

## ESTATE DEVELOPMENT

Through its estates programme, the University aims to provide consistent, high-quality services that support day-to-day operations and help staff and students achieve their goals by providing a sustainable and positive physical working environment. In 2008/09, the Estates Office continued to develop, service and manage the University estate in keeping with the institution's high standards, with particular emphasis on the environmental performance of new and refurbished buildings.

### 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.

### Bumper year for new buildings

Several new buildings were completed in 2008/09, boosting research and learning opportunities in a continually changing academic environment:

- The £4.1 million extension to Canynge Hall, home of the Department of Social Medicine, opened in September 2008. The extension, which includes clinical examination rooms, teaching rooms, a lecture theatre and office space, greatly enhances research and teaching capacities.
- The new £3.9 million Dolberry Building, housing the Animal Welfare and Behaviour Group at the Vet School in Langford, opened in April 2009. Its facilities will help the University build on its position as a world leader in animal welfare research.
- The £12 million Centre for Nanoscience and Quantum Information was finished in May 2009. The building is a unique, interdisciplinary centre, designed to keep Bristol at the forefront of research in science, engineering and medicine. It houses state-of-the-art laboratories where temperature, air movement, vibration and acoustic noise levels are strictly controlled to produce conditions suitable for working at the nanoscale.
- A new, £2 million Multimedia Centre for the Faculty of Arts was completed in July 2009. The two-storey extension greatly enhances modern language teaching facilities and provides access to live European media. The building comprises a teaching space, areas for open access learning, a substantial media resource store, a small recording studio and a screening room.

### Improving existing spaces

Several refurbishment projects came to fruition, in keeping with the University's aim of making the most of its current assets:

- The refurbishment of the Medical Library was completed in January at a cost of £2.1 million (for more details, see p27).
- The £2 million refurbishment of the ground floor of the Arts and Social Sciences Library was completed in February (for more details, see p27).
- The refurbishment of the fifth floor of Senate House was completed in March, creating additional office space and allowing for flexible use of the remaining accommodation while refurbishment continues as part of a wider project to transform the entire building.
- Following the external restoration and cleaning of the Wills Tower, further improvements included the internal restoration of the building fabric, upgrading of ventilation and heating services and the provision of an internal lighting scheme for the key public spaces within the tower.
- Improvements totalling £4 million were made to the Social Sciences and Law Faculty complex in Priory Road. The new facility links a number of disparate buildings into a coherent whole and provides a prominent, main entranceway with a café and social space for students.
- Work began on a High Voltage Network project designed to deliver an improved electrical services infrastructure with the necessary capacity to support the new and improved facilities. This includes the construction of a shared power distribution sub-station with University

Right: Centre for Nanoscience and Quantum Information



## ESTATE DEVELOPMENT CONTINUED

Hospitals Bristol NHS Foundation Trust, a new switch room and two high-voltage ring mains in the precinct.

### Go-ahead for new Biological Sciences and Maths buildings

Planning permission was granted in April for the first phase of an exciting development of the old Children's Hospital site on the corner of St Michael's Hill and Tyndall Avenue. This paves the way for the creation of new education and research facilities for the School of Biological Sciences and Department of Mathematics, aimed at keeping the University at the top of its game in key areas of science. The plans include a new route into Royal Fort Gardens, which would also improve the public realm at the heart of the precinct. Implementation of the planning consent will, of course, be subject to the achievement of financial sustainability.

### Working towards a sustainable future

In planning new buildings and refurbishing existing ones, the Estates Office works closely with the Sustainability team to reduce the University's carbon footprint and environmental impact.

The new Dolberry Building (see above) has a BREEAM (Building Research Establishment Environmental Assessment Method) 'excellent' rating for sustainability in design, materials and energy usage. External insulation keeps the building cool in summer and retains heat in winter. The primary heating source uses waste heat from a nearby building and a green roof significantly enhances biodiversity. The new Social Sciences entranceway, which also has a green roof and low-energy heating system, achieved a 'very good' rating at the design stage.

Waste management has taken a significant step forward with a new plastic recycling scheme in all buildings that aims to divert nine per cent of the University's waste from landfill. In 2008/09, the University invested over £200,000 in energy-saving technologies within the precinct, saving an estimated £70,000 and 750 tonnes of carbon dioxide a year. Projects included an organic liquid

swimming pool cover that reduces the need for air and water heating and humidity control. A further combined heat and power unit was installed during 2008/09, this time at Langford, providing savings of £100,000 and 500 tonnes of carbon dioxide a year.

### Building environmental awareness

The University encouraged staff and students to improve the environmental performance of their own departments with the introduction of the Green Impact Awards, an accreditation scheme for environmental best practice. Over 2,000 staff and 4,225 students representing 46 departments took part in the scheme to see which could be the greenest. Their combined efforts resulted in over 1,000 sustainability actions being taken across the University. Many other activities reflect a growing concern with sustainability: for example, Student Community Action, working with the Sustainability team, collected nearly two tonnes of unwanted domestic items from students during this year's 'Big Give' project, passing them on to charities to sell or reuse.

### Travelling light

The University's commitment to promoting sustainable modes of transport was reflected in improvements to its travel plan in 2008/09, including new cycle-parking facilities at the School of Medical Sciences, Oakfield House, Barley House, 8-10 Berkeley Square, the Centre for Nanoscience and Quantum Information and Langford; cycle maintenance and cycle training sessions; an improved staff car-sharing scheme; and a car club for students.

### Bristol top of the class for security

The University's efforts to provide a safe environment in which staff and students can work, study and live were recognised when Bristol became one of only two universities in the UK to win a police-approved Secured Environments Award in January. Certification is awarded to organisations that have adopted six key principles of crime protection. The University demonstrated that it had invested in effective processes and management in order to reduce crime.



