The University of Bradford

Estates Strategy 2015-2025

Draft: Private and confidential, client privilege only
Executive Summary

The Estate Strategy 2015 – 2025 has been developed over the past eighteen months. A broad spectrum of stakeholder consultations and strategic documents have been referenced and interpreted into the built estate. The strategy seeks to provide a framework for providing an estate capable of responding to the changing HE environment of the next ten years.

Teaching and Learning, research and providing an inclusive campus are key elements in the development of the strategy. We also have links to the City and the community and feature in the development of the planning document City Action Plan where the Learning Quarter is referred to.

Key elements of the strategy are to:

- Meet the strategic requirements of the University, and its academic strategic aims.
- Provide an inclusive, inviting and vibrant campus for students, staff and visitors.
- Develop teaching and learning accommodation, and social learning space, to meet new teaching pedagogic requirements.
- Develop research centres of excellence.
- Increase quality sports accommodation.
- Provide enhanced library and IT facilities
- Develop high quality student accommodation
- Address poor estate.
- Provide a sustainable world class Eco Campus.
- Seek ways of forming closer links to the city.

This document seeks to discuss and analyse the rational for developing the estate. It is supported by an architectural interpretation containing the Campus Masterplan and a summary of desired outcomes which are included in appendix 1.

Where possible budget costs have been attributed to developments and an anticipated cost break down is included in appendix 3 and an idea of phasing and programme are shown in appendix 4. The headline figures are:

- Additional academic space on the City Campus £137m
- Refurbishment (internal and external) of Chesham Buildings £21m
- Additional space at the Faculty of Management and Law £9m - £11m
- Optional moving of the FML to the City Campus Shearbridge Green car park £15m
- Optional moving of the FML to the Science Park and developing a business park £200m
- New car parking £14m
- Developing 2,000 new student bedroom accommodation £87m

All projects are stand alone and can be phased over the next ten years. The only exception is that to allow the Learning Hub to proceed the Learning Portal would need to be complete first. A possible programme is included in appendix 4.
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1.0 Introduction

The Estate Strategy 2015/2025 seeks to address the findings of the previous two sections and provide a framework for linking the Estate Strategy to the University of Bradford Development Plan January 2015, University of Bradford Strategy 2015 – 2025, Faculty Plans, Sports Strategy May 2015, the Research and Knowledge Transfer Environment February 2015 and the Learning and Teaching Strategy 2015 - 2025. At the time of writing a review of IT is underway; the section on Technology may need adapting once its findings are known.

Key Components of the University of Bradford Development Plan January 2015, University of Bradford Strategy 2015 – 2025 which directly affect elements of the Estate Strategy are:

1.1 Academic Themes

We have developed three overarching academic themes, which we will use to frame decisions about developments in teaching and learning, research and knowledge transfer, and to guide our partnerships. Our academic themes are:
   (a) advanced healthcare;
   (b) innovative engineering;
   (c) sustainable societies.

1.2 Strategic Objectives

The University of Bradford’s strategy has four overarching objectives:
   (a) excellence;
   (b) internationalisation;
   (c) equality and diversity;
   (d) sustainability.

1.3 Our key messages are:

- Our outstanding teaching and research are making knowledge work;
- We will be known as a world-leading technology university;
- We will deliver cutting-edge research and knowledge transfer;
- We will put students at the heart of learning;
- We will create intellectual vibrancy by being international and diverse;
- We are proud to have a world-leading eco-campus.

1.4 The University Estate

The City Campus has a total area of about 14.99 ha, the Faculty of Management and Law Campus at Emm Lane a further 4.85 ha and sports provision at Laisteridge Lane has 1.7 ha. Over recent years there has been considerable rebuilding and renovation, so both campuses are attractive and in reasonable condition. There remain some legacy issues with parts of the original 60s buildings, but this has been much reduced in recent years. Both campuses have been built to high standards, and the University wins regular awards for sustainability.

It is not desirable to grow teaching and research within existing buildings. It will lead to constant relocation and reconfiguration of the estate. We need

   (a) central high quality teaching buildings, with flexible lecture, seminar and laboratory space,
   (b) specialised research facilities,
   (c) enhanced library and IT provision, and
New students, many from overseas, will need new accommodation, and this can best be provided by the University directly (perhaps with partners), to guarantee high quality (like The Green). The business case for building accommodation is good, with excellent returns on capital investment yielded from student rents.

An Estate Masterplan is being developed which will balance expenditures on developing the estate to accommodate growth with maintaining and improving the existing estate. Development will be in keeping with the University’s commitment to sustainability, and will include:

a) the development of the Digital Health Enterprise Zone facility,

b) link building to support the growth of STEM activities and
c) an ambitious plan to bring the campus together to integrate teaching and learning and to improve accessibility.

Consideration is also being given to the disposal of the Emm Lane campus, consolidating all of the University’s activities onto the city campus location.
2.0 Campus Masterplan Development

The Development Plan sets out a target of 30% growth, which is aiming for a total of about 16,000 students and 2,500 staff by 2024.

Over the past ten years the University has consolidated its estate from 138,000m² to 114,000m² which equates to a reduction of 13m² per staff/student FTE to just over 8.5m² per staff/student FTE. This improvement is recorded in our annual Estates Management Returns (EMR) to HESA. Within the HE sector circa 8m² per staff/student FTE is considered good practice and is close to the sector norm. Applying this ratio to the proposed growth model we could expect the university to expand to a GIA of 148,000m², an increase of around 34,000m².

The Campus Masterplan has been developed to investigate possible ways to achieve growth without building on potential green space. This has led to innovative ways of expanding our estate by building on top of existing structures and in some case extending them. This will create a seamless indoor accessible link throughout the campus.

A total of around 31,500m² of accommodation on the City Campus is planned and a further 2,500m² identified at the Faculty of Management and Law if it were to remain at Emm Lane (the campus Masterplan indicates this could grow by a further 10% if required). To make the schemes work it would be necessary to refurbish around 10,000m² of existing space and upgrade the whole of Chesham B and C. The anticipated total cost for the City Campus would be £137m. The additional space to Emm Lane would be in the region of £9m – £11.5m or, if built on City Campus £15m (see appendix 4 for budget cost breakdowns). The introduction of multi-storey car parking would be around £14m.

A further enhancement to the Campus Masterplan would be to sell the Emm Lane campus and move the Faculty of Management and Law onto, or closer to, the City Campus. This would be a move into a new building designed explicitly for the Faculty and would mean all Faculties are serviced by the City Campus.

The proposal has several advantages including offering students the same campus experience that students enjoy on City Campus, removing the barrier of having to travel between the two campuses on the bus, saving time for students, lecturers and staff who have to travel between the two sites.

To meet the space requirements to cater for the proposed growth in student and staff numbers on the City Campus 31,500m² of new academic space will be required at a cost of circa £137m.

Increasing the size of Emm Lane would be in the region of £9 - £11m or if built on the City Campus £15m.

New car parking would be in the region of £14m.

2.1 Excellence

The Campus Masterplan will provide exciting and diverse structures which will change the look and feel of the external campus. Internally new learning and teaching spaces will be clustered around a central location and linked to new social learning and social integration spaces. This will provide students, staff and visitors with vibrant spaces to learn, work and socialise. These will be
linked by a series of malls to allow journeys across the University to be managed safely and in an interesting way. The result would be to encourage serendipity as people meet on their journey.

The Campus masterplan aims to provide excellent and exciting spaces which will encourage serendipity to take place.

2.2 Internationalisation

International students often remain at the University during holiday periods when home students have left. Providing an estate which is still appealing at these times requires safe social and learning space to be available. The Learning Portal and Learning Hub would provide such accommodation and be a welcoming place to be outside the traditional semester periods.

Forming safe and secure spaces in the new developments will form welcoming spaces for overseas students during holiday periods.

2.3 Equality and Diversity

The University continues to build an enviable reputation as a place where equality and diversity are not only welcomed but embraced. A key part of this integration is the manner in which the estate as a whole supports the varied needs of its staff and students and visitors. In particular it is essential that provision is regarded as accessible for all and physical barriers removed.

The Learning Portal and Learning Hub malls will remove physical barriers and make safe routes for people with disabilities to journey across campus and Multi Faith provision will provide quiet reflective space in the heart of the campus.

2.4 Sustainability

The University celebrates having a world class eco campus. The new Campus Masterplan will build on this success improving the sustainability of the existing built environment and providing low carbon extensions and new builds set in greener landscaped grounds. Using existing buildings rather than demolishing them provides a more sustainable method for increasing our built environment and reduces rainwater run off to drains if new buildings were built.

The aim would be to still exceed or 70% carbon reduction target whilst expanding the University by 30%.

By extending existing buildings we will be able to provide additional green landscaped space around the campus which will encourage biodiversity and reduce rainwater run off to drains.

2.5 What the Campus Masterplan will not do

The proposed expansion will not detract the University from hitting its 70% carbon reduction, eating into green landscaped areas and reducing its sustainable built environment credentials.
3.0 The Estate and its Linkage to the Learning and Teaching Strategy 2015 – 2025

The Learning and Teaching Strategy 2015 – 2025 titled “Learning – to make a difference”, describes how the University will develop and deliver programmes based on collaborative based learning and seeks to promote participative learning.

Taking this document into account and the comments from stakeholder groups as discussed in pages 26–29, a wide variety of General Teaching Accommodation (GTA) will be an essential part of the future. The style of the rooms will allow student engagement in lecture rooms and theatres by allowing students to form small discussion groups within the lesson. This would be possible with flexible flat floored GTA, mobile multi-function chairs, double-tiered stepped lecture theatres i.e. having two rows of seats on the same level (Las Vegas cabaret style), or in a Harvard style Bear Pit configuration with adjoining breakout spaces (examples are in appendix 1).

The type and amount of social learning spaces will need to increase as more collaborative teaching takes place. Coupled with 24 hour study spaces (not necessarily within the Library) students will require different styles of space for the “out of classroom” learning experience throughout the University.

3.1 Excellence

The vision for the estate is to continue its development of high quality teaching and learning spaces which can quickly be adapted to meet future teaching pedagogies and requirements.

It is important that the student experience of teaching space should be the same across the University. It is therefore necessary to ensure all Faculty Teaching Accommodation (FTA) is constructed and maintained to the same high standard as GTA, and all such teaching space should be centrally timetabled for optimum use.

New clusters of GTA will support excellence in teaching and learning and FTA will be developed and maintained to the standards of GTA.

