1. Introduction

The estate development options plan was approved by Council in March 2012 and an update provided to Council in March 2013. This document provides a high level update on key metrics and projects currently in progress.

Our UK estate includes:
- King’s Campus site including the Medical School and much of our student residential accommodation
- Campus for Ageing and Vitality at the former Newcastle General Hospital site
- Centre for Life
- Business School and Science Central
- Outlying student residential accommodation and sports fields
- Outstations – Cockle Park and Nafferton Farms, Dove Marine, Neptune Centre and Blyth Harbour

In addition, we operate a campus in Malaysia and are provided space by the Singapore Institute of Technology at Ngee Ann and Nanyang Polytechnics in Singapore.

2. Strategic objectives

Our estate strategic objectives, as laid out in Vision 2021: a world class civic university are to facilitate academic priorities and:
- improve the condition and functional suitability of our buildings
- implement the Coherent Campus initiative
- ensure effective utilisation of space and improve the net:gross space ratio
- deliver ‘full life cycle’ value for money on all major projects

We also have the following principles:
- We will not undo the Faculty/School structures (unless it becomes absolutely necessary)
- Better not more, improve the condition and functional suitability of the City Centre Campus, whilst identifying surplus or under-performing buildings that can be released for complementary uses that will integrate the campus with the city. No major new buildings (unless a rebuild) on this Campus.
- We will seek to co-locate similar activities
- Any new buildings (excluding student accommodation, rebuilds or for Medical Sciences) will be on Science Central
- The Armstrong Building, accommodating most of HASS activities, and the Union Society Building will form the “heart” of the redbrick campus,
- Any major additional capital projects in Medical Sciences that are not already agreed will be predominately externally funded. Internal funding will concentrate on HASS and SAGE.
- We must reduce the carbon footprint of our estate

3. Progress against strategic objectives

3.1 Improve the condition and functional suitability of our buildings
Increased investment in recent years has delivered improvements in the amount of floor space in functional suitability grades 1 & 2 (67% in 2007; 87% in 2013) and the amount of floor space in condition categories A & B (78% in 2007; 89% in 2013).
While estate condition has improved greatly, recent investment followed a long period of underinvestment and focused on urgent priorities such as replacement of roofs and obsolete plant. Some poorer buildings are nearing the end of their lives with structural issues beginning to emerge, however further intrusive survey and analysis is required to determine their life expectancy and whether the work would be part of the long term maintenance programme, become a major refurbishment project or a capital replacement project. The Stephenson Building and King George VI Building are among those which give greatest cause for concern.

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<tbody>
<tr>
<td>Floor space in condition category A &amp; B</td>
<td>74%</td>
<td>89%</td>
<td>81%</td>
<td>89%</td>
<td>89%</td>
</tr>
<tr>
<td>Floor space in functional suitability grade 1 &amp; 2</td>
<td>34%</td>
<td>82%</td>
<td>89%</td>
<td>84%</td>
<td>87%</td>
</tr>
</tbody>
</table>

We will ensure that student experience continues to be given high priority and deliver quality teaching and research environments that match or exceed our competitors. In addition to the long term maintenance programme (£3m p.a.) and discrete projects (such as Armstrong Building refurbishment), existing floor space requires continued refurbishment to maintain standards. This has been assessed at £2.1m from teaching, learning and student experience space in summer 2014 then £1.5m per annum and this will be addressed in the budget setting process for 2014-15.

3.2 Implement the Coherent Campus initiative

£1m is set aside annually to improve the spaces between buildings, providing a more unified and recognisable campus. Much of the east side of the campus has been improved in recent years and a masterplan for the phased development of the west side of the campus was approved by Council in February 2014.

The estimated cost to complete the masterplan works is £3.1m and the intention is to carry out the work in phases, related to the annual budget levels, and also mitigating disruption by working incrementally. Later phases will take account of any decision to expand the Student Forum if a decision is taken to demolish Boiler House.

In addition, resource has been committed by us to Newcastle City Council to enable the reconfiguration of Barras Bridge highway for better pedestrian safety and connectivity and improved public realm.

3.3 Ensure effective utilisation of space and improve the net:gross space ratio

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</thead>
<tbody>
<tr>
<td>Net internal area per student FTE (m²)</td>
<td>17.0</td>
<td>11.2</td>
<td>11.1</td>
<td>11.1</td>
<td>10.6</td>
</tr>
</tbody>
</table>

Following approval by Council in February 2014, the University has made a bid to acquire 89 Sandyford Road, to help with interim spatial needs.

