2014/15 (though actual numbers will not be known until year end.)

- Sport England recently awarded Kent Sport a grant of just under £0.25 million (over three years) to encourage further participation in sport and physical activity. Already over 900 currently 'non-active' people have signed up to our new 'let's play' programme. Kent Sport is also contributing significantly into this programme, which is also generously supported by Kent Union, both in principle and with a financial contribution.

Every student should have the opportunity to join and take part in the wide range of activities and services on offer. The expansion of the new gym facilities and the covering of the tennis courts have provided greater access to facilities contributing to the increase in memberships.

National context

Data and research on the positive effects of maintaining an active and healthy lifestyle is now overwhelming, with information coming from wide and diverse areas of expertise including; UK Active Research Institute, British Medical Association (BMA), Public Health England (PHE), National Centre for Sport & Exercise Medicine, UK Government, European Union, International Health Rackets and Sports Association (IHRSA), British Universities and Colleges Sport (BUCS), European Network of Academic Sport Services (ENAS).



CONTINUED OVERLEAF

8 SPORTS, ART AND CULTURAL (CONT)

Student recruitment

With the cap on student numbers being removed from 2015/16, the issue of being attractive to prospective students compared with competitor institutions will become fierce. For a campus based university like Kent, sports facilities are an integral part of the student offer. Kent's competitors continue to invest in sporting facilities and almost all have a swimming pool.

Student Wellbeing

The current Student Wellbeing Strategy considers six strands: Meaning and Purpose, Psychological Wellbeing, Social Engagement, Physical Fitness, Physical Environment, Personal Finances.

Sport and leisure have a direct impact on four of those areas, and an indirect impact on Physical Environment (with new buildings/facilities etc). It is clear then that Sport and Physical activity are key to a wide range of issues that directly impact on students health and wellbeing.

Facility development

Facilities known to be in constant demand* are the highest priority regarding inclusion within the Estate Strategy:

Swimming pool and spa:

This, by a large margin, is the one facility in greatest demand.

- In the most recent 2014/15 Kent Sport Survey 85% of responders' said they would like a swimming pool and/or spa on the Canterbury campus;
- 18 of the top 20 Russell Group universities (90%) have swimming pools (7 of which are 50m);
- 8 of 11 of our main competitor group (73%) already have wet facilities (3 of which are 50m pools);
- Swimming is a generic activity that everyone can take part in as it supports joints and promotes fitness, but does not require specific skills to take part;
- Swimming is widely known to be beneficial to both physical and psychological well being;
- Wet facilities are by far the most requested leisure facility by prospective students at open days;
- Swimming is the most popular and inclusive sport/leisure activity across the sports/ leisure sector as a whole.



Additional grass pitches

As our student numbers have grown, the number of grass pitches has declined by four since 2005 due to building student accommodation. This has been alleviated somewhat with the introduction of artificial pitches (with a third being introduced in 2015). However, there are an unprecedented number of teams competing in a variety of sports requiring grass pitches for matches. This number is continuing to grow and more grass pitches are urgently required. Given the nature of the University, opportunities to develop shared grass pitch facilities will be explored in the future. In the meantime, a new artificial pitch is included in the 2015/16 capital budget as there is greater usage than for a grass pitch

Multi use activity spaces incorporating staff offices/meeting rooms

Although not currently included within the current Capital Plan options, future consideration should be given to the development of multi use activity spaces incorporating staff offices/meeting rooms.

Kent Sport is under considerable pressure with insufficient space for existing staff. With new staff planned over the coming years to service greater numbers of activities, additional space for staff is urgently required. The idea to build additional multi activity spaces alongside new offices aligns itself with the Estates presentation from last year's Managers Forum which stated that building programmes should not always stand in isolation but enable most efficient use of space. Multi activity spaces (ie large square/rectangular rooms with flat floors) allow a great deal of potential new use from a variety of sources and will allow a response to the request for eg dance and musical theatre practice provision. The development of a student activities centre will mitigate the requirement at the Sports Centre but it is clear that another sprung floor dance studio is required as bookings exceed facility time at present.

Improved facilities for cyclists are a high priority and a cycle lodge is planned for 2015.

8.2 Art and culture

Gulbenkian

In July 2014 we received the very exciting news that Gulbenkian would become a National Portfolio Organisation (NPO) with Arts Council England from 1 April 2015 securing £660,000 over three years. The funding is to reposition Gulbenkian as leading International Arts Centre with a particular emphasis on the creative empowerment of children and young people. This will include the development of a major international festival; the commissioning and creating of new work; supporting emerging artists and the development of a Creative Learning Department targeting Schools and the further and higher education sector.

The challenge we face is that Gulbenkian was built as a theatre and cinema and has remained virtually unchanged. It has not responded to the changing more contemporary and flexible physical infrastructure required to be a leading arts centre. As an NPO the Gulbenkian will be eligible to apply for Arts Lottery funding for Capital projects and we intend to start developing ideas over the next three years for the development of a new or reconfigured building that is flexible and a major attraction for artists; local and wider community and prospective students. The University will need to provide some matched funding for such grant aided developments but its role in the community, and its own programme provision in drama and arts, makes further improvements desirable.

9 COMMERCIALISATION AND SUPPORT FOR INNOVATION

Key challenges:

- Need for new science facilities
- Need for additional space for innovation activity
- Ensure that retail spaces are appropriately located and exploited

There is a clear government agenda for Universities to be focal points for developing high value business environments. The success of the Canterbury Innovation Centre, where full occupancy was achieved ahead of business plan and which has a waiting list for space, is an indicator that small and growing businesses wish to locate close to the University and become part of a wider innovation community. The local planning authority is also very keen that the University develops further facilities for start-up companies and grow on space for growing, more established high added value firms.

The University, too, wishes to exploit its intellectual property and to encourage staff to identify markets for potential development. While this may not always mean that a start-up company is appropriate, it can be the case and there are a number of successful staff start-up companies that have been spun off over the last few years. Just as important, is the co-location of industrial partners or their research and development subsidiaries, to our own academic research groups. This will allow a good interchange between applied and blue sky research activities, and the achievement of significant impact from the exploitation of academic research.

Student employability is a key consideration for potential student applicants and employability measures are increasingly important in league tables.