A new Central Time Tabling system should be implemented to maximise the utilisation of all teaching accommodation.

3.2 Internationalisation

Currently the University attracts PGR students from all over the world. Providing these student with bespoke socio – education space (an inclusive space in the University where they can mix and socialise academically and personally) is one way of getting better integration. This has been demonstrated with the opening of the new Post Graduate Lounge.

This success of the PG Lounge should be built on in the next ten years and developed to create similar areas available to all Post Graduate students.

3.3 Equality and Diversity

Breaking down barriers for students with disabilities is vital. These should include hearing, sight, accessibility and a dyslexia friendly learning environment (physically and technologically). At present the University has 24 teaching spaces above third floor level. This causes delays in attending lectures as large queues develop for lifts causing students and lecturers with disabilities to encounter difficulties in navigating lift lobbies and using lifts.
It will be a priority to remove GTA from floors higher than the third floor, and develop them at ground to the third floor in new teaching clusters along a central spine, augmented with adequate adjacent social learning space.

Inclusivity for school children who visit the University for STEM, or Junior University are also a key factor in promoting the University to potential students. Current facilities include the ground floor of the Bright Building and the STEM facilities in the Cavendish Building building. Providing suitable space, furniture and toilets will promote the University through these activities and could lead to an increased STEM type provision.

Provide suitable space and facilities to enhance school children’s learning on campus.

The inclusive estate should also cater for students out of normal teaching time or when classrooms are not used. They should be available for students to use for group study work and preparing/practicing presentations. This would be more formal after the teaching day finishes when they will become available for SU Societies to use. Having GTA clustered in a major single location will allow other major parts of buildings to be secured and minimum energy used, i.e. only heat and light occupied areas after teaching finishes (reducing energy and affording greater access to students for longer periods of time).

Use new clustered GTA as part of the inclusive estate, facilitated through an electronic room vacant/in use signage system linked to a new Central Time Tabling system.

3.4 Sustainability

Currently the estate is used a little to aid teaching and learning in FEI. It would be possible to expand this and perhaps develop a module on sustainability and the built estates which would enhance current modules in all courses. This would give a better understanding of sustainability in the built environment and better equip students personally, professionally and academically.

Within the ten year Estate Strategy the growth of students will require additional student accommodation. This is planned to go on the Beehive Mills and the triangle sites and cater for just over 2,000 students. The new accommodation will be built to the same environmental standards as The Green and provide an additional learning tool for living in sustainable accommodation.

The two initiatives will provide students with holistic sustainable skills which they can use in their private, professional and academic lives.

Ensure all new buildings are built to a high sustainable pedigree and use the estate to aid student learning within a sustainable built environment.

3.5 Employability

The new form of collaborative teaching and learning will better equip students with the means to process problems in the work place. A further enhancement will be to develop real work place environments which are identical to those that students are likely to encounter. These spaces will provide learning space for students to practice their skill sets prior to placements and maintain their skills on return to the University.

These two initiatives will lead to students with rounded skill sets, setting them apart from students graduating out of other institutions. The combined collaborative problem solving and practical workplace learning environments will make them more employable.

Work place learning environments are to be developed within Faculties.
3.6 Technology Enhanced Learning (TEL)

TEL, supplemented by the Virtual Learning Environment (VLE), will be supported by GTA and FTA having a range of lecture capture, pod casting and connectivity systems to form an integrated approach and embed technology into the L&T strategy. This will enable collaborative teaching and learning to take place without technological barriers for devices within the teaching spaces and devices in external class rooms, many styled on the Team Based Learning Lecture rooms (current TBL usage is at capacity).

**All new GTA and FTA to be equipped with AV and connectivity to support TEL.**

Computer aided assessment will also increase which will require additional computer cluster space in a style such as F42 (current usage is at capacity). These spaces can also be used outside of the normal teaching time and for formal lectures.

**Additional computer clusters in a style which allows Computer Aided Assessments will be required in the Learning Portal and Learning Hubs**

3.7 Social Learning Space

As the style of collaborative learning spreads throughout the curriculum, new social learning space will be required outside of the classroom. This will be nested in clusters and in the learning malls created by the new Learning Portal and Learning Hubs from Pemberton Building to Student Central.

Connectivity will be critical via wifi. All areas will have access to power and some spaces will be physically connected to data sockets and have touch screens within the space.

**Develop a range of connected social spaces with diverse forms of furniture, technologies and architecture to allow different types of social learning to take place across the campus.**

The library is also an important source of teaching and social learning, with group spaces (both open and enclosed) becoming more necessary for study work, and for practicing presentations.

**Additional spaces are to be provided in the proposed library and Student Central extension.**

The new TBL rooms would be available as computer cluster rooms when teaching finishes, allowing student groups study space with technology installed for collaborative problem based learning.

**TBL rooms to be available out of teaching time for group study work.**

3.8 The Grand Challenge

Cross faculty themed (Advanced Health Care, Innovative Engineering and Sustainable Societies) learning space to be developed to encourage Faculties to tackle the “Grand Challenge” concept of multi-disciplinary problem solving. This will be through individual spaces catering for multi-disciplinary collaboration and connectivity (dual video broadcasting, pod casting etc.) running at the same time between GTA’s, to engage different cohorts of students to undertake the “Grand Challenge”. Social breakout learning spaces created on the boundaries of Faculties would further encourage and facilitate cross Faculty Teaching and Learning.
Live connectivity for lectures across disciplines and GTA with adjacent social learning breakout space on the boundaries of Faculties to facilitate the Grand Challenge practice of teaching and learning.

3.9 What we are not going to do

We will not be constructing GTA which do prevent the new Learning and Teaching Strategy being implemented.

We will also not be having FTA within Faculties which provide students with a poor experience when compared to being taught in GTA.

3.10 Programme

The Campus Master Plan is a series of individual, stand-alone projects. This is useful in planning terms as projects can be cherry picked to meet circumstance. The Learning Portal is however, the only project which has linkages and unlocks other space or estates requirements. It is also the building which would have a major impact on our students, allow the implementation of the new Learning and Teaching Strategy 2015 – 2025, facilitate additional learning and research laboratory space for FLS and provide connected space for the whole of FSIS.

The second major project to support the Learning and Teaching Strategy will be to create additional GTA in the Pemberton Building leading off of the Learning Portal. This will complete the University’s GTA requirements and centrally provide it in clusters no higher than third floor level.

It will also directly link to the Learning Hub, Library and Student Central and provide additional social learning space for group work and social interaction. This will be an essential part of the new learning and Teaching Strategy.

A further two specialist teaching spaces will be provided. One in FEI for Medical Engineering linked to STEM subjects, and the second in FHS where there will be sports physio attached to the new extended sports centre.
**4.0 Supporting Research Excellence**

The University has several pockets of innovative and excellent research space. The ICT and Norcroft analytical suite, polymer labs, brakes lab, civil engineering lab and soon to be Health and Wellbeing Centre are some examples of existing and proposed locations of excellent research space.

The University Development Plan January 2015 states; Bradford’s research strengths include: automotive engineering, simulation facilities, cancer therapeutics, polymer engineering, civil engineering, outside broadcast media, the trading room, health imaging technologies, dementia studies, international disarmament, archaeology, optometry and vision science, pharmacy and pharmaceutical science, and tele-health. These areas have been confirmed as having real potential for growth in the next ten years.

**4.1 Research and Knowledge Transfer Environment**

The five Faculties (Engineering & Informatics, Health Studies, Life Sciences, Management & Law, and Social Sciences) conduct research in a seamless, integrated continuum, with the aim to be recognised as the Technology University of the North.

Faculties, Directorates including Planning and Estates, external partners, and others will work together to support the identification and development of key facilities associated with our chosen research themes. It is anticipated that new facilities will be brought into existence by an appropriate portfolio of leveraged funding.

*Clusters:* Groups of academics with mutual interest, and a demonstrable track record, in particular areas may come together as a Centre. A centre may be virtual or may have a physical presence. Each will be owned by a faculty in which either the topic, facility or predominant mass of staff is contained. A centre should have a minimum critical mass of 4 academic staff with associated contract research staff and doctoral students.

*Interdisciplinary:* An institute is a greater collocation of trans-faculty or trans-school, interdisciplinary staff (a minimum of 15 academic staff with RAs, PhDs, etc) with a physical presence and attracting a higher level of international recognition with significant external funding levels.

The Estates Strategy will support these themes and provide common areas where interdisciplinary research can take place. The coherence of the three academic themed hubs will further remove physical barriers and the provision of an additional PG facility will all aid collaboration.
4.2 Excellence

Three new centres of excellence are also proposed. 

- A Research Centre for Automotive Engineering will be provided adjacent to the existing automotive workshops with a new entrance and additional floors above the civil engineering Lab.
- A Centre for Bio-marking and Drug Design will be built on the end of the ICT building.
- Although not primary a research centre, we plan to develop a Simulation and Imaging Suit within the Learning Portal which can be used for both Research. Teaching and learning.

Three new centres of excellence have been identified in the areas of Automotive engineering, Bio-marking and drug design and simulation and imaging.

A further PG lounge will be provided within the Learning Hub

4.3 Internationalisation

Having excellent research accommodation will attract outstanding researchers from around the world. The three new centres of excellence will build on our current research resources and provide springboards for our researchers to globalise their research.

4.4 Equality and Diversity

The new centres will be built without barriers and have direct links to learning malls and academic hubs.

4.5 Sustainability

Any new buildings will be built to a low carbon standard and constructed sustainably, embracing the circular economy ethos of construction. The built estate will be capable of encouraging participation from researchers at all levels in the University to develop their research areas within the built environment.

4.6 Programme

The Research Centre for Automotive Engineering and the Centre for Bio-marking and Drug Design are both stand-alone projects which means they can be constructed at any time. The Centre for Simulation and Imaging would be formed in the new Learning Portal and will form part of that project.
5.0 Student and Union Specific

The current Student Union and Student Central social space is well used but is at capacity and at peak times the Richmond Atrium is also full. Student services are also split over three sites and four locations. Providing additional Student Union space and space for students to socialise and undertake collaborative learning will be a major part of the planning for the next ten years when student numbers are set to increase.

