

## Estate development

The University continued to make substantial investment in its academic and residential estate throughout 2010/11, while ensuring that it operated in a financially responsible and sustainable manner.

### The University's priorities in this area are to:

- provide all parts of the University with flexible accommodation which is of a quality, size and functionality appropriate to the activities to be delivered and which supports the University's vision;
- ensure the most efficient use of existing space and the development of capacity within the central precinct area wherever appropriate;
- continue to work to reduce carbon emissions and improve the sustainability of the physical estate;
- provide residential accommodation which is attractive to students in form, service and location;
- deliver an ambitious capital programme in support of the renewal of accommodation and the creation of adaptive capacity;
- provide an attractive, safe, accessible and welcoming setting for University buildings that is sympathetic to the wider urban context;
- produce a new Estate Strategy to inform future strategic decisions about the size, nature and direction of the University's estate.

### National Composites Centre becomes operational

Construction work began on the National Composites Centre (NCC) at the Bristol and Bath Science Park in August 2010 and was completed in June 2011. NCC, a collaboration between the South West Regional Development Agency and the University of Bristol, brings together leading industry experts and academics in composites research and manufacture. GKN Aerospace, Airbus, AgustaWestland, Rolls-Royce and Vestas have committed to long-term partnerships with NCC, which also aims to forge links with other centres of advanced manufacturing expertise across the UK.

The NCC is a one-stop centre of excellence in composites – lightweight, high-performance materials that are key to cutting the environmental impact of industries that have traditionally been heavy carbon emitters. The centre provides manufacturing facilities on an industrial scale, capable of building prototypes to validate design concepts and rapid manufacturing processes. The centre is due to operate at full capability by September 2011.

### New and improved facilities for students and staff

Work was completed on the second phase of the £3.5-million refurbishment project of the Graduate School of Education (GSOE) in Berkeley Square. The first phase, completed early in 2010, saw the opening of a new library on the ground floor. The space formerly occupied by the library has been revamped, enabling all GSOE staff to be located within one building.

Refurbishment of Oakfield and Barley House in Clifton provided improved accommodation for staff and students in the

School of Social and Community Medicine. At St Michael's Hospital, the University and the University Hospitals Bristol NHS Trust opened a new £6-million facility, housing a high-spec magnetic resonance imaging scanner for use in a variety of research applications.

### New beginnings

Work began to renovate and extend the Queen's Road Building to provide enhanced facilities for the Students' Union and other University facilities located there. The £25-million project will run until 2015, with the building remaining operational over the period. The first phase comprises new accommodation for the International Office and the International Foundation Programme, refurbishment of the swimming pool area and improved accessibility for the entire building.

### Carbon management and energy-saving

The University reduced its carbon dioxide emissions by 3.3% in 2010/11 against its 2005/06 baseline, in line with targets in its carbon management plan to reduce emissions by 35% by 2020. To date, £10-million has been allocated to a variety of carbon-reduction projects, including boiler replacements and improved electrical services infrastructure and insulation, particularly in the student halls of residence, freeing up funds for core activities around teaching, students and research.

The University has extended the running hours of the existing Combined Heat and Power unit at Langford and installed better controls to improve the efficiency of the district heating scheme.

The University has also entered into a flexible energy-purchasing arrangement, using current market rather than fixed-term contracts, in order to reduce costs.

Right: Refurbished Graduate School of Education Library.  
Far right: Artist's impression of the Queen's Road Building.



### Travelling in the right direction

The University won an Employer of the Year award as well as a Gold award for its innovative and environmentally friendly staff travel plan in the West of England Travel Plan Awards, hosted by Bristol City Council. The awards reward organisations that promote sustainable travel to employees and help them to reduce their carbon footprint.

During 2010/11, the University maintained a 20% reduction in single-person car journeys; introduced a joint bus service with the University of the West of England from the Stoke Bishop halls of residence to the precinct; installed more cycle parking across the precinct with funding from Bristol City Council; and introduced a scheme where abandoned bikes are passed on to charity for reconditioning through community enterprises and then sold on.

The University is also collaborating with JISC to develop tools to reduce its 'scope 3 carbon emissions' (indirect emissions that organisations produce through their activities, but occur from sources not owned or controlled by the organisation). The project will address travel relating to attendance at events in the course of academic and other University business.

### Reducing waste

In 2010/11, the University increased its efforts to reduce waste. New initiatives included the following:

- introducing a pilot laboratory waste recycling scheme in the Dorothy Hodgkin Building, allowing for recycling of polystyrene, plastics and glass. The scheme resulted in a 50% reduction in waste collection and is due to be rolled out across the University;
- offering accredited Chartered Institute of Waste Management training courses for staff and students, led by the Sustainability team. Its Carbon Audit Training and Auditing course is one of the intensive skills activities offered through the Careers Service's Bristol PLuS scheme to students seeking to improve their employability;
- launching Re-Store, a new reuse website that enables University members to advertise unwanted and surplus reusable items, including furniture, stationery and IT equipment, in order to minimise waste and reduce University expenditure on furniture and office sundries.

### Having a (green) impact

The University's Green Impact Awards initiative – an accreditation scheme for environmental best practice based on over

130 actions that help departments to reduce their negative impact on the environment – is now in its third year. The scheme engages 40 departments that took more than 1,500 environmental actions in 2010/11. Three teams – from Procurement, Space and Asset Management and Estates Administration; Hospitality; and the Dorothy Hodgkin Building – gained Platinum awards this year, with the overall prize going to Procurement. Thirty-five other universities now run Green Impact schemes and the University is working with University Hospitals Bristol NHS Trust to develop similar initiatives in hospitals and with the National Union of Students to develop Green Impact labs.