The co-location of funded research projects and relevant commercial research and development activity will allow both an economic use of space through a flexible short term lettings policy whereby research projects may take space for the duration of their project and then be let commercially if the space is no longer required, and a sharing of ideas and

facilities with industry. The developing master planning exercise proposes that the area to the north of the academic centre of the campus be selected as a potential location for the development of "innovation farmsteads" where such intermingled research and innovation activity might be located. This will leave the area to the west of Keynes as available for longer term academic or residential development. Developing discrete, lower cost innovation units will allow an expansion in line with demand and make it easier to obtain an appropriate return on investment with lower risk. There may, however, be economies of scale in providing flexible laboratory space within the proposed science building, in order to benefit from the specialist equipment and expertise available with relevant academic schools. An economic appraisal of new innovation farmsteads will be undertaken in 2016.

The longer term location or expansion of retail activity on the Canterbury campus will be reviewed at the same time as plans are developed for the student services and student activities buildings that are anticipated to form a "gateway" to the University and provide the focus for a student hub west of Jarman.

Where new student facing advice and administration buildings are being proposed, the University is keen to develop a wider student hub concept close to Keynes College and the Jarman building, incorporating a piazza and two adjacent buildings. In order to co-locate facilities, and also to potentially help fund such provision, it may be that further commercial space is created within the new buildings, with the potential to re-locate some existing retail provision into the new venues.

10 TRANSPORT: PARKING/ INFRASTRUCTURE

Key challenges:

- Pressure on parking spaces
- Adequacy of infrastructure for non-motorcar travellers
- Ensuring easy access around campuses with particular emphasis on disabled access

With 19,000 students and 3,000 staff, vehicle journeys associated with the University make a significant contribution to its carbon footprint and also impact on its campus' and local environment.

In 2006 the University put in place the first Travel Plan, which provides a strategy for Transport, and appointed a full time Travel Plan Coordinator (2008) to develop the Plan and introduce initiatives to offer alternatives to single person car journeys. Since 2008 demands on the Transport team have increased with the development of inter Campus Shuttle Services; bicycle rental and improvements to permit allocations.

10.1 Travel Plan

The Travel Plan, which is part of the Transport strategy for the University, can be located at www.kent.ac.uk/transport/

The current Plan (2011-2015) is due to be updated in 2015, following the outcome of the Travel and Transport Survey, which will be issued to staff and students in Autumn 2015. The new Travel Plan will be in place for the period 2016-2021.

Objectives

The University will:

- Continue to promote public transport initiatives for students, staff and visitors and work with bus companies on developing additional/ new routes.
- Review the current parking system to ensure that it supports the Travel Plan to reduce single car occupancy onto the Campuses and provides adequate funding for the maintenance and development of parking areas;
- Continue to support the reduction in carbon emissions and the use electric vehicles on campus as part of the University's Estates fleet.
- Provide input to the development of the University Masterplan(s).
- Continue to initiate and support improvements to the infrastructure for pedestrians; bicycles and other vehicles to enhance a safer campus environment eg lighting for pedestrians; foot & cycle ways, signage.
- Ensure that CCTV is suitably allocated and monitored in accordance with the University's CCTV Policy.
- Develop, support and advise on new transport infrastructure initiatives eg new/ improved roads; new/ improved bus stops; new/ improved secure bicycle shelters.
- Enhance the availability of online advisory and study materials relating to travel and transport.
- Continue to be a member of the British Parking Association (BPA) and the Approved Operator Scheme, which operates parking enforcement within the BPA code of practice.

- Improve and enhance communications using social media; film and improved websites.
- Continue to review under each new building project for the University, the impact of parking displacement and structural alternatives for cost effective schemes.
- Aim to relocate the Transport Team to a central location to create a central "Travel Hub", as an advisory centre for students, staff and visitors.

10.2 Access

Access can be considered under the two headings of 'access to campus and facilities' and 'access within buildings'.

Access to campus and facilities

Easy access to the University's campuses at Canterbury and Medway, and rapid orientation on arrival is an important factor to prospective students and visitors and will inform an initial perception of the University. This is particularly important at Open Days but may also form the view of the University's 'openness' with respect to town-and-gown relations. At Canterbury there have been significant improvements over recent years to improve the situation. These include new way finding signage; better public transport links including new bus termini and more frequent bus services; improvements to paths, lighting and car parks. Despite these, it is generally acknowledged that it is relatively difficult for a person unfamiliar with the campus to readily orientate themselves. Our master planners, Farrells, have recognised this and have incorporated proposals within their master plan to progressively re-model the central campus to create easily recognisable and defined spaces. The master plan proposals can be found at www.kent.ac.uk/estates/policies/index.html. Significant work has also taken place to ensure improved disability access to campus facilities, which includes the comprehensive installation of automatic doors, lift access to building upper floors and tactile, dropped curbs at designated road crossings.

At Pembroke campus in Medway, signage was an integral part of the redevelopment of the site and orientation is therefore better addressed. Since 2009, a new bus route through the campus has been established, and public transport access to local towns and railway stations has been improved. A dedicated coach service between the campus and Canterbury campus has also been provided.

Building signage at Chatham Historic Dockyard is more challenging as the University's facilities are embedded within a major, Heritage visitor attraction. However, working with the Trust, new building signage has now been installed on University leased buildings that complements the Dockyard's own signage and fully integrates with the existing way finding system. Discussions are ongoing with the local bus company to improve services to the Dockyard, and there is a further review into improving transportation links between both Medway campuses. Notwithstanding this, the Dockyard is building a new entrance building with improved catering facilities and this, combined with the University's plans to create a new reception/café bar within

10 TRANSPORT: PARKING/ INFRASTRUCTURE (CONT)

our leased Galvanising shop building, will obviate the need for students to travel back to Pembroke campus to obtain food and beverages and will provide a main information and reception point for visitors to the University in the Dockyard.

10.3 Roads and other infrastructure

Roads

Giles Lane (a Public Highway) effectively bisects the Canterbury campus. It not only creates a physical barrier but also a psychological one between each half of the campus. It is increasingly being used as a 'rat run' by drivers living to the north and east of the campus who are looking for a shortcut towards the city centre. This creates a heightened risk of an accident occurring with pedestrians crossing the road from the Parkwood area towards the central campus. Positive, tentative discussions have already been held with Kent County Council Highways Department regarding the possibility of the University adopting the road. This would open up the possibility of introducing more effective traffic calming measures, such as shared space between cars and pedestrians, and advice has already been sought from a specialist traffic consultant. These discussions are set to continue.