The Campus Masterplan seeks to address this in several ways:

- Extend the Student Central building at level 0 level to allow for the Student Union to increase in size, bring International Social Learning activities into Student Central, provide additional space for societies and increase outlet space for catering.
- Extend the Library (as discussed in the Teaching and Learning section) to allow for predominantly study space, teaching space, computer clusters and allow for the creation of a student one stop shop where all students services can be accessed.
- Create vibrant and inviting social spaces within the Learning Portal and Learning Hub malls.
- Move the Language Centre into Student Central.
- Rehouse the Learning Development Unit and Academic Development Unit into the Learning Portal
- Develop a Multi–Faith and Reflection Centre
- Student bars to be reconfigured to maximise use during the day.
- Increasing “The Arts” on campus

Increase Student Central and the Library to accommodate larger Social and Social Learning space and an enlarged SU.

5.1 Excellence

The Student Central has had a huge impact on student engagement leading to Team Bradford and retention of students on campus. This is seen as an excellent facility and somewhere students can identify with and see as their own space. However, it is full during term times and additional space would be required if student numbers were to increase and collaborative learning were to be rolled out.

5.2 Internationalisation

Providing a well-constructed Language Centre and International Learning Centre (room 101) within the Learning Hub will allow international students to learn and socialise in a formal space which is dedicated to overseas students. This will be a good selling point and be of added benefit to this student cohort.

It would also provide space out of term time for overseas students to go and be with others who have not returned home.

Create a physical Language Centre and the International Social Learning Centre which international students can identify with.
5.3 Equality and Diversity

All new spaces would be designed as access for all and will allow all visitors to the Learning Hub to embrace the same experience. The One Stop Student Information Centre will make it easier for all students to access information, or seek help on all matters which affect their academic or personal life. Having one location will mean less confusion as to where to go and also save time as they will not have to travel back and forth between Student Central, Chesham B and Richmond Building.

**Develop space within the Learning Hub for a One Stop Student Information Centre to cater for all student academic or personal requirements.**

An addition to the Muslim Prayer room would be to create a Multi-Faith and Reflection Centre. It came out in discussions with students and staff that there is nowhere for non-Muslims to go for quiet reselection. A Centre in the Learning Hub would afford quiet space in the centre of the campus for all religious and non-religious denominations.

**Develop a Multi-Faith and Centre for Reflection within the Learning Hub.**

5.4 Sustainability

The new Learning Hub would provide indoor routes around the City Campus. As these enclose courtyards, external walls will face internal spaces reducing heat loss and solar gain. They will also provide safe easily secured spaces which will enhance the feeling safety for students and staff as they travel across the campus.

5.5 Developing the Arts on Campus

The development of the Learning Hub will be a major indoor thoroughfare for the University community. This stimulating space will provide the opportunity to have one of the longest gallery walls in the country which can be used for housing collections and exhibitions and promote art on campus. Cloud type balconies will enhance the provision for art by providing space for craft demonstrations and sculptures. This space would bring art into the heart of the University community.

**The learning Hub would provide gallery and craft space into the heart of the University**

Currently we have the Great Hall as a performance venue which is very large. Within the Learning Portal we could provide smaller venues which can be used for performances or teaching rooms during the day.

Externally the amphitheatre could be enhanced for outside performances and the landscaping designs will incorporate sculpture into the grounds. Golden Routes would also be formed to overcome the physical barriers to the Theatre in the Mill.

**The new landscaping will provide interesting space for sculptures and offer barrier free access to the Theatre in the Mill.**

5.6 Programme

The Learning Hub project could be split into two phases and would follow on from the Learning Portal project. Phase one would be the enclosure of Pemberton/Chesham walk way and the
creation of GTA in the Pemberton and Ashfield Buildings. The second phase would be the extension of the Library and Student Central.

The projects are complex and will require careful planning. This should start in 2019.
6.0 TECHNOLOGY

It is difficult to predict what technology will look like and how this will affect the estate in the next ten years. It is clear though, that the University has an ambition to become the Technological University of the North and investment into technology will be a priority. Therefore, from an estates perspective, it is important that we create flexibility into design which will allow for installing changing technologies into our physical landscape. Some areas of technology requirements are covered in the section for Learning and Teaching and in more detail within the section for Technology Enhanced Learning.

6.1 Internationalisation

Key and critical is being able to interact within the University and out to the world seamlessly and on the move (mobility). Within the Estate Strategy an important element will be to design in ways which will allow connectivity changes (physically) to be easily made.

New developments will incorporate easy access routes for cables and data.

6.2 Equality and Diversity

By having a technologically enhanced estate we will be encouraging all users of the estate to remain on campus and interact with activities taking place. New spaces for social learning and social engagement will need to have fast connectivity (physical and/or wifi) built into the designs, not as an “add on”, but as the norm.

Social learning and engagement spaces will have connectivity designed in.

Students and staff with disabilities will have an estate which is easy to navigate. This will be enhanced by mobile apps and beacons to assist with mapping routes for people with disabilities to navigate across the campus.

Mapping Beacons to be built into the campus infrastructure.

6.3 Sustainability

Reducing the University carbon emissions is a key estates priority over the next ten years. Using technology across a wide platform of projects will see reductions of over 70% carbon reduction. This will include extending the smart Grid to new development projects, linking the BMS (Building Management System) to the GTA central timetable to automatically turn on/off utilities to the room, introducing water capture in new buildings and a SUD’s (Sustainable Urban Drainage) pond and network to feed it.

Using a wide verity of technologies will reduce our carbon emissions by over 70%.

6.4 Network

As the University researchers use more Big Data, processing power and larger storage capacity for data will be required. This could be on the Cloud, at a physical location off campus, or on the campus itself. Currently the University has two main server rooms which will need supplementing with an additional one when new developments take place.

Provide an additional secure server room within the Learning Portal.
6.5 Library

It is envisaged that e-journals and e-books will become more prominent and whilst there will still be a need for printed books it is thought that this will not expand significantly. The proposed extension to the library would therefore be primarily for mixed study and teaching space.

The extension to the Library will be primarily for study and teaching space.
7.0 Sports Provision

The University plans to significantly enhance the provision for sport. Detailed plans for the University’s Laisteridge Lane sport facility are outlined in the paper “Outdoor Sport Provision – Laisteridge Lane” (13th May 2015). In addition, the Campus Masterplan contains projects designed to further enhance provision on City Campus by virtue of the following:

1. A new 5 court sports hall
2. Extension to existing fitness suite

Our sporting facilities at Laisteridge Lane may be described as tired, and in particular the facilities for changing are well below the standard that we would aspire to.

The strategy makes provision for:

1. Refurbishment of the existing pavilion to improve changing facilities at the site
2. Upgrades to existing all weather pitches to 3G standard
3. Upgrade to all weather playing surfaces for other sports (tennis, hockey)
4. Develop club house facilities for Team Bradford with training, coaching and social facilities
5. Develop a new 3G playing surface in collaboration with Dixons Academy Trust at their Macmillan site

In addition, agreement will be reached with Dixons Academy Trust and Bradford College giving access to a grass playing surface alongside the new 3G surface.

Finally, we will further develop the Laisteridge Lane offer to provide social, learning and teaching space to enhance the user experience and provide opportunities for student engagement, academic collaboration, and community access.

These plans endeavour to make direct connections to the core themes of the University’s Strategy and Development Plan.

7.1 Excellence

The Estate Strategy envisions a range of excellent sporting facilities that meet the expectations of a student and staff body that is ever more engaged with sport, health and wellbeing. The facilities will be recognised not only for their high standard in terms of the quality of provision, but also their excellence in terms of energy and sustainability.

The provision of leading technology playing surfaces, together with high quality social and activity spaces will be an exemplar for sport.

The proposed facilities will also provide opportunities for Faculties to develop programme modules in areas of sport science (Psychology, Physiotherapy), and gain access to participants both for training purposes and research.

Developments on the City Campus and at Laisteridge Lane will include provision for academic involvement in sporting capable of T&L and research.

7.2 Internationalisation

During the Olympics of 2012 the University hosted international athletes. The University has also hosted the World Power Lifting Championships and training for the Italian Rugby team. The
provision of leading edge sporting facilities will enhance the reputation of the University internationally which could lead to more interest in Bradford as a base for training or as a venue for further international sporting events.

With a growing desire to attract international students, a well-developed sports offer will be seen by some as a desirable “added value” factor when considering where to study, particularly by those for whom participation in sport is a part of their everyday life at home. Engagement in sport is a major contributor to a broader engagement in University life and society.

**Developing a high quality sports facilities will attract international teams to train here.**

### 7.3 Equality & Diversity

Providing sports facilities which are barrier free will allow all visitors to the sports facilities to participate in sport. It is therefore, essential that provision is regarded as accessible for all.

**Sport provision on Campus will be developed in a manner and to a style that supports the mantra of “Access for All”**.

### 7.4 Sustainability

All new facilities will be to a high sustainable pedigree including low energy equipment and facilities that will contribute to our carbon reduction targets.

As well as environmental sustainability, it is essential that facilities are provided that can contribute effectively to the financial sustainability of sporting provision on Campus.

**Facilities will be developed in accordance with our sustainability specification and designed to encourage participation in sport for students, staff and the community.**

### 7.5 Programme

Work will commence on refurbishing facilities at Laisteridge Lane in 2016. The proposals for the delivery of the 3G pitch in conjunction with the Dixons Academy and Bradford College will follow on with a vision to complete the provision by 2017.

To complete the development of sports provision at Laisteridge Lane a club house could ideally be developed in 2018.

The proposed extension to the existing Sports Centre is a stand-alone project and could be undertaken at any time and when funds become available. However, the current facility is full and at times cannot cope with demands. It would therefore, be beneficial to have the extended facility available in the next 5 years.

### 7.6 What we are not going to do

The sports playing fields at Woodhal will almost become redundant once the new pitches are built at Laisteridge Lane. We should therefore, not retain this site (retaining some use on a Wednesday afternoon would be beneficial in the short term).
8.0 Student Accommodation

The additional student numbers would predominately be overseas students, EU students and students from outside the West Yorkshire post code. These would require new student accommodation to be built and the Campus Masterplan has identified sites which could accommodate around 2,000 student bedrooms. The sites identified on the North East corner of the City Campus will create a student village around the Green totalling 3,000 student bedrooms and would allow the University to close roads beyond its current boundaries to provide an extended safer curtilage to the estate.

With these built and the current student accommodation surplus in Bradford there will be no shortage of accommodation over the next ten years.

The cost of building 2,000 student bedrooms would be circa £80m and could be funded through joint partnerships or private developments.

Plots have been identified to build a further 2,000 student bedrooms at a cost of circa £87m.