### Green Academy

The University is participating in the Higher Education Academy's recently launched Education for Sustainable Development project, known as Green Academy, which aims to help institutions to incorporate sustainability in the curriculum and learning experience. The project brings together teaching, research, support services staff and students from different subject areas, and has so far identified opportunities to use the estate as a 'living lab' and proposed a Masters course in sustainability.

## Information technology and libraries

The University's Information Services division provides information resources and library services to support the delivery of the University's learning and teaching, and research and enterprise activities. Some of the division's achievements and developments undertaken during 2010/11 are outlined below. From August 2011, Information Services was replaced by two separate organisations, IT Services and the Library.

### The University's priorities in this area are to:

- provide IT and library facilities to support education, learning and teaching and to enhance the student experience;
- provide IT and library facilities to support research activities and enhance research impact;
- support the University's business objectives by providing efficient and effective processes enabled by well-designed, integrated information systems;
- ensure that our IT Strategy is people-focused and that all members of the University are well supported, trained and equipped to fulfil their roles;
- provide excellent, responsive and resilient IT services for all members of the University;
- develop sustainable approaches to the provision of IT, in order to minimise the impact on the environment.

### Library Services

The University continued its rolling programme of library refurbishment throughout 2010/11, focusing on the first and second floors of the Arts and Social Sciences Library to complement the ground-floor renovations completed in 2009. The new facilities include quiet study areas, enclosed group study areas, additional furniture to suit modern study needs, and audio-visual viewing areas.

The Library's 2010/11 book budget increased by 13%, boosted by an additional £125,000 provided by alumni donations. The Library has also rolled out its new 'e-Reserve' service to 13 schools or departments. This facility gives students access to book chapters or journal articles via Blackboard, and users have so far made more than 800 requests for scanned items. The Library has also continued to review and improve its opening hours, extending hours in the Queen's Building Library and the Wills Library over the April Bank Holiday weekends and other key student revision periods.

A new interface to the Library Catalogue was launched in February 2011, which offers a single Google-style search box and enables users to search by author, title or key word, and to limit the search by material type. An Archives Catalogue was also introduced, providing access to a growing number of archival records and digital images.

The Library was successful in a bid for funds to provide self-service facilities in its four largest branch libraries, and aims to implement these over a five-year period

beginning in 2012. Radio-frequency identification technology will facilitate convenient self-service lending and return services throughout extended opening times, and will release study space.

### IT Service Review

As part of the Support Process Review (see p16), IT Services has been restructured to improve efficiency by limiting the number of processes used to perform similar tasks, and by reducing inefficient procurement of IT and duplication of effort in developing IT solutions. This has resulted in a smaller, more focused, IT organisation across the University. Service and process improvements include the following:

- all IT staff are now managed by a single process owner;
- the IT organisation has been restructured centrally while maintaining local provision through geographical zonal teams that cover faculties and support services;
- common policy, standards and operational processes are being defined;
- Service Level Agreements outlining standard levels of service are being put in place, with variations being limited to areas of genuine need, for example, in certain academic disciplines;
- a central Service Desk now handles all IT-related incident calls.

Planned changes include:

- the implementation of a standard approach to the management of desktop computers across the University will be implemented; and

- the introduction of a defined career development structure for IT professionals, with appropriate progression and movement across teams.

A review of IT processes across the University has been conducted, and a set of principles developed, to inform the planning and development of organisational models and a professional career development framework. IT Services continues to monitor IT service provision in higher education institutions and other organisations to ensure that it complies with best practice.

### Supporting students

The University continues to invest heavily in ICT to support teaching, learning and research. Wireless networks have been extended to five halls of residence (1,700 study bedrooms, over a third of the residential estate), and wireless access is available across the University precinct.

2010/11 saw an increase in the use of the University portal, My Bristol, with around 10,000 undergraduate and 3,500 postgraduate users. The portal provides access to a range of tools and services, including email, remote desktop, course details, Blackboard and Student Info. The Student Laptop Clinic continues to receive positive feedback from users.

### Developing business processes

Activities in Information Processes and Systems over the past year include the following:

- the launch of a new online postgraduate admissions system, which allows applicants to track the progress of their application and supports more efficient processing of applications, reducing duplication and the reliance on paper;
- the introduction of a new access and identification system across the University, equipping buildings with networked smart card readers and providing staff, students and visitors with multifunction smart cards;



Above: Student taking advantage of wireless access on the precinct.  
Above right: High Performance Computing facility.



- the development of new systems for managing unit and programme data and updating student records;
- improved estates management and research information systems.

### High Performance Computing

BlueCrystal, the University's High Performance Computing (HPC) facility, now supports over 375 users undertaking research across a wide range of disciplines. BlueCrystal is also being used for teaching, with over 50 undergraduates studying HPC modules run by the Department of Computer Science in autumn 2010 and similar numbers expected in spring 2012. Over 900 users have attended workshops since 2007 and 196 papers were published or in preparation by HPC users in 2010. The next phase of BlueCrystal is being planned and will be built using a mixture of new and existing technologies.

BluePeta, the new petascale Research Data Storage Facility, is now available to researchers from all disciplines, and provides a secure, resilient facility for the long-term storage of research data.

### Enabling research

A number of projects led by the Institute for Learning and Research Technology in 2010/11 illustrate how the University is meeting its commitment to provide systems that enable easy, anytime, anywhere access to University information. One such example is the Nature Locator project. The project has developed a smart phone application to help biologists monitor the distribution and movements of the horse-chestnut leaf miner, a non-native moth species that is causing widespread damage to horse-chestnut trees. 'Conker Tree Science – Leaf Watch' shows users how to identify affected trees and enables them to upload a GPS tagged photograph and rate the degree of damage caused by the moth larvae. The data collected will feed into a larger project being run by scientists in the School of Biological Sciences and the University of Hull.