In the longer term, a more radical solution will be required that allows traffic to avoid the current 'rat run' along Giles Lane and Blean/Tyler Hill. The University will work with Kent County Council to establish options, over the time frame of this strategy.

The new Farrell Master Plan at www.kent.ac.uk/estates/policies/index.html envisages a hierarchy of roads and streets on the Canterbury campus as part of the concept of 'place making'.

This will be gradually implemented alongside other Master Plan developments, as agreed developments are undertaken and funding provided.

Other infrastructure

Significant improvements have been made to the Canterbury campus infrastructure since the 2009 Strategy. These include the renewal of the district heating main that serves 75% of the central campus buildings; substantial renewal of water and gas mains; the imminent commencement of the replacement of the original, buried HV electrical cables that form the University's owned ring mains; and the renewal and repair of substantial parts of the University's privately owned road system.

The next phase of infrastructure improvements will be the repair and renewal of the University's foul drainage system. Due to a lack of investment in the public sewerage system, Southern Water's sewerage network can no longer accommodate any significant expansion of the Canterbury campus. Following negotiations between the University and Southern Water, it has been agreed that the University can install its own private sewerage main directly to the local water treatment plant. This main will be able to accommodate any future, envisaged expansion of the campus. Design work is at an early stage but it is anticipated that the total cost of the new main will be in the region of £2 million at 2014 prices and will be funded from the recurrent infrastructure renewal budget. This project will also address relevant backlog maintenance issues flagged in the 2014 Condition Survey.



11 SUSTAINABILITY

Key challenges:

- Containing the cost of utilities
- Meeting emissions and carbon reduction targets
- Improving waste reduction, re-use and recycling rates

Sustainability, support of the University Environment Plan and compliance with ISO14001 is incorporated into all activities including the management and development of the Estate. Environmental objectives consistent with the University Plan are developed and controlled under the Environmental Management System.

11.1 Utilities

Carbon reduction & energy efficiency

The UK Government set a legally binding target to reduce greenhouse gas emissions by at least 34% by 2020 and 80% by 2050 against a 1990 baseline. In 2010 the Higher Education Funding Council for England (HEFCE) published a statement of policy in support of the national targets for carbon reduction. The HEFCE target for the HE sector is an absolute reduction of 43% by 2020 and 83% by 2050 against a 2005 baseline. All English HE institutions were required to produce a carbon management plan covering the period 2010 to 2020 setting out their proposals for carbon reduction and stating their institutional target. The University of Kent committed to a 23% absolute reduction in carbon emissions by 2020 against the 2005 baseline.

Improving the energy efficiency of the University's buildings has been a priority over the past 25 years resulting in significant savings in consumption which makes the absolute reduction in carbon emissions achieved since 2005 all the more remarkable. Likewise growth in student numbers has been offset by improved energy efficiency and a sizeable reduction in relative emissions.

Absolute and relative performance against the baseline is shown in the following tables:

Scope 1 & 2 emissions – absolute reduction

Year	Fuel Oil tCO ₂	Natural Gas tCO ₂	Electricity tCO ₂	Vehicles tCO ₂	Total tCO ₂	Absolute % change against baseline
2005-06	57	8,757	8,969	124	17,907	
2012-13	0	7,592	8,255	79	15,926	-11.06

Note: 2005-06 University owned vehicle emissions estimated by SQW Energy for HEFCE

Scope 1 & 2 emissions – relative reduction

Year	Total tCO ₂	Student FTE	Emission per FTE tCO ₂	Relative % change against baseline
2005-06	17,907	12,145	1.47	
2012-13	15,926	16,510	0.96	-34.69

The Energy Performance of Buildings Regulations requires a Display Energy Certificate (DEC) to be displayed in public buildings with a floor area exceeding 500m². At Kent a DEC is produced annually for every building over 500m² as a visual indicator of energy performance. A building with a D100 rating has energy efficiency typical of its type. An A rated building is more efficient and a G rating less efficient. The DEC ratings show a marked improvement in energy efficiency since 2008-09.

The floor area of University buildings falling into each rating are shown in the following table:

Floor areas – DEC ratings

Year	A	B	C	D	E	F	G
2008-09			35,273	61,890	52,612	5,074	7,992
2012-13		4,884	83,235	44,850	29,798	5,074	

Whilst good progress has been made towards the University's 23% absolute carbon reduction target, the Canterbury campus continues to grow with the potential to reverse the early achievements. To address this there will be a sustained effort to improve the energy efficiency of existing buildings, replace those that are not fit for purpose with low carbon buildings, upgrade inefficient plant, services and infrastructure and invest in renewable energy alternatives to fossil fuels. Projects such as the Ingram over-cladding and Stacey windows replacement will help to improve energy efficiency.

11 SUSTAINABILITY (CONT)

HEFCE linked carbon reduction with the Capital Investment Framework (CIF2) so there is an expectation that Kent will achieve an absolute reduction of at least 23% by 2020. The CRC carbon tax increased by 33% to £16 per tonne from 1 April 2014 and will increase in line with inflation. The University has Carbon Trust Standard accreditation to 31 July 2015 but to retain the standard must demonstrate an absolute reduction in carbon emissions. Discussions are currently ongoing with the Carbon Trust for renewal of the Standard which will be backdated to 1 August 2015. Energy consumption and emissions feature in auditing of the University's ISO 14001 Environmental Management System.

District Heating Phase 2

The existing High Temperature Hot Water (HTHW) district heating boilers and associated plant were installed in 1990 so timely consideration is being given to their replacement with energy efficient Low Temperature Hot Water (LTHW) boilers. The district heating distribution mains have already been replaced and their design allows for future LTHW operation. The replacement plant will include a 2MWe Combined Heat & Power (CHP) unit that will generate electricity for the Canterbury campus with the waste heat from the engine being recovered to supplement the heat output of the new boiler plant. It is envisaged the overall efficiency of the heating system will be improved by 15% and the annual consumption of Grid electricity reduced by 10%. The estimated capital cost is £8.3m, inclusive of fees and VAT, with a simple payback of 14 years and an annual reduction in carbon emissions of 1,940 tCO₂. We are currently working with a government organisation Local Partnerships, to evaluate potential funding options.