8.1 Excellence

We would build on the appearance of the Green by extending the physical curtilage and forming a large student village split into smaller collegiate areas which students can identify with. The new accommodation would be constructed to the same exacting standards we have on the Green.

The new developments would form a large Student village split into smaller collegiate clusters.

8.2 Internationalisation

Within the collegiate clusters there should be social space built in to give a village hall environment. This could then be used for events and the socialising of home and overseas students.

“Village Hall” type social space should be built into the scheme.

8.3 Equality and Diversity

Providing access for all will be a prerequisite of the development due to the topography of the sites. Within the accommodation there will be a number of bedrooms which can easily be adapted for students who may have a range of different disability requirements.

There should be a number of bedrooms which can easily be adapted for students who may have a range of different disability requirements.

8.4 Sustainability

The green, at the time of writing, is the highest BREEAM rated student accommodation in the world. Learning from the project it should be possible to increase this score in the next phase of development. This is important but having a sustainable built environment which students can learn to live sustainably in is more important. Having programmes and events to promote and use the built estate will allow students to better understand about sustainability and the built environment.
Any additional accommodation should aim to improve on the sustainability of the Green and continue the education programmes into sustainable living.

8.5 Programme

The first development would be on the Bee Hive Mills site leading from the Green to Thornton Road. The development would take two to three years to plan and deliver and this should be considered in 2017. Depending on the success of increased student numbers further ones on the “Triangle” should be commenced in 2020.

8.6 What we are not going to do.

There is a current over supply of student bedrooms and the “normal” model for providing student accommodation does not apply to Bradford. At this point in time we should not look to provide more than 2,000 bedrooms into the market.
9.0 Faculties Cohesion and Identity

At present, three faculties have disconnected space provisions which cause a disjoint for students and staff and a feeling of not belonging to the Faculty. Physical location has not really been planned when new Schools or Faculties were formed. It is an ambition in this Estates Strategy to have all departments and schools collocated into Faculties within the same, or adjoining buildings.

The collocation of Faculties will form hubs and be aligned to the University’s three core academic themes of advanced healthcare, innovative engineering and sustainable societies.

The three hubs will form permeable boundaries between Faculties and encourage collaboration between Faculties. The enclosed Horton/Chesham courtyards and the malls along the Learning Portal and Learning Hub are examples where deliberate endeavours have been made to encourage collaboration between Faculties to take place. The Health and Wellbeing and Digital Health Enterprise Zone are another example of where the University is encouraging academic collaboration for research, teaching and learning.

Three physical hubs will be developed to enhance the three academic themes; advanced healthcare, innovative engineering and sustainable societies.
10.0 Landscaping and Public Realm

By delivering the additional landscaped space within the existing built environment we are able to enhance the amount of green space within the City Campus. This will create a green corridor running through the City Campus, stretching from Shearbridge Road and Great Horton Road to Thornton Road. A major feature will be the new large grassed area for student and staff recreation and a SUDS pond (Sustainable Urban Drainage System) which will slow the rate of rainwater entering the drainage network.

The development of the student accommodation on Beehive Mills will also provide a new green frontage to the University on Thornton Road. The development will also allow the University to apply to close adjoining areas of Tumbling Hill Street, Smith Street and Longside Lane, making the journey across campus pedestrianised and safer.

Key nodes with sculptures will also be a prominent part of the landscaping. A special area of landscaped interest will be formed in the newly formed courtyard in front of the Richmond Building, the Learning Portal and Horton Buildings which will also see the area pedestrianised.

Existing and new key pedestrian routes will be enhanced forming Golden Routes across the campus with consistent materials and signage to create a unified and coherent public realm. Other enhancement will include:

- Enlarged Edible trail around campus including
  - accessible allotment plots
  - Extended orchards and planting
  - Extended beekeeping for the pollination of our planting
  - Further extend the medicinal and sensory therapy gardens
  - Edible walls to enhance routes across the campus
- Biodiversity improvement initiatives for national priority species and habitats including woodland, wetland, wildflower meadow etc.
- Roof gardens developed on the tiers of the Learning Portal
- Develop a jogging and exercise track around the campus to promote wellbeing
- Enhance the main entrance to form a green focus to the campus
- Create new formal exhibition square for outdoor performances, media screenings, lectures, graduations etc.
- New oval landscape node to the front of the Bright Building
- New therapy garden linked with the School of Health
- Further extend the medicinal and sensory therapy gardens
- Roof gardens developed on the tiers of the Learning Portal
- Develop a jogging and exercise track around the campus to promote wellbeing
- Green walls to existing buildings, enhancing route from library square to Great Horton Road
- Enhance and engage the street to Great Horton Road with wildflower verges, and temporary changing installations such as geocaching (temporary or permanent)/ sound installations and moss graffiti
- Urban pond and wildflower meadow

10.1 Excellence

For an urban campus the City Campus and the Emm Lane campuses have a good reputation for the development of its grounds. The amphitheatre provides a beautiful setting for recreation and entertainment, and edible planting has been well received by the University community. The
Campus Masterplan seeks to further improve this reputation with the new green space to the east of Student Central and greened “edible” Golden Routes across the campus.

This will have a positive effect on the appearance of the University and will be a good first impression to visitors, and on open days when we show off the University.

10.2 Internationalisation

Many of our international students are from large cities. By careful landscaping we have the opportunity to show how urban areas can be transformed into green recreational spaces in the centre of a large city.

The campus allotments and edible gardens can also be used as a demonstrator for them to learn about biodiversity, ecology and permaculture and take home the benefits of developing these areas within a built environment.

Roof gardens are also evidence of using urban spaces and transforming them for recreation use. Our campus will be a demonstrator to local and international students that an urban campus does not have to be a concrete jungle.

**The new landscaping and roof gardens will be an exemplar of good urban landscaping.**

10.3 Equality and Diversity

The topography of the City Campus is difficult to navigate for people with ambulant disabilities. This will be addressed to a large extent by the development of the Learning Portal and Learning Hub. However the new green spaces will provide alternative accessible Golden Routes for everyone. It will encourage people to use the outside areas and provide pleasant and stimulating (visually and sensory) corridors across the campus.

**Golden routes across the campus will provide visual and sensory stimulation.**

10.4 Sustainability

Our current landscape policy is designed with the notion of sustainability. The edible planting of trees and plants is a major element of how we tackle ecology and biodiversity, including providing natural habitats for insects, birds and bats.

The apiary is a further example of sustainable intervention as bees are not a normal occurrence of urban development. All of our existing practices will be built on and further enhanced with our new landscaping plans.

**New forms of ecology and bio diversity will be encouraged in the sustainable landscape plans and biodiversity action planning to enhance our existing edible garden policy.**

10.5 Health and Wellbeing

A major element of the new landscaping plan will be to support the University’s Health and Wellbeing agenda. Recreation areas for quiet contemplation are built into the landscaping designs. These will be tranquil sensory pockets of seating which are accessible to all. Edible planting and allotments for student and staff use are also a key feature of the designs and the edible garden tours for staff and students will be enlarged to cover the new areas.
Tranquil sensory planting and seating will be provided in pockets around the grounds to facilitate quiet contemplation.

A new jogging and exercise route will be developed to encourage students and staff to use the campus for exercise. The route circumnavigates the whole City Campus and a modified route designed for wheelchair users. Outdoor exercise equipment will be stationed at intervals around the jogging track to increase fitness levels.

A new jogging track with access for all will be developed to circumnavigate the campus augmented with exercise equipment stationed at intervals around the course.

### 10.6 City and Community Linkages

The greening and landscaping to the boarders of the campus is an important link to the community surrounding the University. The grounds are also used to bring schools into the University to understand ecology and biodiversity. These linkages promote the University within the local community and demonstrate how an urban space can be transformed into a green oasis in the centre of a city environment.

The grounds will be capable of demonstrating green urban designs to schools and the community

The proposed development of the Beehive Mills site will give the University a further link to a major arterial route into the city. By landscaping our frontage to Thornton Road we will be able to promote the University to passers-by and provide a new green entrance into the University.

The development of the Beehive Mills site will provide a new green entrance into the University with closer links to the city.

### 10.7 Car Parking

Currently the University has 973 car parking spaces on its City Campus and 206 at the FoML Campus.

The University aspires not to grow this car parking provision in line with increasing campus user, rather to encourage people to use greener forms of transport as laid out in the University's 2015-9 Smart Move Travel Plan.

However we acknowledge that if university growth is causing congestion to areas around the University we would seek to increase the number of car parking spaces.

These will be housed in two major areas. A new multi-story car park built on the Longside lane car park bordering Longside Lane and Shearbridge Lane and car parking underneath the Beehive Mills student accommodation. By exploiting this we are able to open up a new green heart for the campus.

The University will encourage greener forms of commuting and thus limit the need for further parking provision. If however local congestion is problematic we have opportunities for increasing provision.
11.0 Delivering a World Class Eco Campus

This section outlines the department of estates and Facilities targets and aspirations in helping to deliver the sustainability theme of the 2025 corporate strategy.

11.1 Carbon reduction and Energy Security

Reduce Scope 1 and 2, 2020 Carbon emissions by 75% against 2005/6 baseline. This is well ahead the sector requirement of 43% by 2020. Our ambition is to have core services off grid and secure from power outages, with the longer term aim of taking the campus off the national grid.

11.2 Buildings

When upgrading our existing built estate it will be important to reduce the energy demand by Improved Thermal Performance – all refurbishments will have a high thermal standard each time reducing the heat required of the building to maintain a comfortable environment.

The existing sustainability specification for construction projects to be adopted on all projects.

Reduce demand for power through natural light, natural ventilation, building management system optimisation, low power lighting and behaviour change initiatives.

11.3 Waste & Recycling

Continue to deliver the waste management hierarchy to achieve further reductions and build on the current zero waste to landfill, recycling, composting, furniture, reduction of packaging through effective procurement and bike reuse operations. We will investigate further opportunities such as Recycling of existing electronics on campus Circular economy principles.

11.4 Travel

Use the Smart Move Travel Planning (appendix 5) process to deliver progress against our 4 key objective areas:
- Build on our success in offering a great range of staff green commuter travel incentives by offering an improved range for students also
- Control the impact of cars travelling to the university in terms of numbers on site and clogging up the local residential areas.
- Ensure good communications processes to all campus users are fully aware of their travel options.
- Limit non-essential business travel through effective travel authorisation processes and encouraging virtual meeting provision.
11.5 Food

Working with current suppliers to maximise possibility of using local supply chain, Fairtrade, organic and healthy products, encouraged through the KPI management process. Ensure main catering operations are certified to the Food For Life standards or equivalent.