Discussions are in progress with INTO to grant a long lease of Line East Building and the upper floors of the Crow's Nest building. Subject to planning approvals INTO wish to
demolish and rebuild Line East and refurbish the Crow's Nest building to create a new building for much needed additional teaching facilities, labs, meeting rooms and administrative offices.

Capital disposals completed recently or in progress include:
- Claremont Place (2,661m²)
- Bruce Building (2,293m²)
- 17-21 North Terrace
- Benton Farm Cottages
- Close House – lease surrender on walled garden and adjacent field

We have sought early termination of the lease of Citygate (due to expire in 2016) releasing a further 2,517m² and have surrendered our lease at Moorbank. Work is underway to examine the feasibility of relocation of the cavitation tunnel, and replacement of the Boiler House with reconnection to the ducts, which might then enable part or total demolition to create an enlarged Student Forum.

3.4 Deliver 'full life cycle' value for money on all major projects

Recently completed projects
- **Bedson Building**: this project is to create an effective student facing front door for our School of Chemistry as well as enabling development of closer research working with the School of Chemical Engineering and Advanced Materials who will vacate space in the Herschel Building. The overall cost is £1.3m and the work is now completed.
- **Armstrong Building**: phases 2 and 3 have been completed.
- **Institute of Neuroscience**: phase 1 of this project has been completed.
- **Grand Hotel**: a major refurbishment to provide 71 additional student bed spaces were completed in time to admit students for 2013/14.
- **Biology**: removal of facilities at Close House and Moorbank and re-provision of higher quality facilities at Cockle Park

Projects in Progress
- **Kensington / Park Terrace**: The 350 bed student residential development is scheduled to complete in time for September 2014 admissions. It is intended to use this additional capacity to close Henderson New Hall
- **Nominations agreements**: As agreed by Council in December 2013, negotiations are in progress to secure nominations agreements for student residential accommodation
- **Armstrong Building**: the Armstrong Building is at the heart of the Humanities and Social Sciences academic experience. A £25m phased project is well underway to comprehensively redevelop the H&SS parts of the Armstrong Building for completion by 2019. The business case for phase 4 is dealt with elsewhere in the Council agenda.
- **Law School**: student numbers continue to rise and a modest extension to the Law School Lecture Theatre is being designed, to increase capacity by 40
- **Cookson and Leech Building**: phase 2 is at tender stage; this work will complete the Institute of Neuroscience facility and the laboratory facilities requiring legislative compliance; in addition phase 2 will provide Social space for the Faculty at ground and first floor level in the courtyard adjacent the main entrance to the building.
- **Neptune**: a new outstation is being developed at Shepherd’s Offshore Technology Park for the Neptune R&D Centre for sub-sea and offshore engineering.
- **Science Central Core building**: Newcastle City Council’s ‘Core’ building will be complete by September 2014 and this will accommodate business incubation, a Professional Learning and Executive Education facility for the University and temporary accommodation for Cloud Computing.

- **Science Central early presence**: a 300m² Fabric Structure will be built during 2015 to provide an early research presence and business engagement on site.

- **Science Central first University building**: our first building will be a new 10,000m² building for the School of Computing Science with space for cross cutting sustainability research, releasing space on the King’s Campus site that can be re-purposed. Architects have been appointed and initial design work is underway.

- **Blyth**: the Port of Blyth is building a unit to house the Princess Royal research vessel at Blyth harbour, this will be a rental arrangement and will replace an existing unsatisfactory facility.

- **Hatton Gallery**: The results of resubmission of a bid to the Heritage Lottery Fund for refurbishment of the Hatton Gallery will be known by April 2014. Should this be successful, a business case will be prepared and brought to Council for approval.

- **NUMed**: We are progressing the accommodation nominations agreements recently agreed by Council.

4. **Key Risks**
   Estate functional suitability is a university strategic risk embracing all aspects of the estate and how it supports the academic community. An integrated approach to estate planning and decision making is required to consider all aspects of the estate and buildings and match them with academic plans and requirements. Increasing intensity of estate use means it is essential to plan for adequate servicing, this cannot be assumed as a given. Climate change is increasingly leading to greater risk of flooding and unseasonal temperature fluctuations, brings risks of loss of buildings, loss of power and inadequate functioning of heating, cooling and ventilation plant in conditions that the buildings, infrastructure and landscape were not originally designed for.