Water resources

Water is a valuable resource particularly in SE England where there is a greater reliance on water drawn from underground aquifers rather than reservoirs. The Higher Education Statistics Agency (HESA) requires data on water consumption, and corresponding carbon emissions from pumping, to be included in the annual Estate Management Record (EMR) submission.

Over the past eight years progress has been made in using water more efficiently. Since 2005 over three kilometres of underground water mains have been replaced on the Canterbury campus resulting in a significant reduction in leakage. Flush controls, water efficient fittings and automatic taps have been installed to reduce water consumption at the point of use.

Absolute and relative performance against the baseline is shown in the following tables:

Water consumption – absolute reduction

Year	Water consumption per annum (m ³)	Absolute % change
2005-06	273,204	
2012-13	221,467	-18.94

Water consumption – relative reduction

Year	Water consumption per annum (m ³)	Student FTE	Consumption per FTE per annum (m ³)	Relative % change
2005-06	273,204	12,145	22.50	
2012-13	221,467	16,510	13.41	-40.40

Investment in remote monitoring of water meters to aid leak detection, a rolling programme of building refurbishments and upgrading of campus infrastructure will ensure the efficient use of water resources.

Further information can be found in the Sustainability Report at Appendix 8

11.2 Waste management and recycling

Waste and recycling is one of the most visible areas of the University's sustainability agenda and demonstrates the commitment to staff, students and visitors. The University Estates Department is responsible for waste management and works hard to reduce overall waste, increase the percentage of waste that is recycled and, where possible, avoid the use of landfill to dispose of any waste.

The University recognises the importance of ensuring its waste is always managed in a responsible, sustainable and legally compliant manner that prevents pollution and helps progress the University towards continuous environmental improvement.

The Sustainability Report at Appendix 8 details the University's commitment to improving the way it manages its waste and supports how we plan to meet the objectives and commitments as set out within the Waste Management Policy, to be

implemented over a period between 2014 and 2020. The Strategy is also accompanied by incremental targets according to the waste hierarchy and a key commitment to become a 'zero waste to landfill' organisation.

The following drivers are fundamental influences to the way in which we currently manage our waste, and how our waste will be managed in the future:

Legal compliance Ensuring we are compliant with all waste management legislation is of upmost importance to the University.

Financial implications We recognise that promoting sustainable waste management across the campuses will have beneficial financial implications.

Improving environmental performance Sustainability is considered one of the six key messages of the University of Kent's current Strategic Plan.

National strategy and targets

The University is familiar with National Policy and Strategy on waste management and understands the impact this will have on how we will be expected to manage our waste in the future.

The key objectives for the Waste Management Strategy are to:

- Embed the principles of the Waste Management Strategy throughout the University of Kent at Canterbury and Medway campuses.
- Achieve legal compliance in all of our waste management practices.
- Achieve continuous improvement in all of our waste management practices.
- Develop and implement the most efficient and effective waste management options, in line with the waste hierarchy.
- Effectively communicate and consult on the University's waste management aims, objectives and targets and the progress made against them.
- Effectively monitor and report on our waste management performance.
- Develop and implement effective awareness and behaviour change campaigns.

Waste management targets

The University has previously set targets for the management of its waste. These have included a target to increase its recycling rate to 50% by 2011/2012 and a further target to increase the recycling rate to 55% by 2012/2013. Both of these targets were successfully met by the University and a core component of the Waste Management Strategy is the establishment of new, incremental targets to help us continuously improve our waste management performance. This includes targets against the waste hierarchy using 2012/2013 as the baseline year.

The targets we have set are over a period of six years until 2020 and in line with the 'two year' short term, medium term and long term timescales as set out within the Strategy. These targets, as well as our performance against them, will be reviewed on a regular basis to ensure they remain relevant to the University.

As part of the Waste Management Strategy incremental targets have been set to reduce the total waste production by 20% by 2020 compared to 2014 levels, and to reuse 10% of its waste by 2020.

We will explore a number of options to improve waste prevention and reuse, and will aim to:

- Work closely with Procurement Teams at the University to embed the consideration of waste management within all purchasing activities. Procedures will be developed and communicated to fully embed this approach.
- Develop and roll-out awareness and behavioural changes campaigns for staff and students on the importance of waste prevention and minimisation.
- Develop partnerships with appropriate charities and other third sector organisations to maximise opportunities to reuse waste materials.
- Explore other opportunities to establish reuse schemes for waste materials, such as WEEE, batteries, furniture, stationery and toners/cartridges and prioritise these schemes over the recycling of these materials.
- Develop objectives and targets within our Waste Management Strategy Implementation Plan to implement the above options.

University of Kent waste management targets according to the waste hierarchy

Year	Waste prevention*	Waste reused	Waste recycled**	Waste recovered (EFW*)	Waste disposed (landfill)	Waste disposed (incineration)
2014/15	0%	0%	60%	40%	0%	0%
2015/16	0%	5%	65%	35%	0%	0%
2016/17	5%	5%	70%	25%	0%	0%
2017/18	5%	10%	75%	15%	0%	0%
2018/19	10%	15%	75%	10%	0%	0%
2019/20	10%	15%	80%	5%	0%	0%

* EFW = Energy From Waste

12 IMPLEMENTATION: DELIVERING ASSESSED SPACE REQUIREMENTS



Above: Artist impression of the new academic building for Kent Business School and the School of Mathematics, Statistics and Actuarial Science. The development has an estimated construction cost of approximately £26m and is due for completion for the 2016/17 academic year. Three lecture theatres together with seminar and IT rooms and a Bloomberg suite are being provided as part of the development.