Edible campus - Continue to increase the number of edible plants on site and the awareness work surrounding the programme, including the potential of serving some of the food onsite.

Work with students and staff to develop the access for all allotments.

Sharing best practice amongst suppliers.

11.6 Ecology

Deliver the campus biodiversity masterplan to feature multiple habitat areas, a second green lung of the campus and wildlife corridors to run through all of the estate. Investigate possible links for future developments through/with the city.

Support the Biodiversity Action Plan (BAP) species through development and delivery of a full BAP prioritising relevant threatened species. Encourage campus users to be involved with the monitoring activities for this plan.

Ensure all new developments have a budget for landscaping and planting and that this is done in line with the policy, BAP and planting practices elsewhere on our sites.
Appendix 1

Highlight Summary of outcomes

To meet the space requirements to cater for the proposed growth in student and staff numbers on the City Campus 31,500m2 of new academic space will be required at a cost of circa £137m.

Increasing the size of Emm Lane would be in the region of £9 - £11m or if Built on the City Campus £15m.

New car parking would be in the region of £14m.

The Campus masterplan aims to provide excellent and exciting spaces which will encourage serendipity to take place.

Forming safe and secure spaces in the new developments will provide welcoming spaces for overseas students during holiday periods.

The Learning Portal and Learning Hub malls will remove physical barriers and make safe routes for people with disabilities to journey across campus and Multi Faith provision will provide quiet reflective space in the heart of the campus.

Using new technologies and construction methods our aim would be to still exceed or 70% carbon reduction target whilst expanding the University by 30%.

By extending existing buildings we will be able to provide additional green landscaped space around the campus which will encourage biodiversity and reduce rainwater run off to drains.

New clusters of GTA will support excellence in teaching and learning and FTA will be developed and maintained to the standards of GTA.

A new Central Time Tabling system should be implemented to maximise the utilisation of all teaching accommodation.

The success of the PG Lounge should be built on in the next ten years and developed to create similar areas available to all Post Graduate students.

It will be a priority to remove GTA from floors higher than the third floor, and develop them at ground to the third floor in new teaching clusters along a central spine, augmented with adequate adjacent social learning space.

Provide suitable space and facilities to enhance school children’s learning on campus.

Use new clustered GTA as part of the inclusive estate, facilitated through an electronic room vacant/in use signage system linked to a new Central Time Tabling system.

Ensure all new buildings are built to a high sustainable pedigree and use the estate to aid student learning within a sustainable built environment.
Work place learning environments are to be developed within Faculties.

All new GTA and FTA to be equipped with AV and connectivity to support TEL.

Additional computer clusters in a style which allows Computer Aided Assessments will be required in the Learning Portal and Learning Hubs.
Develop a range of connected social spaces with diverse forms of furniture, technologies and architecture to allow different types of social learning to take place across the campus.

Develop a range of connected social spaces with diverse forms of furniture, technologies and architecture to allow different types of social learning to take place across the campus.

Additional spaces are to be provided in the proposed library and Student Central extension.

TBL rooms to be available out of teaching time for group study work.

Live connectivity for lectures across disciplines and GTA with adjacent social learning breakout space on the boundaries of Faculties to facilitate the Grand Challenge practice of teaching and learning.

Three new centres of research excellence have been identified in the areas of Automotive engineering, Bio-marking and drug design and simulation and imaging.

A further PG lounge will be provided within the Learning Hub.

Increase Student Central and the Library to accommodate larger Social and Social Learning space and an enlarged SU.

Create a physical Language Centre and the International Social Learning Centre which international students can identify with.

Develop space within the Learning Hub for a One Stop Student Information Centre to cater for all student academic or personal requirements.

Develop a Multi-faith and Centre for Reflection within the Learning Hub.

The Learning Hub would provide gallery and craft space into the heart of the University.

The new landscaping will provide interesting space for sculptures and offer barrier free access to the Theatre in the Mill.

New developments will incorporate easy access routes for IT installations and data.

Social learning and engagement spaces will have connectivity designed in.

Mapping Beacons to be built into the campus infrastructure.

Using a wide verity of technologies will reduce our carbon emissions by over 70%.

Provide an additional secure server room within the Learning Portal.

The extension to the Library will be primarily for study and teaching space.

Developments of sports provision on the City Campus and at Laisteridge Lane will include provision for academic involvement in sporting capable of T&L and research.

Developing a high quality sports facilities will attract international teams to train here.

Sport provision on Campus will be developed in a manner and to a style that supports the mantra of “Access for All”.

Facilities will be developed in accordance with our sustainability specification and designed to encourage participation in sport for students, staff and the community.

Plots have been identified to build a further 2,000 student bedrooms at a cost of circa £80m.

The new developments would form a large Student village split into smaller collegiate clusters.

“Village Hall” type social space should be built into the student accommodation scheme.

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Three physical hubs will be developed to enhance the three academic themes; advanced healthcare, innovative engineering and sustainable societies.

The new landscaping and roof gardens will be an exemplar of good urban landscaping.

Golden routes across the campus will provide visual and sensory stimulation.

New forms of ecology and bio diversity will be encouraged in the sustainable landscape plans to enhance our existing edible garden policy.

Tranquil sensory planting and seating will be provided in pockets around the grounds to facilitate quiet contemplation.

A new jogging track with access for all will be developed to circumnavigate the campus augmented with exercise equipment stationed at intervals around the course.

The grounds will be capable of demonstrating green urban designs to schools and the community.

The development of the Beehive Mills site will provide a new green entrance into the University with closer links to the city.

The University will seek to increase its car parking provision by around 290 spaces. The majority of which will be housed in a new multi-story car park and underneath the Bee Hive Mills development.
Appendix 2

Innovative Teaching Spaces

1. Team based learning facility – benches for each team. This enables groups to collaborate more easily than in a standard lecture theatre.

2. Chairs can ‘swivel’ around to join the table behind, to the side or in front of them. This allows mid-lecture changes with little disruption, and everyone can work together effectively.

3. Designed for smaller group work, even though it follows the traditional lecture theatre style.
4. A slightly more stylish version of the first image – an environment for groups to work effectively.

5. Ideas from America show a more circular layout, with projector and lecturer central focus. This allows more students to be nearer as opposed to the system whereby there are only 10 seats max right at the front of the lecture. From experience, it is much easier to be distracted at the back of the hall and lose concentration.

6. Tables and chairs aligned so that again, there is more layout. Chairs are on wheels so that they can be easily moved to create groups, and can be placed on
either side of the desks.

7. America seems to be attempting to make lecture theatres smaller, and more rounded. Even if Bradford doesn’t have the allowance to teach in smaller groups, this layout might encourage interaction from the entire group.

8. Anglia Ruskin University has combined mobile and stationary chairs, whilst maintaining a neat and circular environment. The idea is that students on mobile chairs can easily to form groups with those front. Bright colours seem to be feature of newer lecture too.
### Appendix 3 - Budget Cost Plan

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<th>Refurbished GIA (sq ft)</th>
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<th>Total for proposal</th>
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Appendix 4 - Phasing and Programme

3.16. PROGRAMME

The Campus masterplan is a series of individual, stand-alone projects. This is useful in planning terms as projects can be cherry picked to meet circumstance. The Learning Portal is however, the only project which has linkages and unlocks other space or estates requirements. It is also the building which would have a major impact on our students, allow the implementation of the new Learning and Teaching Strategy 2015 - 2025, facilitate additional learning and research laboratory space for PLS and provide connected space for the whole of FISIS. The second major project to support the Learning and Teaching Strategy will be to create additional OTA in the Pemberton Building leading off of the Learning Portal. This will complete the University’s OTA requirements and centrally provide it in clusters no higher than third floor level.

It will also directly link to the Learning Hub, Library and Student Central and provide additional social learning space for group work and social interaction. This will be an essential part of the new learning and Teaching Strategy.

A further two specialist teaching spaces will be provided. One in FEI for Automotive Engineering linked to the proposed automotive research centre and the second in FHS where there will be sports physio attached to the new extended sports centre.
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A  EXECUTIVE SUMMARY

University of Bradford through its Ecoversity Program prides itself for being an environmentally sustainable and ethically responsible university. To achieve this, we have invested a considerable amount of effort and resources to minimize our carbon footprint caused by staff and student transportation from the launch of our first SMART Travel Plan in 2004 with a recent update in 2010.

The 2010-14 period saw significant changes in the campus with the relocation of Faculty of Health Studies and new buildings such as the Bright building, STEM centre and The Green student residences. From the 2003 Travel Plan, we see a successful trend in the reduction of single occupancy car users. In addition to that, successful implementation of cycling facilities saw a rise in the number of UniBug registrations over the years. The A99 bus that transports staff and students for free from the city campus to Emm Lane campus was very much in demand with an average of 210 users per trip.

Key areas of attention for this plan include the package of measures available for student commuting, using technology to remove the need for travel, partnership working with key Bradford employers, data collection, tackling local parking congestion and improving the perception of safety. The plan sets out the following 4 key objectives, each of which is supported by an action plan:

1. Reduce single occupancy car journeys by aligning car parking development with the Estates Strategy and changing permit policies.
2. Improve relationship with the local travel networks to get better travel incentives for students.
3. Reduce work related travels by increasing awareness on virtual meeting technologies and new travel policy enforcements.
4. Improve marketing and communication to increase survey responses and change staff and student travel behaviours.

B  INTRODUCTION / CONTEXT

Summary

With almost 50 years of academic excellence behind us as a University, we have continued to grow our international reputation and course provision. We have always been pioneers in developing new course subjects, reflecting and anticipating the needs of employers, our students, and of society as a whole. Bradford was the first university outside London to offer part-time degree courses, and our courses are designed in response to the changing business, social, scientific and environmental landscape. From the first modern Business School, which has an international reputation, to the first Peace Studies degree, we continue to offer relevant, practical and useful learning for all our students. Today our associations with employers have expanded across the globe with operations in Dubai and China, however this document is in relation to the Bradford operations only. With over 11,000 students and 1800 staff, the university’s 10 year strategy is to increase in numbers by an additional 50% while maintaining its degree of excellence operationally and academically. The University of Bradford consists of two campuses (Emm Lane campus that holds Faculty of Management & Law and the City Centre campus that holds the rest of the faculties and departments) both located 20 minutes away from each other. The university currently has around 2,000 staff and 10,000 students.