5. **Future planning**
   At council in March 2013 we identified five events that required us to re-examine the current strategy:
   - Flood Risk Mitigation
   - Science Central
   - Increasing Medical Science Research Awards
   - Student Residential accommodation and
   - Proposals to establish a Veterinary School (subsequently decided not to proceed).

   The new home undergraduate fees regime, removal of the UG home numbers limit, and our success in student recruitment (home and overseas) mean it is timely to re-clarify the major issues for the Estate that we need to consider. This was addressed in the paper to the joint meeting of Senate and Council this morning.

6. **Environmental Sustainability**
   Our Environmental Sustainability Policy commits us to reducing all our environmental impacts, our Environmental Management System covers all UK operations at the University and provides a structured framework to:
   - Meet and, where appropriate, exceed all relevant legislation, industry standards and other requirements to which the organisation subscribes.
   - Prevent pollution by reducing emissions and discharges.
• Demonstrate continuous improvement in our activities which impact on the environment.
• Promote Education for Sustainable Development throughout the curriculum, supporting our Societal Challenge Themes and Vision 2021.

With ‘first-class honours’ awards in the People & Planet ‘Green League’ in both 2012 and 2013, our continuous improvement makes us the ‘greenest’ university in our region, second in the Russell Group, and despite the energy intensity of our research, 15th in the People & Planet ‘Green League’ and in the top 10% of all universities. In 2012 Newcastle University was the first research-intensive university to achieve dual environmental management accreditation with Platinum EcoCampus and ISO 14001.

We continue to invest in energy efficiency - our Revolving Green Fund invested ca £200,000 in 2012-13; hotel-style room card controls have been installed as part of the Grand Hotel refurbishment, meaning minimal energy is consumed when unoccupied, and speed controls have been added to the ventilation plant at the Medical School and Bedson building. These projects combined will save over 550 tonnes of CO₂ per annum. Sustainable procurement initiatives include the introduction of flexible energy contracts to control costs in volatile markets, and we are leading into a joint procurement exercise with the NHS for clinical waste disposal.

Our accreditation and award scheme ‘Green Impact’ continues to grow and develop awareness of sustainability issues among staff and students. 16 teams took part in 2012-13, three achieved Bronze awards and seven Silver, for actions such as undertaking energy audits, labelling light switches and bin amnesties. Awards are presented by the Vice-Chancellor at an annual ‘Celebrating Success’ event every June.

Key performance indicators help us assess our performance. Objectives have been set to:
• Integrate environmental management into our day-to-day operations.
• Reduce our energy consumption and associated carbon emissions. Minimise our use of water.
• Implement a waste minimisation strategy and maintain a high recycling rate.
• Promote and support sustainable travel options for commuting and business travel.
• Establish procedures to implement sustainable construction and green procurement.
• Preserve and enhance the biodiversity of the estate.
• Empower and motivate staff, students and stakeholders through appropriate environmental education and communication.

Professor Tony Stevenson
PVC Planning and Resources
March 2014

Appendices
1. Estate Key Performance Indicators
2. Environmental Sustainability Key Performance Indicators
### Overall Estate Performance Summary

A good quality, functionally suitable and safe estate is essential to support student and staff experience, teaching, learning, research and engagement, contribute to the Environmental Sustainability Societal Challenge and help the University’s reputation.

Newcastle has made outstanding progress with estate improvement in the sector. To support improved quality through growth we will support growth in teaching, learning and research activities, ensure that student estate experience is given high priority and deliver quality teaching and research environments to match or exceed our competitors. Feedback from student surveys indicates that this is the case.

The Estate Strategy as outlined in 2012 delivered improvements in the amount of floor space in functional suitability grades 1 & 2 (from 67% in 2007 to 87% in 2013) and floor space in condition categories A & B (from 78% in 2007 to 89% in 2013). We have tripled the floor space let to third parties (to 37,000m² GIA) and recycle over 90% of our waste (17% in 2007) with no general waste to landfill. The estate is a costly asset and needs to be well utilised, attention paid to rationalisation and utilisation will turn to re-purposing of space to support priority activities.

There has been good progress with the Estate Strategy objectives identified in the estate development options plan approved by Council in March 2012. Estate Support Service (ESS) provides a value for money, customer focused range of estate services to support the academic community.