12.1 Overview

The implementation of the 2015/16 Capital Programme will not only deal with previous student number growth but will release existing space to enable the rationalisation of space occupied by a number of Schools and, in some cases, their relocation to better, new or refurbished facilities. The main opportunities arising from this Strategy are:

- Circa 1,000m² vacated by the School of Mathematics, Statistics and Actuarial Science following the transfer to the new academic building in Park Wood Road.
- Circa 1,600m² vacated by Kent Business School following the transfer to the new academic building in Park Wood Road.
- New co-located space for SSPSSR created by the construction of the 2,100m² Cornwallis East building.
- Additional space released on the Pembroke site at Medway with the move of Kent Business School to the Sail and Colour Loft, Chatham Historic Dockyard
- Space made available in Keynes following the move of the School of Economics to new and refurbished facilities at the site of KRDC/KBS.
- Additional teaching facilities being provided in Templeman Library, Cornwallis East, the new building for KBS and SMSAS, and expanded facilities on the KRDC site.
- The consolidation of student facing services and other amenities into a new building on a site adjacent to Keynes that will release space in several buildings on the Canterbury campus including the Registry.
- A partnership project with the University of Greenwich to refurbish a derelict building (C4) on the Pembroke campus Medway to provide student social and Student Union space.
- The opportunity to re-convert c200 offices within Rutherford into lower cost student accommodation following the completion of a new academic building on central campus.

12.2 Main proposals

The main capital project proposals contained within the 2015/16 Capital Programme are set out below together with their goals in relation to the Objectives and Principles of this Strategy.

Table 1: Schemes approved by Finance and Resources Committee and in progress

Project	Objective
Extension to Templeman Library to provide additional collection store, reader spaces, seminar rooms and lecture theatre	Improves student experience, aids recruitment, addresses urgent need for additional floor space for both library use and central timetabling due to increase in student numbers. Addresses IS strategic priority 1 to be appropriate for a diverse user group
Phase 1 of the remodelling and refurbishment of the existing Templeman Library	Improves accessibility, co-location of IS facilities, strengthens Library's role as the academic focus of the University, aids collaboration and interaction, addresses IS strategic priority 1 to fully develop the Templeman Library
A new academic building as part of the Cornwallis complex, to provide space for SSPSSR, Graduate School and Teaching	Co-location, consolidation and expansion, to facilitate interaction and collaboration. Replacement teaching space to allow future rationalisation of space, permanent solution to mitigate use of temporary buildings
Student accommodation, west of Keynes College providing 801 bedrooms and a 'hub' building with reception, launderette, offices, catering facilities and housekeeping centre (Turing College)	Increases UG/PGT on-campus accommodation consistent with local plan policies, provision and improving overseas guarantee, aids overseas recruitment, supports commercial strategy
The Law Clinic and Mooting Chamber providing an enhanced community-facing legal services, offices and a moot room	Enhances community reputation of Law Clinic, aids student and staff recruitment and expectations, develops students mooting skills to enhance employability through real-life court and tribunal hearings
A new academic building in Park Wood Road to bring together Kent Business School and School of Mathematics (SMSAS) providing offices, meeting and seminar rooms, lecture theatres and administrative space	Brings together two Schools to promote synergies, collaboration and interaction, foster knowledge exchange, addresses growth predictions that cannot be accommodated in existing facilities, enhances reputation of both schools to assist student and staff recruitment, releases space elsewhere on campus and mitigates future use of temporary buildings, increases teaching and learning facilities
Completion of the remodelling and refurbishment of the existing Templeman Library	Improves user satisfaction with effective stock management, co-location of IS facilities, aids collaboration and interaction, addresses IS strategic priority 1 to fully develop the Templeman Library
Relocation of Kent Business School at Medway into refurbished buildings on the Chatham Historic Dockyard (Sail and Colour Loft and Church)	Co-location, allows creation of lecture theatre adequate for modules, releases space on Pembroke campus for expansion, rationalisation and moves from Compass Centre
Refurbish space on site C4 at Medway to provide student social and administration space	Improves student experience and service at Medway
Additional 3G sports pitch and conversion of facilities in the existing Sports Centre	Need for extracurricular activities facilities, improve sports facilities that will attract students
Over cladding and new windows to the Ingram Building	Promotes sustainability, targets carbon reductions, improves working environment, enhances image of facilities that will attract and retain students
Continuation of the student bedroom refurbishment programme	Provides accommodation that will attract students and provides value for money, Market for conference use. Reduces energy use with efficiency initiatives

12 IMPLEMENTATION (CONT)



Above: Turing College, a development providing 801 study bedrooms and a 'hub' building with reception, launderette, offices, catering facilities and housekeeping centre. The scheme is being developed through a partnering agreement between the University and UPP. The first students occupied the facility in September 2014.

Table 2: Schemes prioritised for progression 2015-20 subject to funding approval

Project	Objective
New facilities for the School of Economics and additional teaching rooms	Co-location and consolidation, into new facilities for existing School, adjacent to new KBS and SMSAS building, encourages research and learning collaboration and facilitates interactions and knowledge exchange, increases teaching and learning facilities
Consolidating Schools in Rutherford into a new academic building including converting vacated space made available	Co-location and consolidation of Schools, critical mass, informal learning, social flexible/bookable meeting and centrally timetabled teaching spaces
A new building to provide student administration services	Improves student experience and service, relieves pressure on Registry
Demolition of existing Venue building and construction of a new student activities building	Improves student experience, Venue not fit for purpose, creates student zone
Refurbishment of space vacated by Schools moving to new academic facilities, from Rutherford	Provides space fit for purpose and adequate for intended use, consolidation of Schools, improves student and staff experience
A hub for innovation and enterprise – subject to external grant/loan	Enhances reputation for innovation, creativity and enterprise



Above: Early proposals for the Wigoder Law Building providing facilities for the Kent Law Clinic and the Kennedy Wong Mooting Chamber, to be located next to Eliot College. The project, designed by Hawkins/Brown will commence on site early in 2015 and be delivered for early 2016.

Table 3: Programmes of work having an annual allocation of budget

Project programme	Objective
Teaching space refurbishments	Provides centrally timetabled space that is appropriate for use incorporating current AV and lighting technology
Space rationalisation	Delivers efficient and effective use of available facilities and spaces, ensuring an active response to changing space needs
Security/access enhancements	Works towards a secure and safe campus, aids student and staff recruitment
Perception upgrades	Upgrading the legacy of a 1960's campus to provide a quality external environment, aids student recruitment through improving the image of the campus
Improvements to social facilities	Improves student experience, creates informal student zones
Estate infrastructure	Mitigates failure risk due to reliance on 50 years old infrastructure, addresses capacity issues relating to increased student and staff numbers and capacity requirement due to new developments, particularly on-campus student residences (address condition survey issues)
Long-term maintenance	Improves or reduces deterioration of the condition of University buildings, promote sustainability (addresses condition survey issues)

13 FUNDING

13.1 Ten Year Capital Programme

As described in the University Funding Strategy Paper, which was approved by the F&R Committee in June 2014:

“...the proposed 2014/15 Ten Year Capital Programme has been developed to take into account the work undertaken as part of the 2013/14 Estate’s Strategy Review and in response to Faculty and Professional Services needs identified during the 2014 Planning Round. The total budgeted expenditure over the ten year period to 2023/24 amounts to £395m, with £228m planned to be spent in the first five years to 2018/19⁸.