Drivers for Change

This travel plan integrates with wider corporate objectives, where the University of Bradford targets sustainability by being a world leading eco-campus.

1. University of Bradford Strategy 2015 – 2025 requires us to measure all our impact on the environment, as to which the travel plan comes into place with the aim of reducing our carbon footprint despite the expected growth.
2. In alignment with the Estates 2014-2024 strategy in planning additional sites with hopes of maximizing current space and reducing the need to travel between sites.
3. An effective travel plan is a condition for planning permission at the Bradford District Metropolitan Council.

4. University of Bradford’s travel plan strategy to have a wider impact at the university by promoting cost reduction and improved well-being, upon which the travel plan then builds upon.

University of Bradford is pleased to have been judged as a consistent first class green league performer and the 6th in the latest UI Global Green Metric with a total of 35% carbon reduction (scope 1 & 2 since 2005). In order for us to maintain this status, it is important to continue developing in a way which minimises our impact on the environment, reduces our contribution to global climate change and contributes to a more sustainable future which includes effective management of our transport operations through our travel plan.

**Governance Structure**

A steering committee will take ownership of the action plan and steer it to completion with proactive ad-hoc planning as they see fit (Refer to Appendix 1 for the steering committee structure and responsibilities.

**Funding**

From 2009 to 2014 10% of car parking revenue was set for the SMART Travel Plan.

The SMART Travel Plan 2015-19 will have control over the dedicated funds that it is set for it.

**How To Find Us**

*Note to Designer: Please make this box more graphical. Sample refer to “How to Find Us.doc”*

*Graphics to Use: For each of the travel modes, please design an icon. EG: Car a car icon.*

<table>
<thead>
<tr>
<th>Travel Mode</th>
<th>How To Find Us</th>
</tr>
</thead>
<tbody>
<tr>
<td>Car</td>
<td>Bradford is connected to the national motorway network via the M62 and the M606. Approximate distances by motorway are:</td>
</tr>
<tr>
<td></td>
<td>- London 200 miles (320 km)</td>
</tr>
<tr>
<td></td>
<td>- Birmingham 120 miles (192 km)</td>
</tr>
<tr>
<td></td>
<td>- Bristol 220 miles (352 km)</td>
</tr>
<tr>
<td></td>
<td>- Edinburgh 200 miles (320 km)</td>
</tr>
<tr>
<td></td>
<td>- Leeds 8 miles (13 km)</td>
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<tr>
<td></td>
<td>Best routes into Bradford are:</td>
</tr>
<tr>
<td></td>
<td>- from the south, east or west of Bradford - M62 and the M606</td>
</tr>
<tr>
<td></td>
<td>- from the north-west of Bradford - A629/A650 via Skipton and Keighley</td>
</tr>
<tr>
<td></td>
<td>- from the north-east - A1 or A19, and reach Bradford via the A59 and then the A658 south of Harrogate.</td>
</tr>
<tr>
<td></td>
<td>Postcodes for Sat Nav purposes are:</td>
</tr>
<tr>
<td></td>
<td>- City Campus: <strong>BD7 1AZ</strong></td>
</tr>
<tr>
<td></td>
<td>- Emm Lane Campus: <strong>BD9 4JL</strong></td>
</tr>
<tr>
<td>Coach</td>
<td>An extensive coach service connects most parts of the country to Bradford's Travel Interchange.</td>
</tr>
<tr>
<td></td>
<td>- National Express</td>
</tr>
<tr>
<td></td>
<td>- Megabus</td>
</tr>
<tr>
<td>Train</td>
<td>Bradford has two train stations - Bradford Interchange and Bradford Forster Square. Both stations have extensive rail links, though many involve changing at Leeds. The Interchange is where you will probably arrive. Approximate journey times are:</td>
</tr>
<tr>
<td></td>
<td>- London, King’s Cross - 3 hours</td>
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<tr>
<td></td>
<td>- Edinburgh - 4 hours</td>
</tr>
<tr>
<td></td>
<td>- Birmingham - 3 hours</td>
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<td></td>
<td>- Manchester - 1 hour</td>
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</table>
Leeds - 20 minutes

Air

- There are direct regular air services into Leeds/Bradford International Airport, 7 miles (11 km) from the University, from various cities around the UK and Ireland as well as from many international locations.
- Bradford can be reached from the Airport by taxi at a cost of about £16. There is also an hourly bus service to Bradford Interchange at a cost of around £2.00.
- Many internal and international flights can also be made into Manchester Airport, 50 miles (80 km) south-west of Bradford.
- The University offers a free Airport Pick-Up Service for international students who arrive at either Leeds/Bradford Airport or Manchester Airport.

For further information, please refer to [http://www.bradford.ac.uk/contact-and-find-us/how-to-find-us/](http://www.bradford.ac.uk/contact-and-find-us/how-to-find-us/).

**Top 10 Commuting Population**

Majority of our staffs and students commute from Leeds and Bradford.

<table>
<thead>
<tr>
<th>Home City</th>
<th>Staff 2009</th>
<th>Staff 2014</th>
<th>Student 2009</th>
<th>Student 2014</th>
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<tbody>
<tr>
<td>Bradford (BD)</td>
<td>64%</td>
<td>60%</td>
<td>75%</td>
<td>61%</td>
</tr>
<tr>
<td>Leeds (LS)</td>
<td>16%</td>
<td>16%</td>
<td>12%</td>
<td>10%</td>
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<tr>
<td>Halifax (HX)</td>
<td>5%</td>
<td>7%</td>
<td>4%</td>
<td>5%</td>
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<tr>
<td>Huddersfield (HD)</td>
<td>4%</td>
<td>4%</td>
<td>3%</td>
<td>4%</td>
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<tr>
<td>Wakefield WF</td>
<td>3%</td>
<td>3%</td>
<td>5%</td>
<td>3%</td>
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<tr>
<td>Sheffield (S)</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
<td>3%</td>
</tr>
<tr>
<td>Oldham (OL)</td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>2%</td>
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<td>York (YO)</td>
<td>2%</td>
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<td>0%</td>
<td>2%</td>
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<td>Harrogate (HG)</td>
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<td>Manchester (M)</td>
<td>2%</td>
<td>1%</td>
<td>0%</td>
<td>1%</td>
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<td>Blackburn (BB)</td>
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<td>0%</td>
<td>0%</td>
<td>0%</td>
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<tr>
<td>Others</td>
<td>14%</td>
<td>5%</td>
<td>0%</td>
<td>10%</td>
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Table 1: Top 10 staff and student home postcode analysis.

For a city campus, 47% of students live and travel from family home, which is unique to our university. Therefore restrictions such not being allowed to bring cars to the university will not be practical. Using these statistics however, what is clear is that each of these cities have bus, train and cycling routes that connects them easily to the city campus through Bradford Interchange and Foster Square train station and the Bradford Free City Bus.
C PREVIOUS SUCCESSES AND THEMATIC OPPORTUNITY AREAS

Key Successes from the 2009-14 Travel Plan

- Successfully worked with BMDC to map out new residential only parking zones and reduce the congestion in Emm Lane campus.
- Successful implementation of the Cycling hub, facilities, community and support group. Very well communicated and very popular especially during Freshers Fair.
- Effective marketing and communication of the alternative travel options when it was launched especially for walking and cycling routes and facilities.
- A good set of remote working facilities has been installed. This includes CISCO Webex, proper Video conferencing facilities at the Faculty of Health Studies and the JB Priestly libraries among the others that are currently available.
- Successful funding for students to travel for free using the Free City Bus which is a shared funding between UoB, Bradford College and BMDC and since 2012, the A99 bus that connects Emm Lane campus to the City Campus consistently from 8.30 am up to 6.30 pm hourly.

This SMART Travel Plan will continue to maintain and improve the successful initiatives that were implemented in the 2010-14 Travel Plan.

Lesson Learned from the 2009-14 Travel Plan

The following elements are required to deliver a successful travel plan.

1. Understanding of the different marketing channels and personnel in charge.
2. Control over the dedicated funds allocated for the travel plan.
3. Travel plan to link to wider university strategies.
4. Dedicated team of individuals to take ownership of the travel plan.

Barriers to greener travel:

1. Postcode analysis shows that most staff & students do not have a direct public transport option to the university. (EG: Those living in BD13, will need to walk 20 minutes to the nearest bus station that will bring them to Alhambra Theatre and from there another 5 minutes’ walk to the entrance of the Richmond Building.)
2. Abundant affordable car parking in and around University of Bradford.
3. Removal of the Free City Bus by the BMDC could lead to loss of staff and student headcounts to neighbouring competitors.
4. Disconnect between the corporate business travels policies against the actual travel spent by faculty. (Example, not all travel bookings are made through the University’s central procurement system.)
5. Convoluted communication channel due to complicated university structures.

Thematic Priorities of new plan

- Reducing carbon footprint in alignment to the university growth.
- Reduce business related travels by implementing alternative communication options.
- Reduce vehicle congestions in and around our campus.
- Improve public transport incentives for students
- Improve communication and promotion of initiatives and survey responses

SMART Targets

1. Significant reduction in SO car journeys.
2. Increase in total survey responses.
3. Increase of Work from Home and Virtual Meeting suites usage. (Change in business travel policy)
4. Reduction of annual commuter carbon footprint per staff and student by 20%.
The next developments on campus would be the BUPA care home at the Shearbridge car park which will commence 2016. Once that is completed, the “Learning Portal” building which is located between Bright building and Richmond shall begin construction, which will then take out the current visitor parking space (Refer to Appendix 3 for the 10 year development plan).

In alignment with the 2015-19 SMART Travel Plan, the Estate’s 10 year strategy aims to keep the current number of available parking spaces. Therefore, in the event the University of Bradford succeeds in increasing its staff and student numbers (expected additional 5000 headcounts), it would mean reduced car parking space provision by the end of the 5 years.

The following squeeze points are likely to happen around car parking capacity, (refer to Appendix 4 for future car parking spaces):

1) BUPA home on Shearbridge Car Park – this will take out most of the parking here. The solution is to turn the Beehive Mills site into a temporary car park to account for this loss of space.
2) The “Learning Portal” building will cause the loss of the visitor car park but this is only 30 spaces and will be absorbed.
3) The construction of the multi-storey car park on the Longside Lane car park will cause the loss of those spaces as it will be a construction site so this will have to try to be scheduled out of term time over the summer.