### Institutional Strategic Objective

<table>
<thead>
<tr>
<th>Institutional Strategic Objective</th>
<th>Estate Performance Comments</th>
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<tbody>
<tr>
<td><strong>Top 20 in the UK for research</strong></td>
<td>• To support research excellence and innovation, ESS works with units to create and improve added value and unique research facilities, reduce and rationalise inefficient research space, optimise use of research facilities&lt;br&gt;• £6.2m was invested in research facilities in 2012-13&lt;br&gt;• Awards included a Higher Education Environmental Performance ‘Safe, Sustainable and Successful Lab’ award</td>
</tr>
<tr>
<td><strong>Top 20 in the UK for student satisfaction</strong></td>
<td>• ESS supports student experience by developing and maintaining high quality teaching, learning and social spaces as well as continually improving general facilities and the campus environment, working with students on the Estate Student Committee and through focus groups&lt;br&gt;• ESS reviews the design, condition and functional suitability of teaching and learning rooms; regular inspections ensure cross departmental management and maintenance; we undertake functional suitability surveys and monitor utilisation&lt;br&gt;• £9.4m was spent in 2012-13 on teaching, learning, social space and the general environment&lt;br&gt;• Over the last 3 years we invested £4.3m in Coherent Campus landscaping and improvements&lt;br&gt;• £1.1m was expended on estate Improvement Projects funded by Units&lt;br&gt;• Excellent feedback about the estate was received from students in the Decliners and New Entrants Surveys as well as in a student survey carried out by ESS</td>
</tr>
<tr>
<td><strong>Focus on 3 societal challenge themes</strong></td>
<td>• We support the key societal challenge themes of Sustainability and Ageing through planning and development to deliver Science Central and Campus for Aging and Vitality projects&lt;br&gt;• ESS maintained dual environmental accreditation and a ‘First’ in the People and Planet Green League in 2013 enhancing the University’s reputation for the Sustainability&lt;br&gt;• Sustainability related awards include a Green Gowns Highly Commended for Modernisation and Efficiency for ESS Smartworking as well as several local and national awards for buildings and landscaping design&lt;br&gt;• Estate operational contribution to social renewal is embodied in our apprenticeships, student placements, and local employment and training schemes as part of letting major construction contracts.</td>
</tr>
<tr>
<td><strong>A significant international, national and regional profile and reputation</strong></td>
<td>• Awards include: Continuing Excellence (the highest level) for ‘Better Health at Work’ in 2013 and ‘Times Higher Outstanding Estate Team’ in 2011&lt;br&gt;• We were shortlisted for ‘the Times Higher Outstanding Contribution to Sustainable Development’ in 2013&lt;br&gt;• Excellent feedback about the estate was received from students in the International Student Barometer, placing us highly among research universities nationally as well as internationally</td>
</tr>
<tr>
<td><strong>Financial and Environmental Sustainability</strong></td>
<td>• Success with the Space Policy includes space sharing to free up underperforming space for alternative use, such as Third Party use, supporting co-location of research with industry, and encouraging the use of vacant space to support spin-out and spin-in businesses and develop third strand and/or commercial activities; these have tripled&lt;br&gt;• We ensure that space released by developing new buildings, either directly where business cases support or with partners, enables major relocations and rationalisation&lt;br&gt;• Estate expenditure is carefully controlled to ensure projects are within budget. The level of investment is generally appropriate to maintain a good condition, functionally suitable estate although some buildings are nearing the end of their lives.</td>
</tr>
<tr>
<td>Estate Strategic Objective</td>
<td>KPIs and Targets</td>
</tr>
<tr>
<td>---------------------------</td>
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</table>
| **Functional suitability of the estate** | Target: 89% of estate recorded as class 1 & 2 in EMR Estates Management Record 2014-15 target: 89% | *provisional pending 2012-13 EMR*  
Whilst between peer group lowest quartile and the median, we have made significant improvement (from 34% in 2000-01) however the improvement rate may slow as we tackle more difficult aspects. The Sector median is 90.0%, the Peer Group median 89.2%; and both the TRAC Group and Russell Group medians 85.0% (2011-12 EMS data). |