HEFCE capital funding has diminished over the years, with the assumption, in the new HE funding regime, that capital expenditure requirements will be met from a proportion of

the increased student fee. Institutions have therefore had to drive up surpluses to boost cash reserves in order to make more funds available for capital developments. In a competitive environment, where revenue investment is also essential, this may not, however, provide sufficient funding to enable the delivery of an entire Estate Strategy, thus forcing institutions to assess their borrowing capacity and, where financially sustainable, seek to increase their long-term financial commitments, as a means of spreading the cost of the required capital investment.”

Table 1 below shows the proposed 2014/15 10 Year Capital Programme versus Capital Plan Options. This table formed part of the University Funding Strategy Paper of June 2014. Since then, further work has been undertaken on the Funding Strategy resulting in the approved 2015/16 10 Year Capital Programme shown in table 2.

Table 1: Proposed 2014/15 Ten Year Capital Programme vs Capital Plan Options (2014 Funding Strategy)

	Total Expenditure - 10 year capital programme (14/15-23/24)			
	Current Approved/ Indicative Plan £000	Estates Strategy - Option 1 £000	Estates Strategy - Option 2 £000	Estates Strategy - Option 3 £000
Major Building Projects				
Conference Centre	33,472	-	-	33,472
Law Building	4,525	4,525	4,525	4,525
Templeman Library - Extension	15,217	15,217	15,217	15,217
Templeman Library - Phase 3: Refurbish	8,500	8,500	8,500	8,500
New Academic Building (KBS/SMSAS)	27,605	27,605	27,605	27,605
KRDC Expansion (Economics)	6,042	16,042	16,042	16,042
Turing College Hub	3,153	3,153	3,153	3,153
HIVE	4,980	4,980	4,980	4,980
New Academic Building (Relocate Schools from Rutherford + refurb bedrooms)		21,520	21,520	21,520
Student Services Building		25,000	25,000	25,000
Student Activities Building		25,000	25,000	25,000
Replace Darwin College (bedrooms + teaching spaces)			40,000	40,000
Science Building / Research Hotel			20,000	20,000
New Academic Building (possibly Medway)				20,000
	103,494	151,542	211,542	265,014
Estates Strategy Major Projects				
Cornwallis East	5,356	5,356	5,356	5,356
Other Academic Space Developments	10,743	25,000	25,000	25,000
Student Facilities (see also major projects above)	14,200	400	400	400
Careers & Employability Building Improvements	350	350	350	350
Sport Facilities (Sports Pitches + Swimming pool)		12,000	12,000	12,000
Medway Academic Spaces (Sail & Colour loft + other developments)		7,000	7,000	7,000
	30,649	50,106	50,106	50,106
Refurbishments & Infrastructure Projects				
Teaching Space Refurbishments	3,129	3,129	3,129	3,129
Space Rationalisation	5,098	15,098	15,098	15,098
Refurb Rutherford Extension for Dean, KIE & Research Services	-	2,000	2,000	2,000
Perception Upgrades	4,594	4,594	4,594	4,594
Major Refurbishments (includes Ingram overcladding + refurb of space vacated by SMSAS / Economics)	14,740	14,740	14,740	14,740
Improvements to Social / Information Learning Spaces	2,431	5,431	5,431	5,431
Medway Social / Informal Learning Spaces (includes C4 site + Galvanising Shop)	4,897	5,897	5,897	5,897
Academic Services Developments & Refurbishments	1,510	1,510	1,510	1,510
Infrastructure Improvements	9,676	9,676	9,676	9,676
Security / Access / Health & Safety / Disability Enhancements	3,476	3,476	3,476	3,476
Carbon / Energy Projects	2,871	2,871	2,871	2,871
	52,422	68,422	68,422	68,422

8 Includes budgets carried forward from 2013/14 to be spent in later periods

Table 2: Approved current (2015/16) Ten Year Capital Programme

	2015/16* - 2019/20	2020/21 - 2024/25	Total Expenditure - (15/16-24/25)	Prior years Spend	Project total
Major Building Projects & Student Facilities					
Law Building	4,334	-	4,334	1,166	5,500
Templeman Library - Extension	7,523	-	7,523	20,077	27,600
Templeman Library - Phase 3: Refurbish	6,492	2,805	9,297	(0)	9,297
New Academic Building (KBS/SMSAS)	32,543	-	32,543	4,257	36,800
KRDC Expansion (Economics)	14,000	-	14,000	(0)	14,000
Innovation Facilities	5,000	-	5,000	-	5,000
New Academic Building (Relocate Schools from Rutherford + refurb bedrooms)	22,760	2,340	25,100	-	25,100
Student Admin Building	25,000	-	25,000	-	25,000
Student Activities Building	3,000	22,000	25,000	-	25,000
Sciences Building	5,000	30,000	35,000	-	35,000
Capitalised interest in relation to projects above	2,783	-	2,783		
	128,435	57,145	185,580		
Estates Strategy Major Projects					
Cornwallis East	1,035	-	1,035		
Other Academic Space Developments	2,303	-	2,303		
Sport Facilities (Sports Pitches + Swimming pool)	2,098	10,000	12,098		
Medway Academic Spaces (Sail & Colour loft + other developments)	882	-	882		
Large PV Array	2,000	-	2,000		
	8,318	10,000	18,318		
Refurbishments & Infrastructure Projects					
Teaching Space Refurbishments	3,465	2,500	5,965		
Space Rationalisation	8,004	5,500	13,504		
Refurb Rutherford Extension for Dean, KIE & Research Services	1,000	1,000	2,000		
Perception Upgrades	2,094	2,000	4,094		
Major Refurbishments (includes Ingram overcaddng + refurb of space vacated by SMSAS / Economics)	8,449	5,000	13,449		
Canterbury Social & Student Facilities	4,605	3,000	7,605		
Medway Social / Informal Learning Spaces (includes C4 site + Galvanising Shop)	4,447	1,000	5,447		
Academic Services Developments & Refurbishments	1,952	500	2,452		
Residences & Catering Major Refurbishments	19,099	19,250	38,349		
Facilities Upgrades & Refurbishments	2,750	2,750	5,500		
Infrastructure Improvements	8,073	5,000	13,073		
Security / Access / Health & Safety / Disability Enhancements	1,152	1,200	2,352		
Carbon Reduction Projects	1,494	1,250	2,744		
	66,586	49,950	116,536		
Equipment & Systems recurrent budgets	25,156	20,800	45,956		
Less: non capital items included above	(2,000)	(2,000)	(4,000)		
Contingencies	17,103	14,572	31,674		
Project Delays or Planned Deferrals needed to ensure affordability	(5,500)	5,500	-		
	34,759	38,872	73,630		
Total Capital Expenditure	238,098	155,967	394,064		