E COMMUTER TRAVEL IMPACT

Opportunities for further improvement:

1) Total number of survey respondents were too low to gage a clearer picture of actual change in travel behaviour.
2) 53% of students lived in the student halls during term time. The aim was to convert 47% who lived in family homes. MCard discount was not sufficient to convert students to use public transportation. A quick trip generation analysis showed that for most of the students, it was inconvenient to travel to the university by bus.
3) For staff, the increase in parking permit rates was not significant enough as the permit can be paid off on a monthly interest free instalment scheme.

The below are our current initiatives that we plan to continue and further improve over the next 5 years.

Note To Designer: Please make this table more graphical. For design suggestion refer to “Current Initiatives.doc”.
Pictures to Use: For each transport mode please find a picture of implementation at University of Bradford. Suggestions are as per each mode.

<table>
<thead>
<tr>
<th>Transport Mode</th>
<th>Options</th>
</tr>
</thead>
</table>
| Public Transport (Picture: A99 bus, UBUS, & Free City Bus) | 1. Bradford Free City Bus (refer to Appendix x for the Free City Bus map)  
2. A99 Bus Service between the City Campus and the Faculty of Management & Law campus which runs on an hourly basis and is free of charge.  
3. UBUS – The student union safety bus which provide free bus service during term time after office hours (5.30 pm to 11 pm) to ensure students get to travel home safely and for free.  
4. Student Incentives  
   a. Student Plus MetroCards (£19.70 for a week (or £72.90 per month)) for unlimited bus and train travel between Zone 1 and Zone 5. (See Appendix x for maps)  
   b. 16-25 Student Rail Cards that provide 1/3 price discounts to students on any train service within the UK.  
5. Staff Incentives  
   a. Annual MC Card scheme at 15% discount of normal cost, and interest free 12 month payment scheme. (Bus & Train)  
   b. 12 weeks free travel for an annual train ticket with an easy 9 months instalment plan via salary deduction. |
| Car Share / Pooling (Picture: car sharing pictures) | 1. Car share scheme with discounted parking permits and guaranteed priority parking spaces.                                                                                                                                                      |
| Cycling (Picture: Any image of cycling or UniBug) | 1. Bike storage, showers and water points by joining UniBug.  
2. Bike Hub that offers training, bike hire and second hand bikes. (http://www.bradfordbikehub.com/)  
3. Community for cyclists to share information on routes and cycling activities.                                                                                                                                                   |

**F CARBON FOOTPRINT OF TRAVEL**

Key Points:
1. Nearly 9000 tonnes of carbon from travel  
2. 23% of total university carbon footprint  
3. Same as carbon footprint for heat and power  
4. 50% rise in business travel carbon footprint per FTE staff.
Fun Fact: The circumference of Earth from Pole to Pole is 40,008 KM. With the current 8787 Tonnes of carbon emission of University of Bradford, an average passenger can travel 1,108 times around the world from pole to pole.

**Business Travel Carbon**

Business travel carbon emission has increased by 150% since 2009 with 0.82 tonnes of carbon emission in 2014/15 term as opposed to the 0.55 tonnes in 2009/10 term. This travel plan aims to reduce this significantly through the reduction of business related travels which is highlighted later in Chapter I.

**G THEMATIC AREA 1 - CAR USE AND CONGESTION**

Objective: Control single occupancy car use congestion while ensuring compliance to national standards and avoidance of unfairly penalising motorists.

**Number of Spaces**

1. City Campus – 911 spaces & 62 Disabled Parking
2. Faculty of Management & Law campus - 185 spaces & 21 Disabled Parking

**Number of Users**

<table>
<thead>
<tr>
<th></th>
<th>2011/12 Term</th>
<th>2012/13 Term</th>
<th>2013/14 Term</th>
<th>2014/15 Term</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>1082</td>
<td>1035</td>
<td>1053</td>
<td>1147</td>
</tr>
<tr>
<td>Students</td>
<td>981</td>
<td>696</td>
<td>519</td>
<td>471</td>
</tr>
</tbody>
</table>

Students are more sensitive to car parking price changes compared to staff as seen in the massive reduction from 2011 to 2013. Besides the above mentioned parking spaces, in order to achieve the above objective, University of Bradford will be maintaining a close relationship with the council to increase “No Parking”, “Residential Parking” and “No Wait” zones around the campuses to discourage both staff and students to drive. This is based on the successful implementation of residential parking in the past couple of years.

**Proposed Action Items**

1. Change in car parking policy and rates.
2. Reduce car parking provision and look into greener car parking structures.
3. Work closely with the council to increase residential parking zones and no parking zones.
4. Increase incentives for green commuter vehicles, example salary sacrifice schemes, electric vehicle charging points.
5. Improve environmental performance of university fleet vehicles.

** For a review of the full action plan, please refer to Appendix 2.

** THEMATIC AREA 2 – ENHANCING GREEN TRAVEL MEASURES AMONG STUDENTS

Research has proven that introducing new initiatives are best done while an individual is still at university. These behavioural changes are ones that is seen to be brought on to the working world hence the opportunity to have a wider impact.

Current Statistics

Average daily users in 2014/15 term time for A99 Bus would be 210 passengers a day making return journeys
Average UBUS single travel journeys in 2011/12 term was 35 passengers a day which then dropped to 19 passengers a day in 2014/15 term. (Reason: unreliable data due to a lot of bus breakdowns).

<table>
<thead>
<tr>
<th>Year</th>
<th>2012/13</th>
<th>2013/14</th>
<th>2014/15</th>
<th>3 year average</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Bus</strong></td>
<td>17%</td>
<td>19%</td>
<td>19%</td>
<td>19%</td>
</tr>
<tr>
<td><strong>Train</strong></td>
<td>10%</td>
<td>15%</td>
<td>11%</td>
<td>11.7%</td>
</tr>
<tr>
<td><strong>Walk</strong></td>
<td>7%</td>
<td>9%</td>
<td>41%</td>
<td>42.3%</td>
</tr>
<tr>
<td><strong>Cycle</strong></td>
<td>0%</td>
<td>0%</td>
<td>13%</td>
<td>5.3%</td>
</tr>
<tr>
<td><strong>Motorbike</strong></td>
<td>1%</td>
<td>1%</td>
<td>0%</td>
<td>1.0%</td>
</tr>
<tr>
<td><strong>Other</strong></td>
<td>0%</td>
<td>0%</td>
<td>4%</td>
<td>2.3%</td>
</tr>
</tbody>
</table>

Opportunity to Improve

1. 43% of students from the UK live in Bradford (BD1 to BD15). Implication: opportunity to use public transport or a bicycle instead of a car.
2. 53% of students live in a term time university accommodation, which means they will be living in student residences around both campuses. A large number choose to live closer to the city centre and commute by bus or taxi to the Faculty of Management & Law. Implication: A99 service needs to be sufficient and consistent. Better student travel discounts especially to larger cities like London and etc.

Key Action Items

1. Work with the council and local transport providers through the West Yorkshire Travel Network to negotiate a better discount for students and staff.
2. Ensure continuation of A99 bus service from Faculty of Management and Law to the Main City Campus.
3. Ensure the continuation of the UBUS service for night travels for students living near Faculty of Management & Law.
4. Lobby for continuation of Free City Bus service.

** Refer to Appendix 2 for full action plan.

Note to Designer

a. Please use pictures as shown below.
I  THEMATIC AREA 3 - REDUCING NON ESSENTIAL BUSINESS TRAVEL

In the context of the university’s wider strategy to reduce cost while at the same time increasing headcounts, initiatives to investigate and mitigate business relation travels have already begun.

Key Findings

1. An average of 47% of flights in the past 5 months are based on business class.
2. Only 2/3 of travel bookings goes through the university’s trusted partner.
3. Financial year 2013/14 saw a total spent of 1.89 million GBP on business related travels.
4. Airline price to increase by 0.5% in average for all classes from the UK in 2016. Business class transport to increase by 2.1% for international flights and 2.2% for domestic. Hotel prices to increase 2.5% globally.

Key Action Items

1. New and comprehensive travel policy include procurement through a single authorized partner.
2. Enforce separate budgets and targets for business related travels.
3. Travel procurement system to include approval process and reporting.
4. Develop formal work from home policies and practices
5. Implement centralised remote working and virtual meeting facilities.  
** Refer to Appendix 2 for full action plan.

J  THEMATIC AREA 4 – MARKETING AND COMMUNICATION

This plan aims to proactively communicate and engage the students and staff of the University of Bradford on a continuous basis with the hopes of over-achieving the targets set.

Key Action Items

1. Map out marketing channels and process for a better student and staff engagement
2. Aim to promote travel initiatives as a selling point to join the University (both staff & student)
3. Leverage student unions for better student involvement.
4. Frequent updates and periodic communication throughout term time via all possible channels.  
** Refer to Appendix 2 for full communication channels.

Survey Plans for representative data.

Getting representative data is critical to monitoring and controlling the travel initiatives implemented. To ensure this plan is successful, a commitment to ensure high response rates shall be achieved by:

1. Conducting a full survey bi-annually moving forward.
2. Work with IT to enforce survey launch on login to system with option to snooze thrice.
3. Work on incentivising survey responders.
4. Use surveys to monitor travel initiatives and understand students and staff travel needs.
APPENDIX 1: UNIVERSITY OF BRADFORD SUSTAINABILITY GOVERNANCE STRUCTURE

Sustainability Steering Committee Structure

1. In the absence of the chairman, spearhead the group.
2. Ensure that each meeting has a dedicated agenda and a review of the past meeting action items.
3. Follow up on available action items and flag those that are at risk of not completing, etc.

Chairman
Deputy Vice Chancellor

Vice Chairman
Ben Tongue

Travel Plan Coordinator
New Role TBA
- Ensure the travel plan initiative is followed through.
- Work with the relevant members to push through the actions to closure.
- Flag up risks and pending items.
- Be the administrator for car share app / car park management system, etc.

Human Resource Rep
Main & Deputy
- Ensure travel plan is well communicated during induction.
- Assist in the role of enforcing work from home policies / options with employees.
- Complete actions that require HR involvement.

Finance Rep
Main & Deputy
- Provide suggestions as to where and how funds can be obtained.
- Complete actions that require Finance involvement.

Marketing and Comms Rep
Sam Butterworth
- Communicate and promote all travel initiatives and measures to staffs and students.
- Find new and proactive measures to ensure message is well received.
- Participate in survey collection.
- Marketing and communication related activities.