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</table>
| **Teaching** | **Suitability** | **Target** 07-08 08-09 09-10 10-11 11-12 12-13 13-14  
**Achieved** 81% 77% 79% 80% 82% 84% 87% |
| | |  
*provisional pending 2012-13 EMR*  
Surveys are undertaken biennially by ESS, the Scheduling Office and the Estate Faculty Coordinators. We are looking to maintain a target of 95%, the latest surveys completed early 2014 indicate an improvement to around 96%. |

| | **Condition** | **Target** 07-08 08-09 09-10 10-11 11-12 12-13 13-14  
**Achieved** 88% 88% 95% 95% 95% 95% 95% |
| | |  
*provisional pending 2012-13 EMR*  
Condition is at upper quartile for the Sector and above that for our TRAC Group. The Sector median is 84.6%; the Peer Group median is 80.6%; and both the TRAC Group and Russell Group medians 80.4% (2011-12 EMS data).  
Due to climate change and Equality legislation, more investment is required to protect major assets and ensure accessibility is compliant. Potential underlying structural issues are being investigated in some poorer buildings. |

| **Space efficiency** | Target: 10.0m² net internal area (NIA) per student FTE by 2014-15 2014-15 target: 9.8m² | *provisional pending 2012-13 EMR*  
Space efficiency per student FTE is at the median for our TRAC Group. This has reduced significantly from 17m² in 2000-01 with another 1.0m² reduction in 2012-13. The Sector median is 6.42m² per student FTE; the Peer Group median is 10.81; the Russell Group median is 10.80 and the TRAC Group median 11.22 (2011-12 EMS data). |

<table>
<thead>
<tr>
<th></th>
<th><strong>Target</strong></th>
<th><strong>Actual</strong></th>
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<tr>
<td></td>
<td>07-08 08-09 09-10 10-11 11-12 12-13 13-14</td>
<td>11.1 11.1 11.7 11.6 11.2 10.1*</td>
</tr>
<tr>
<td></td>
<td>07-08 08-09 09-10 10-11 11-12 12-13 13-14</td>
<td>13.5 12.5</td>
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</table>

| **Space utilisation** | Target: 60% frequency of use of all teaching rooms | Frequency 07-08 08-09 09-10 10-11 11-12 12-13 13-14  
**Target** 47% 51% 54% 57% 60% 60% 60%  
**Actual** 49% 49% 50% 52% 61% 57% |

*provisional pending 2012-13 EMR*  
Frequency of use fell to 57% with utilisation (% of frequency x occupancy) at 26%. The fall may be due to seminar rooms being freed by INTO relocating teaching to its new building and additional rooms being provided in Armstrong Building. There are 199 teaching rooms of which 140 are centrally actively supported. |
Investment levels

Target: 29% utilisation of all teaching rooms

<table>
<thead>
<tr>
<th>Year</th>
<th>07-08</th>
<th>08-09</th>
<th>09-10</th>
<th>10-11</th>
<th>11-12</th>
<th>12-13</th>
<th>13-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Target</td>
<td>26%</td>
<td>27%</td>
<td>28%</td>
<td>29%</td>
<td>30%</td>
<td>30%</td>
<td>29%</td>
</tr>
<tr>
<td>Actual</td>
<td>22%</td>
<td>26%</td>
<td>29%</td>
<td>26%</td>
<td>29%</td>
<td>26%</td>
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</table>

While the complexity of the curriculum, number of modules and patterns of teaching constrain utilisation, there is good practice as teaching is evenly spread across teaching hours and the week. Auditing is carried out on 2 weeks per annum.

Results are analysed to determine the reasons why there is a discrepancy between booked and actual usage; to challenge those that are not using rooms without good reason; and promote a culture of understanding around the benefits for the University of good utilisation.

Affordability

Target: 100% completion of the main Coherent Campus initiative by 2021

<table>
<thead>
<tr>
<th>Year</th>
<th>09-10</th>
<th>10-11</th>
<th>11-12</th>
<th>12-13</th>
<th>13-14</th>
</tr>
</thead>
<tbody>
<tr>
<td>Per Annum</td>
<td>1,052,000</td>
<td>1,260,000</td>
<td>2,094,000</td>
<td>931,000</td>
<td>1,000,000*</td>
</tr>
<tr>
<td>Cumulative</td>
<td>1,867,000</td>
<td>3,127,000</td>
<td>5,221,000</td>
<td>6,152,000</td>
<td>7,152,000*</td>
</tr>
</tbody>
</table>

*provisional spend for 2013-14

The Coherent Campus objective is to improve the spaces between buildings to create a sense of place that is welcoming, with well designed and well linked social spaces. The campus aims to be permeable, pedestrian and cyclist friendly, safe, clean and tidy, visually recognisable, clearly defined and environmentally sustainable. There is a draft programme of works to 2021 and good progress has been made.