*2015/16 budget includes c/f from 2014/15

Building costs are also increasing as discussed further in 13.2 below, and so annual reviews of the Capital Programme will be undertaken to assess affordability. It may therefore be necessary to re-assess priorities, and if so any review will take account of academic pressures in determining how to re-model the Capital Programme.

13.2 Capital project cost pressures

As noted in Section 4, during the period of the last Estate Strategy (2009-2014) the University struggled to build new facilities to match the demand created by significant increases

in student numbers. This coincided with the recession and a significant downturn in economic activity. This was particularly severely felt in the construction industry which saw almost unprecedented falls in tender prices throughout the period. This is illustrated in Graph 4 in Appendix 4. This fall was accompanied by an exodus of large numbers of highly qualified and technically skilled workers from the industry. Suppliers also massively reduced output and many construction related manufacturing plants were either shut down or mothballed.

CONTINUED OVERLEAF

13 FUNDING (CONT)

Unfortunately, the capital building programme proposed by this Strategy coincides with a huge increase in construction activity resulting from the economic recovery. Whilst the effects are being felt in most parts of the country, they are particularly focussed in the South-East with tender price inflation at levels not seen for a generation. Graph 3 and Table 2 in Appendix 4 show the forecast annual tender inflation rates for the next five years. They have been produced by major, reputable quantity surveying firms and the Royal Institute of Chartered Surveyors and show an average annual inflation rate of 5% or circa 25% over the next five years. Of even more concern is that the University and partner organisations within the construction industry are now seeing tender returns of 10% above budget, and even 20% is not unknown, reflecting actual increases in costs significantly in excess of published data. And, unsurprisingly, the reason for these increases is the lack of capacity within the industry, primarily a lack of skilled workers and a shortage of basic construction materials, such as bricks.

It is therefore clear that tender price inflation is the major risk to the delivery of this Strategy. The mitigating actions that can be taken to reduce the risk are summarized as follows:

- Increase student fee income – given the declining Home/EU demographic until 2020, the target group will be premium fee O/S. However, this will be challenging as most universities will be competing aggressively for this group of students to boost fee income.
- Increase commercial income – see Section 9 for increased commercial opportunities.
- Reduce specification of capital projects – once the scope of a project has been determined and design work commenced, the savings achieved through reduction of specification/value engineering are marginal compared to the overall construction value and would not fully mitigate the current tender price inflation. Design briefs will need to be clear as to the quality and price sensitivity of projects
- Reduce scope of capital projects – what this really means is making the buildings smaller (and the usage more efficient). This will achieve the savings required to offset tender price inflation. However, it runs the risk of delivering facilities that are too small when opened and/or not fit for purpose. To be effective, changes in working practices may be required and so far, this has been difficult to achieve (e.g. open plan offices for academic staff) but can be assisted by the co-location of relevant staff as in the proposed student administration building, where a co-ordinated approach to delivering student support services will form part of the overall brief. This will provide significant efficiencies.
- Build simpler, more utilitarian structures with a reduced aesthetic but maintaining a quality working environment – this could be combined with a turnkey type of construction contract. This would be appropriate for less public facing locations and could deliver significant cost savings that would go some way to mitigating construction inflation. It is possible to have good design at lower prices but cost constraints need to be articulated clearly when briefing architects.
- Reduce the number of capital projects – prioritize capital projects and initially only deliver those that are absolutely critical to delivering the strategic goals. This can be reviewed annually in the light of fee and other income and movements in build costs. Essentially the 2015/16 Capital Programme is the package of prioritised projects.
- Public Private Partnership that provides academic facilities as part of a student residential development – future student rents over the duration of the residential development contract would provide the capital to build academic facilities. However, the implied interest rates may exceed the cost of borrowing for the University and it may be appropriate to review the University's appetite for borrowing on directly income generating projects.

13.3 Operational cost pressures

The operational cost of the estate has risen significantly during the five years since the last Estate Strategy. Although tuition fees for Home/EU students rose to £9,000 per annum in 2012, this has been offset by a 75% reduction in capital grants to about £1.3m per annum. Furthermore, as tuition fees are not indexed linked, their effective real value is reducing year on year. Coupled to that, there is political uncertainty concerning the future scale of tuition fees, and with the uncapping of student numbers in 2015/16, it means it will be very difficult to predict future student income to any degree of accuracy. Considered against the spiralling costs of maintaining an ageing estate, it is clear that any Estate Strategy must be sufficiently flexible to either take advantage of additional income as it arises, or to scale back aspirations and consolidate should income fall. Obtaining value for money in both the construction of new facilities and in the maintenance and use of the existing building stock is therefore essential.