Student Unions Manager
TBA
- Ensure all student induction has information regarding travel.
- Ensure students are aware and reminded of travel options.
- Ensure student survey response is high and constant over the years.
- Any activities that will require student input or message to be reached to them.
## APPENDIX 2: FULL TRAVEL ACTION PLAN

### Table 2-1: Proposed action items to control single occupancy car congestions.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Action Items</th>
</tr>
</thead>
</table>
| Prepare for implementation. | 1. Get a document from BMDC to see where the existing and upcoming residential parking zone are.  
   a. Propose to increase these spaces if necessary  
   2. Plot staff and students based on distance of travel  
   a. Start identifying alternative easiest travel options (bus & train)  
   b. Work with local transport to see what are the current available routes and plans on changing the routes to pass through the city campus or Emm Lane campus. |
| Reduce car parking congestion. | 1. Change the policies  
   c. Build and internal system to provide a permit and charge based on carbon emission.  
   d. Install pay machines all over the parking areas and start charging by the day.  
   e. All permits to be terminated by the end of 2016.  
   f. Students are not allowed to travel by car or bring their car to the university, with exception of those living at The Green  
   2. Reduce car parking provision.  
   3. All income from car parking to go to sustainable travel planning (or sustainability pot)  
   4. Work with BMDC to increase residence only parking zones and stricter fines (Daily random hour checks) |
| Increase car share users | 1. Option to work with an existing company (Devonshare / Liftshare) or build own internal system.  
   g. See possibilities to join the same carshare network (Liftshare scheme / www.bradfordcarshare.com) with Bradford College. (230 members)  
   h. Provide trainings to staff and students on how to use the system.  
   i. Bi-monthly communication / engagement to increase car poolers.  
   j. Guranteed ride home scheme  
   2. Car share users are permitted to buy parking permit.  
   3. Install security onsite to ensure that car share users are valid and monitored.  
   4. Priority parking spaces for car share users. (Closest to site, covered parking, etc.)  
   5. Carry out consultation with car sharers and monitor scheme success  
   6. Ensure an effective system is in place for reporting car share issues. |
| Additional green initiatives | 1. Green parking lot installation (Future parking lots to be built greener).  
   2. Feasibility study to investigate introducing car club vehicle(s) on campuses.  
   3. Explore out of city parking options for those 5 miles or more from the University, with easy access to a public transport.  
   4. Explore collection of more robust data on car parking usage. |

### Table 2-2: Proposed action items to improve public transport usage among students.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Action Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Create and maintain a strong relationship with the local</td>
<td>1. Keep in-touch with local travel groups and providers and the council monthly to get updates on what is happening with them.</td>
</tr>
</tbody>
</table>


2. Collaborate through WYTPN partners to collaborate on getting discounts with rail and bus providers. 
3. Join forces with other businesses in WYTN to get a much cheaper discount for Mcard and get this deal available for students. 
4. Join in the negotiation for the Free City Bus, but not champion it. 
   a. See possibilities of including other businesses in the area like Morrisons, Foster Square.

Reduce travel Between Sites
1. Ensure continuation of A99 bus service as a free service to staff/students and investigate a more frequent shuttle service. 
2. Ensure continuation of UBUS services 
   a. Investigate whom handles time tabling for School Of Management. See how this is linked to student counts and need of busses. 
   b. Create time tables for 2 buses, where there is a bus service every 30 minutes. 
3. UBUS 
   a. Explore opportunities to make this available during off-term time. 
   b. How this can be made into a dedicated service for night time travel. (EG: Students travelling from BD4 to city centre to participate in Circles or night outs)

Disincentives
As per the single occupancy congestion control.

Table 2-3: Proposed action items to control business related travels.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Action Items</th>
</tr>
</thead>
</table>
| Review/audit business mileage & expenses claims and review policy | 1. All travel bookings to be made via SELECTIVE, as travel cannot be approved or claimed. 
2. Travel approval process. 
3. Travel budget allocation, target for savings and utilization monitoring. (Total allowed per day hotel rate, etc.) 
4. Travel policy based on miles vs travel mode (EG: within the UK, by train or bus. 3 to 5 miles Electric car and no personal car usage. Etc.) 
5. Travel application timeline to ensure the cheapest travel rates. |
| Develop travel hierarchy to prioritise sustainable modes | 1. Different travel classes depending on management ranks. 
2. Different travel modes depending on distance. (EG: anything more than 10 miles, travel made using electric cars / UoB Fleet) |
| Reduce the need to travel | 1. Promote the usage of virtual meeting facilities (Skype for business, video conferencing, Blackboard Collaborate for training) 
   a. Explore and address barriers to use of tele- and video-conferencing 
   b. Explore options to include VC facilities in each meeting room. (Even basic ones are fine to start off with) 
   c. Improve processes and promote the usage of VC. 
   d. Look at current VC usages and find new measures to promote. (Work from home day, Communicate online week where all meetings are to be held virtually, showcase / roadshow in the Atriums of SoM and City Campus) 
   e. Conduct training for all employees on remote working facilities & VC. 
   f. Look at booking options and how to relocate all current conferencing facilities |
| | 2. Staff working from home 
   a. HR to work on Work from Home policy. 
   b. Proper monitoring and control in place to ensure no abuse. 
   c. Ensure all staff are setup with the right work from home facilities (VPN, Skype for Business, chat, etc.) 
   d. See possibilities to reduce desk space (convert to mobile work station) |
Table 2-4: Proposed action items to improve survey response rates.

<table>
<thead>
<tr>
<th>Objective</th>
<th>Action Items</th>
</tr>
</thead>
</table>
| Full survey to be conducted bi-annually. As to monitor and show real progress and not to irritate staff and students. | 1. Identify a software or an outsourced partner whom can create / program the survey questions properly into the system.  
2. Ensure that the questions are coded based on the proposed format.  
a. Some of the survey questions should have restrictions on input.  
b. Possibility of auto generated reports that can save data crunch time. |
| Ensure survey questions are easily understood.                            | 1. Approach local vendors like those in Kirkgate Mall. (Primark / NewLook / etc.)  
3. Movie tickets.  
4. Food outlet vouchers (Frankie & Bennys, Nandos, etc.) |
| Find sponsors / funding to incentivise survey responders. (Suggest to start 6 months in advance) | 1. Individuals’ in-charge to ensure periodic promotion.  
a. Student union engagement (welfare and well-being officer)  
b. Internal communications for weekly newsletter blast for staff and plasma screen messages.  
c. Individuals with iPad to have surveys being filled on the spot. |
| Ensure survey is communicated before it begins and continuously during the period of collection. | 1. Work with IT to see possibility of ensuring that surveys will pop up automatically every time student / staff log in using their IDs. Can snooze 3 times, then unable to access system until survey is completed.  
2. All staff with parking permit must update travel survey, else risk losing permits??  
3. University wide policy to have at least 70% response rate from each department & faculty?? |

Figure 2-1: Marketing channels for SMART Travel Plan.
1. The Green Welcome Pack (possibility of Welcome Pack with other Student Accomodation around UoB >>>>
(David Houston) d.houston@bradford.ac.uk

2. Welcome Letter to Students (The Acceptance Letter)

• International Students >>>> http://www.bradford.ac.uk/marketing-and-communications/international-
offices/meet-the-team/
• UK Students >>>> Sally Raby

3. International student induction presentation / pack

4. Faculty >> Program Induction pack.

5. Freshers Fair >>>> Phil Lickley, Ethics & Well-being Officer

6. Bi-monthly promotions

• Weekly staff newsletter. >>>> Samuel Butterworth
• Screens at the Atriums (SoM, Student Central & Richemonde) >>>> Samuel Butterworth
• Staff and student intranets >>>> Samuel Butterworth (staff) / Phil Lickley (student)
• Facebook, Twitter, Instagram >>>> TBA / Internal Communication Officer
• Email blasting >>>> Samuel Butterworth

7. Open day pack. >>>> Enrolment Office & The Hub (Vickey Foxley-Sayles)

8. Recruitment presentation >>>> Each Faculty External Communications Coordinators

9. Staff Induction >>>> Internal Communications Officer

10. Other reaching out measures

• Putting up flyers at student accommodations, library, atriums, student central, notice boards around the
  campus & departments. >>>> Mark Dolby
• Leave extra behind like the student movers info.
• Update SMART Travel Page yearly. >>>> Claire Gibbons
• See options to put up information on the Free City Bus, A99 and UBUS
• Union mobile app
• Staff briefing, events and student liaison offices
• Leverage on information on http://www.bradford.ac.uk/marketing-and-communications/
• http://www.bradford.ac.uk/new-students/ >>>> Claire Gibbons
POTENTIAL NEW ACCOMMODATION AREAS (JAN 2015)

Beehive Mills development
221 spaces of car parking
23,900m² Accommodation (983 Beds)
890m² Other accommodation
Smith Street Mills development
15,660m² Accommodation (580 Beds)

850m² ICT Expansion
Institute of Biomarkers & Drug Discovery
14,991m² Learning Portal
1,842m² Refurbishment of workshop block
Learning Hub
4,394m² Refurbished accommodation
9,347m² New accommodation

10,410m² Multistorey carpark (450 spaces)
Faculty of engineering and informatics
3,504m² Refurbished accommodation
5,286m² New accommodation
Faculty of Health
326m² Refurbished accommodation
927m² New accommodation
Private retail / student accommodation

6,786m² Care Home
Sports Centre
927m² New accommodation

TOTALS
Student accommodation = 36,560m²
New teaching and study accommodation = 31,470m²
Refurbished teaching accommodation = 10,066m²

CITY CAMPUS: DEVELOPMENT OPPORTUNITIES
APPENDIX 4: ESTATES & FACILITIES CAR PARKING DEVELOPMENT PLAN.

ADDITIONAL CAR PARKING - REAR OF PHOENIX BUILDINGS

ADDITIONAL CAR PARKING - BEEHIVE MILLS

ADDITIONAL CAR PARKING - SCIENCE PARK

CAR PARKING NUMBERS - LOSSES

Anticipated additional 200 car parking spaces required to accommodate expansion.

Car parking losses (from existing campus)
- Carpark 1 = 150
- Carpark 2 = 69
- Carpark 3 = 259
- Carpark 5 = 40 (approx)
- Carpark 8 = 177
- Total = 695

CAR PARKING NUMBERS - PROPOSAL

Car parking gains (from proposed concepts)
- Carpark 1 - Multi-storey carpark = 224
- Carpark 9 - Undercroft carpark = 24
- Carpark 10 within science park expansion = min 224
- Total = 695