In 2012-13 we enhanced Merz Court Quad, Herschel Car-park, carried out tarmac repairs to the King’s Road, improved way-finding, cycle storage and contributed to the NCC Barras Bridge pedestrian improvement project. Progress on the latter is disappointing.

Major 2013-14 schemes include Phase 1 of the 5 year Campus West pedestrian priority project and a further contribution to the City Council’s Barras Bridge pedestrian improvement project as well as wayfinding, cycle and engagement work.

Investment levels

Target: 2.00 for IRV (estate insurance replacement valuation) as a proportion of total Non-Residential income

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<tr>
<th>Year</th>
<th>08-09</th>
<th>09-10</th>
<th>10-11</th>
<th>11-12</th>
<th>12-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Res IRV £’000</td>
<td>780,910</td>
<td>852,057</td>
<td>914,271</td>
<td>785,925</td>
<td>871,132*</td>
</tr>
<tr>
<td>Non-Res Income £’000</td>
<td>351,216</td>
<td>357,504</td>
<td>364,590</td>
<td>393,496*</td>
<td></td>
</tr>
<tr>
<td>IRV as proportion of income</td>
<td>2.22</td>
<td>2.38</td>
<td>2.49</td>
<td>2.16</td>
<td>2.25*</td>
</tr>
</tbody>
</table>

*provisional pending 2012-13 EMR

A measure of estate affordability is the ratio of insurance replacement value (IRV) to institutional income. This measure identifies estate values that are disproportionately expensive in comparison to institutional income. IRV was last reviewed in 2012 with the next review due in December 2016. For benchmarking purposes 3% is added per annum.

For the 2012-13 EMR Return IRV has increased because of the requirement to include Farms which has unbalanced the ratio, however as income increases this will improve. The sector median is 2.07; the peer group median and Russell Group medians are 2.11 and the TRAC Group median 2.06 (2011-12 EMS data).
Non-Residential Estate Expenditure as a proportion of IRV

Target is median for TRAC group

<table>
<thead>
<tr>
<th>Year</th>
<th>08-09</th>
<th>09-10</th>
<th>10-11</th>
<th>11-12</th>
<th>12-13</th>
</tr>
</thead>
<tbody>
<tr>
<td>IRV £’000</td>
<td>780,910</td>
<td>852,057</td>
<td>914,271</td>
<td>785,925</td>
<td>871,132*</td>
</tr>
<tr>
<td>Expenditure £’000</td>
<td>51,216</td>
<td>34,624</td>
<td>36,027</td>
<td>30,284</td>
<td>25,768*</td>
</tr>
<tr>
<td>Expenditure as % of IRV</td>
<td>6.6%</td>
<td>4.1%</td>
<td>3.9%</td>
<td>3.9%</td>
<td>3.0%*</td>
</tr>
</tbody>
</table>

*provisional pending 2012-13 EMR

An independent report advises that indicative expenditure should be close to 4.5%. Based upon this, spend should have been £39.2m in 2012-13 compared to £25.8m. The average spend over the last five years has been at 4.23%. In the next few years we need to invest in flood mitigation works, student experience and high quality teaching and research environments that match or exceed our competitors and support the Raising the Bar agenda.

The TRAC group median is 4.6% (2011-12 HEFCE CIF2 data).
Overall Environmental Sustainability Performance Summary

We have delivered outstanding improvements in operational sustainability performance by involving students and staff in sustainability on campus. The Vice-Chancellor celebrates success in an annual awards ceremony each summer.

Our Environmental Management System (EMS - a framework for compliance with environmental legislation and continuous improvement in environmental performance) achieved accreditation to the internationally recognised ISO14001 standard in 2012 and 2013 following five day external audits.

Carbon reduction is challenging; however despite growth in the University estate, carbon emissions have been contained. Our investment in carbon reduction infrastructure is saving over 4,500tCO$_2$/annum and we continue to invest in lighting upgrades, insulation, heat recovery and improved control systems.