Between 2009/10 and 2014/15 the revenue costs of running the University's estate have increased by 38.6% (see Appendix 4 Table 1 and Graph 1), despite annual inflation being at record lows for much of that period. Against a background of single figure wage increases within the sector, pay has increased by 30.2%. However, the majority of this relates to increased staff numbers to deal with higher service demands and additional facilities which may be summarised as follows:

- 1,614 m² of temporary, 4,070 m² of leased and 7,430 m² of permanent academic and teaching facilities have been delivered over the period to accommodate staff and student growth between 2009 and 2014.
- Bringing back in house a number of previously outsourced contracts to improve operating efficiencies and generate an overall cost saving, eg the boiler house maintenance contract; locksmithing; portable appliance testing.
- Increased facilities management resource at Medway campus due to the (leased) acquisition of six additional premises on Chatham Historic Dockyard (CHD).
- Over 1000 additional student bedrooms on campus requiring an increase in security and maintenance resources.
- Extended opening hours for the Library and other academic/informal learning areas. This results in additional security and cleaning resources.
- Significant increase in financial transactions requiring additional finance resources.
- The University's main boilers that provide heat energy to the district heating main were installed in 1990 and are reaching the end of their design life. Replacing these boilers with energy efficient condensing boilers would save approximately 30% of current fuel consumption. A feasibility study to provide the CHP plant and replace the boilers (including funding options) is currently being undertaken. However, the cost is likely to be in the region of £9m and is not included in the Capital Plan.
- The University has been involved in government and National Union of Students sponsored behavioural change programmes since 2009, namely Degrees Cooler and Green Impact. Whilst these programmes have been successful in raising staff and student awareness of the need to reduce energy consumption, the actual net reduction in energy usage has been marginal compared to the increase in usage on both main campuses as a result of increased student bedroom numbers and new non-residential facilities.
- It is now Estates Department policy to install LED lighting in all new buildings and refurbishment projects, and for external lighting. LED lamps offer significant energy savings compared to incandescent and metal halide lamps and a significantly longer life expectancy over other energy saving lighting, saving money and maintenance time. Recent figures show that in the Park Wood houses that have been refurbished with LED lighting, electricity usage has almost been halved. Notwithstanding these technology driven energy reductions, only a large PV array will deliver a step change reduction in electrical energy consumption and enable the University to achieve its 2020 carbon reduction target.
- Estates costs such as maintenance and cleaning services are regularly benchmarked against external providers to ensure that value for money is delivered to the University. Outsourcing is used to manage peaks and where third party providers can provide a more cost effective service. The Estates Department therefore operates a policy of 'rightsourcing'. Although Campus Security is benchmarked, this will remain as an inhouse service for the foreseeable future due to its pastoral element and the fact that security is regarded as very high importance by our students and is a key part of our brand.

Non-pay costs which include utilities and service contracts have risen by 42.6%. This is more worrying and is less under the control of the University. Utilities, which represent over 34% of non-pay costs have increased by nearly 53% and now include an annual carbon tax of £305,979 which was first introduced in 2010/11. The University competitively tenders gas and electricity by a reverse auction as part of a multi-institution consortium and, while the increases can be, in large part, attributed to the well-publicised increases in the unit prices of gas and electricity, Graph 2 in Appendix 4 shows steady year on year increases in the consumption of these fuels. This is despite the energy reduction measures described in the Sustainability section of this document, and is due to the increase in the number of new buildings and student bedrooms.

Mitigation measures

The following measures to mitigate increasing operational costs have either been implemented or are under consideration:

- Significantly reducing the amount of electricity consumed requires investment in 'free' renewable energy. The 2MWp photovoltaic (PV) array being proposed as part of this Strategy would effectively deal with the University's summer base load demand. Winter base load demand would be delivered by a Combined Heat and Power (CHP) machine with the waste heat from this being used to heat up water in the district heating main. The recently replaced district heating main was specifically designed to use this low grade heat energy.

14 LONGER TERM VISION – THE NEXT 50 YEARS

14.1 Canterbury campus

In 1963 Lord Holford was commissioned to produce a Development Plan for the newly established University. Although this plan was never fully implemented, it did provide a framework for subsequent development of the central campus over many decades. In the year of the 50th anniversary of the opening of the University, it is appropriate to have commissioned a master planning framework document that looks ahead towards a further fifty years and will provide a planning and decision making tool for the future development of the University's landholdings. Internationally renowned, award winning architect planners Farrells have produced the framework document which may be found at www.kent.ac.uk/estates/policies/index.html.

14.2 Medway campus

The University has significant development sites on and adjacent to the Pembroke campus, both owned and on long lease, that would enable the University to develop over 20,000m² of purpose built academic facilities. The leased facilities on the Historic Dockyard, whilst refurbished to a high standard, are Listed Buildings or Scheduled Ancient Monuments which will, to a greater or lesser extent, limit their future adaptability to new teaching and learning requirements. This limitation combined with the cost of the leases is likely to require a decision, within the currency of this Strategy, as to whether the University should remain within these properties or construct its own purpose built facilities. Such a decision will not only be informed by the need to maximise the benefits of the previous investment and the timing of break points in the leases, but by the future, strategic direction of the Medway campus as a whole.



15 CONCLUSION

This Strategy provides a realistic route to develop the estate to absorb past growth in student numbers that exceeded the expectations of the previous strategy. It is sufficiently flexible to allow for the mitigation of the risks of increasing costs and fluctuating student recruitment while delivering facilities that are easily adaptable to changing needs. Moreover, it seeks to further distinguish Kent from other, competitor universities, essential to attract the best students and staff in an increasingly competitive higher education environment. Those distinguishing features of Kent that this Strategy may influence are articulated below:

The type of student we produce

The provision of facilities that support societies, social interaction, group working and volunteering will help shape every Kent student and prepare them for a post-university career.

Productive working environments

Designing buildings that promote the effective use of space; support the re-engineering of working processes and practices to improve efficiency; encourage social interaction; and have environmental systems that enhance wellbeing.

Inspiring learning environments

Facilities that support the latest technologies whilst being sufficiently adaptable to accommodate future developments.

Such facilities will also support and promote the widest range of teaching and learning techniques and be fully accessible to all users.

A remarkable external environment

Creating a safe and sustainable external environment that is visually appealing; encourages leisure activities and social interaction; supports university events and commercial activities; and can be used for formal and informal teaching and learning opportunities.

A welcoming environment

Our campuses and buildings must be accessible and easily navigated. They must facilitate interaction with the outside world and build links into the community: with businesses; with other arts and sporting organisations and participants; and with the local community so that barriers may be broken down and a greater recognition of mutual benefit is encouraged.

Alongside of these objectives, the estate needs to be run in a cost effective and efficient manner, cognisant of the environmental impact that is created by the co-location of students and staff, and the impact upon traffic and local walking routes in the vicinity of our campuses. Most of all, students, staff and the local community should be proud of our estate.



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