Top: Artist's impression of Biological Sciences building  
Bottom: Dolberry Building, home of the Animal Welfare and Behaviour Group

## INFORMATION TECHNOLOGY & LIBRARIES

The University's Information Services division provides information resources and library services, information and communications technology (ICT) and a robust ICT infrastructure to support University learning and teaching, research and enterprise. Some of the division's achievements and developments, undertaken during 2008/09, are outlined below.

### 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.

### New-look libraries

The University is committed to ensuring that all students and staff have access to high-quality library and IT facilities appropriate to a leading institution. To this end, 2008/09 saw major refurbishments of both the Medical and Arts and Social Sciences Libraries. These projects, partially funded by the Wolfson Foundation, provide modern learning environments comprising a wider, improved range of study spaces and facilities.

Improvements to the Medical Library include more social learning space, using an innovative, flexible design to enable individual study, group problem-solving activities, presentation work and resource sharing; a coffee bar; improved IT facilities; contemporary furnishings and decoration; and improved learning technology equipment and self-service facilities.

The refurbishment of the Arts and Social Sciences Library comprises a new glass wall and doors at the front of the building, increasing the natural light available. New refreshment facilities have been developed, and contemporary furnishings, newspapers and on-screen information systems introduced to create a space where visitors can relax after studying in quieter zones of the library. The issue, help and reception desks have been redesigned and relocated to maximise the use of space. The Short Loan Collection has been redesigned to create better accommodation and a new self-issue service improves the availability of loan items by allowing users to borrow books at any time while the library's doors are open.

The library resources budget has risen by ten per cent a year over the past four years. In addition, a pilot project was launched to develop electronic study packs aimed at improving student access to materials in high demand.

Helping students to find and use information effectively and ethically has also been a key target. This year, in addition to offering library induction and training courses to all new students, and refresher sessions to returners, Library Services used £9,000 awarded from the University's Annual Fund to develop an online resource bank. This new interactive tool consists of video tutorials and quizzes designed to help students improve their information literacy skills, including understanding and avoiding plagiarism.

### Using IT to support learning

A major achievement in 2008/09 was the development and approval of the University's new Information and Technology Strategy, following consultation with staff and students during the previous year. The strategy includes a Development Plan, which identifies significant projects and activities. Many of these are currently under way, such as the development of timetabling and room-booking systems and a programme of learning support developments, including a system for summative assessment, a clinical-experience recorder and an electronic portfolio tool to support reflective learning.

Student-focused initiatives include the introduction of a student laptop clinic, and an out-of-hours IT help desk covering evenings, weekends and University closure days. There has also been a great demand for wireless network access points around the University. Following improvements to the underlying infrastructure, the number of points increased to 300 during the year, covering all study desks in the Arts and Social Sciences Library and including new access points in the Hawthorns refectory.

## INFORMATION TECHNOLOGY & LIBRARIES CONTINUED

2008/09 also saw a dramatic increase in the usage of the University portal, My Bristol, with around 300 staff, 5,000 undergraduates and 2,000 postgraduates regularly using the facility since 1 October 2008. The portal is a gateway to web-based services within and beyond the University. By signing in, students and staff can access a range of tools and services in one place, such as email, course details, Blackboard, the Students' Union and the Sports Centre.

### Help for researchers in developing countries

The University's Institute for Learning and Research Technology has developed a new website for an international project aimed at helping researchers in developing countries to publish their work and advance their research careers. AuthorAID ([www.authoraid.info](http://www.authoraid.info)) is a free online community providing access to advice, mentoring, discussion forums and a range of material on best practice in writing and publication. It is based at the International Network for the Availability of Scientific Publications and supported by the Swedish International Development Corporation Agency, the Norwegian Agency for Development Co-operation and the UK Department for International Development.

### Boosting research

The University's new High Performance Computing system, Blue Crystal, became fully operational, and now has more than 250 active users. The system supports research in disciplines such as aerospace engineering, molecular modelling, climate change and social medicine, among others, with a combined project income to date of around £9.5 million. In November 2008, Blue Crystal was ranked as the 86th most powerful supercomputer in the world, helping to establish Bristol as a world-leading centre for research. The next stage of development will be the introduction of a large-scale (one petabyte) data-storage facility to complement Blue Crystal's computational power.

Other significant activities during the year include work with Research and Enterprise Development (RED) on the creation of a research applications and contracts database for better visibility and management of contracts and awards from application through to completion. Work also began on a project with RED and Communications and Marketing Services to develop a new website through which to showcase the University's research.

### Community collaborations

As well as providing tools to enable communication between members of the University, Information Services facilitates projects with external collaborators. During 2008/09, the division worked with the National Co-ordinating Centre for Public Engagement to develop web-based resources to support its local and national activities. The Bristol-based Centre is a partnership between the University of Bristol and the University of the West of England and aims to co-ordinate UK universities' best practice in public engagement and to deepen the social impact and relevance of their work.

Information Services also worked with the Department of Drama and Bristol's Watershed Media Centre on the Semantic Tools for Screen Arts Research (STARS) project. This provides an innovative way of mapping and annotating connections between artists, video performances and other research centres on the web, supporting new collaborations and new perspectives on screen arts research.

### Maintaining high-quality information systems

Underpinning all these developments, the division invested more than £1 million in core ICT infrastructure, such as the University's data network, IT systems hardware and software and PC provision in Information Services sites. Such investment ensures that critical IT services are robust and resilient and that business continuity plans are established, tested and kept up to date.



Top: Refurbished Medical Library

Bottom: Refurbished entranceway to the Arts and Social Sciences Library