Water consumption per staff & student FTE has reduced by circa 36% between 2005/06 and 2011/12 through investment in water efficient technologies including push taps, urinal controls and shower restrictors. Water consumption increased in 2012/13 in part due to increased consumption associated with a new outlet flushing regime to manage legionella risk.

The amount of general waste recycled has increased from 29% in 2008 to over 90% in each of the last 3 years. By providing recycling facilities and engaging with staff and students recycling practice is now widely adopted on campus and our waste contractor undertakes further separation of recyclables off-site. Waste minimisation is more challenging and total waste mass is increasing. Our resource redistribution scheme, WARPit, encourages the reuse of equipment, furniture etc. reducing the environmental impact from buying new.

As a city centre campus we would expect to have less car parking spaces than the median for our peer group, however 10 years ago we had over 1000 (now 372). Between 2004 and 2012 the proportion of staff driving to work has reduced from 40% to 20%. We have increased the number of cycle parking spaces to 1115 and further investment in shower facilities is included within all new buildings and major refurbishments. Electric vehicle charging points for 7 vehicles have been installed on campus and the City’s first rapid charger will be installed later this year.

The Environmental Sustainability Policy and action plan cover all aspects including biodiversity; new initiatives include pollinator planting and more native species part of the Kings Road landscaping scheme.

<table>
<thead>
<tr>
<th>Institutional Strategic Objective</th>
<th>Environmental Sustainability Performance Comments</th>
</tr>
</thead>
</table>
| **Top 20 in the UK for research** | • The operational sustainability strategy supports the Sustainability Societal Challenge Theme.  
• A number of research council funded projects use the estate in their research e.g. the Transforming Energy Demand through Digital Innovation (TEDDI) project in King’s Gate  
• Estate Support Service and Newcastle Institute for Research on Sustainability integrate estate operational sustainability and academic research initiatives including at Science Central. |
| **Top 20 in the UK for student satisfaction** | • In the £9k fees regime, sustainability is about demonstrating value for money in our service delivery to the student body – delivering savings through energy efficiency, waste minimisation etc.  
• In a recent survey of student opinion on estate matters over two thirds were aware of our environmental sustainability campaigns.  
• In the International Student Barometer 2012, 93.9% of international students were satisfied with the University’s ‘eco-friendly attitudes’, placing us 1st within the Russell Group for this metric. |
| **Focus on 3 societal challenge themes** | • Our focus on Sustainability as a Societal Challenge Theme requires that we also focus on our operational sustainability performance. A risk is identified for this within our Strategic Risk Register. |
## Institutional Strategic Objective

### Environmental Sustainability Performance Comments

| A significant international, national and regional profile and reputation | • Enhancing our reputation as a sustainable university provides opportunities to positively engage with stakeholders in the North East, the UK and around the world. |
| Financial and Environmental Sustainability | • Our ISO14001 accredited EMS provides a structured framework for delivery of continuous improvement in environmental performance.  
• Investment in operational sustainability supports financial sustainability by value for money in service delivery. |

## Environmental Sustainability Strategic Objective

<table>
<thead>
<tr>
<th>KPIs and Targets</th>
<th>Performance Comments</th>
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</table>
| **Integrate environmental management into our day-to-day operations** | Registration to a recognised Environmental Management System - ISO14001 and EcoCampus (Platinum).  
Target: Maintain EcoCampus (Platinum) award / ISO14001  
** | 08-09 09-10 10-11 11-12 12-13  
Bronze Silver Gold Platinum & ISO14001 Platinum & ISO14001  
| 2009 2010 2011 2012 2013  
Position 72 104 63 26 15  
Class 2:2 3rd 2:1 1st 1st  
| 2013 saw our highest ever placing in this league table. At 15th we were 2nd in the Russell Group and highest in the North East. P&P have indicated some changes to the 2014 methodology in 2014, however the detail and impact of this is not yet known. The 2014 Green League will be published in the Guardian in Oct/Nov.  
| **People and Planet Green League of Universities – league table position.** | People and Planet Green League of Universities – league table position.  
Target: Maintain a ‘First Class’ Award  
** | 08-09 09-10 10-11 11-12 12-13  
SCOPE 1 & 2 carbon dioxide (kg CO₂) emissions per m² gross internal area (total estate)  
Target: 52kg (scope 1 and 2) CO₂ per m² gross internal area by 2020  
** | 08-09 09-10 10-11 11-12 12-13  
kgCO₂e per m² 111 108 97 103 98  
| The growth agenda and slow progress by government on decarbonisation of the grid make this a challenging area. Data is compiled as per the HESA definitions for the Estate Management Record - which can vary between years e.g. farms were added in 12/13. The peer group median for 2011/12 was 101 kg/m², lower quartile was 90 kg/m². Peer group benchmarks are not yet available for 12/13.  
| **Minimise our use of water** | Water consumption for the total estate (m³) per staff and student FTE  
Target: 13m³ per staff and student FTE by Jul 2015  
** | 08-09 09-10 10-11 11-12 12-13  
m³ / FTE 19.9 18.1 15.2 15.7 16.5  
| Newcastle peer group median for 2011/12 is 16.0m³ with the lower quartile at 13.6m³.  
| **Implement a waste minimisation strategy and maintain a high recycling rate.** | Percentage of general waste recycled.  
Target: Maintain a general waste recycling rate above 90%  
** | 08-09 09-10 10-11 11-12 12-13  
% 45.4% 79.0% 97.2% 94.1% 92.6%  
| 2008/09 data was unreliable, from 2010/11 data quality improved as each bin is weighed on collection. Waste minimisation is challenging, with increasing expenditure, refurbishment and research leading to growth in total waste mass.  
| **Implement a waste minimisation strategy and maintain a high recycling rate.** | Total waste mass (kg) per Staff & Student FTE (excluding construction waste)  
Target: 60 kg per staff and student FTE by Jul 2015  
** | 08-09 09-10 10-11 11-12 12-13  
Tonnes 1402 3117 1641 1726 1821  
kg/FTE 62.0 138.8 70.2 72.9 76.5  
| 2008/09 data was unreliable, from 2010/11 data quality improved as each bin is weighed on collection. Waste minimisation is challenging, with increasing expenditure, refurbishment and research leading to growth in total waste mass.  

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**Note:** The data and KPIs are compiled as per the HESA definitions for the Estate Management Record - which can vary between years, for example, farms were added in 12/13. The peer group median for 2011/12 was 101 kg/m², the lower quartile was 90 kg/m². Peer group benchmarks are not yet available for 12/13. The growth agenda and slow progress by government on decarbonisation of the grid make this a challenging area. Data is compiled as per the HESA definitions for the Estate Management Record - which can vary between years, for example, farms were added in 12/13. The peer group median for 2011/12 was 101 kg/m², the lower quartile was 90 kg/m². Peer group benchmarks are not yet available for 12/13.
Promote and support sustainable travel options for commuting and business travel

Proportion of staff driving to work.
Target: 22% by 2013

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>Car single occ.</td>
<td>40.4</td>
<td>35.3</td>
<td>25.3</td>
<td>22</td>
<td>19.6</td>
</tr>
<tr>
<td>Car share</td>
<td>-</td>
<td>-</td>
<td>3.1</td>
<td>2.4</td>
<td>3.1</td>
</tr>
<tr>
<td>Motorbike</td>
<td>0.3</td>
<td>0.5</td>
<td>0.7</td>
<td>0.6</td>
<td>1.2</td>
</tr>
<tr>
<td>Bus</td>
<td>16.9</td>
<td>18.1</td>
<td>21.5</td>
<td>20.9</td>
<td>26.6</td>
</tr>
<tr>
<td>Train/Metro</td>
<td>20.7</td>
<td>21.6</td>
<td>23.4</td>
<td>23.7</td>
<td>29.1</td>
</tr>
<tr>
<td>Park &amp; Ride</td>
<td>0.6</td>
<td>0.7</td>
<td>1.7</td>
<td>1.8</td>
<td>0.3</td>
</tr>
<tr>
<td>Cycle</td>
<td>5.3</td>
<td>6.2</td>
<td>9.1</td>
<td>8.7</td>
<td>8.7</td>
</tr>
<tr>
<td>Walk</td>
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<td>10.6</td>
<td>9.6</td>
<td>11.8</td>
<td>11.4</td>
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<tr>
<td>Other</td>
<td>0.3</td>
<td>1.2</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>99.8</td>
<td>100.1</td>
<td>100</td>
<td>99.8</td>
<td>100</td>
</tr>
</tbody>
</table>

The overall percentage of staff travel survey respondents who chose ‘car driver’ as their main mode of travel to work reduced from 40.4% in 2004 to 19.6% in 2012. The survey is biennial.