THE UNIVERSITY of EDINBURGH

**Estates Committee**
**Raeburn Room, Old College**
**Wednesday 24 May 2017, 9.30-12.30pm**

# AGENDA

| | | |
|---|---|---|
| **1** | **Minute (closed)**<br>To *approve* the minute of the previous meeting held on 22 March 2017. | **A** |
| **2** | **Matters Arising**<br>To *raise* any matters arising. | |
| **SUBSTANTIVE ITEMS –** | | |
| **3** | **Estates Capital Plan 2016-17 to 2025-26 (closed)**<br>To *note* a paper from the Director of Estates. | **B** |
| | **3.1 Finance Director's Update - Interim Ten Year Forecast (May 2017) (closed)**<br>To *note* and *consider* a paper from the Director of Finance | **B1** |
| **4** | **Estates Vision 2017-2027 (closed)**<br>To *endorse* a paper from the Director of Estates | **C** |
| | **4.1 Residential Accommodation Strategy 2017-2027 (closed)**<br>To *consider* and *endorse* a paper from the Director of Accommodation, Catering and Events. | **C1** |
| **5** | **Integrated Travel and Transport Plan 2017 – 2021**<br>To *approve* a paper from the Assistant Director of Estates, Head of Estates Operations | **D** |
| **6** | **Proposals for Investment in Student Facing Facilities (closed)**<br>To *consider* and *note* a paper from the Director of Estates | **E** |
| **7** | **Student Centre – Full Business Case (closed)**<br>To *endorse* a paper from the University Secretary | **F** |
| **8** | **Murchison House – Full Business Case (closed)**<br>To *endorse* a paper from the College of Science & Engineering and the Director of Estates. | **G** |
| **9** | **King's Buildings Nucleus (closed)**<br>To *approve* a paper from College of Science & Engineering. | **H** |
| **10** | **King's Buildings Campus Infrastructure (2017 to 2022) (closed)**<br>To *endorse* a paper from Director of Estates. | **I** |

**11 Main Library Study (closed)** **J**
To *approve* a paper from Chief Information Officer and Librarian and Director of Estates.

**12 New Teaching Rooms at High School Yards Former Nursery (closed)** **K**
To *approve* a paper from Director of Estates.

**ROUTINE ITEMS**

**13 Estates Committee Sub-Group Approvals** **L**
To *homologate* a paper from Depute Director, Head of Estate Development.

**14 Development Trust Campaign Capital Project Update (Closed)** **M**
To *note* an update from Director of Philanthropy and Donor Relations, Development and Alumni Services.

**15 Strategic Acquisitions and Disposals (closed)** **N**
To *note* paper from Director of Estates.

**16 Teaching Rooms - Integrated Scenario Planning** **O**
To *note* a paper from the Depute Director, Estate Development

**ITEMS FOR FORMAL APPROVAL/NOTING (**Please note these items are not normally discussed.)

**17 College of Medicine and Veterinary Medicine Summary Report (closed)** **P**
To *note* and *approve* a paper from College Registrar, Medicine & Veterinary Medicine will comprise:

**18 Support Group Summary Report (closed)** **Q**
To *approve* a paper by Director of Estates

**18.1 Emergency Phones (closed)** **Q1**
To *note* and *approve* a paper by Chief Information Officer and Librarian.

**18.2 Sustainable Campus Fund: Performance Update** **Q2**
To *note* a paper by Assistant Director of Estates (Head of Estates Operations)

**19 Date of next meeting: Wednesday 13 September 2017 -09:30 – 12:30 to be held in Room 4.31/33, Informatics Forum, 10 Crichton Street**

THE UNIVERSITY of EDINBURGH

D

**ESTATES COMMITTEE**

**24 May 2017**

# Integrated Travel and Transport Plan 2017 - 2021

## Description of paper

1. This paper presents the University of Edinburgh Integrated Travel and Transport Plan 2017 – 2021.

## Action requested

2. Estates Committee is asked to approve the Integrated Travel and Transport Plan 2017 – 2021 (Appendix).

## Recommendation

3. It is recommended that Estates Committee approve the Integrated Travel and Transport Plan 2017 – 2021.

## Background and context

4. The Integrated Travel and Transport Plan 2017 – 2021 sets clear targets and actions for the various methods of travel to and between our campuses. This is the first time that the University has sought to take a strategic overview of the transport requirements of the University and set targets and actions that will support both the growth of the University, the Estate Strategy and the Residential Strategy.

## Discussion

5. The plan sets out actions that will address the fundamental inequalities in the current provisions of transport options for staff and students at the University. The actions within the plan seek to reduce the reliance on the existing King's Buildings free shuttle bus service whilst accepting that students value it as an important link for students with back-to-back study needs at King's Buildings and in the Central Area.

6. The plan aims for the introduction of improved Lothian Buses student ticketing products including that of a student single fare. Consultations with students and EUSA have consistently demonstrated the strong desire for a product of this nature. Success in this regard would produce a product that greatly reduces the transport costs of all students regardless of where they live and study, rather than the current focus of subsidising all free travel between King's Buildings and the Central Area. This would potentially allow the shuttle bus to return to its original concept of a service for those issued with priority passes for urgent inter campus travel to support their academic timetable.

7. Other actions in the plan seek to encourage staff and students to walk and cycle to and between our campuses through improvements in facilities as part of the capital development plan, improvements in routes, access to bike hire and bike storage schemes. All of these will help play a part in working towards the commitments in our Zero by 2040 Plan.

8. The plan further seeks to support staff and students to move away from car travel to and between our campuses through the introduction of various initiatives to support this change in behaviour, thereby further reducing the carbon emissions from transport in support of local and national policy targets.

**Resource Implications**

9. There are no immediate resource implications; however, additional funding from Estates budgets for transport initiatives outlined in the plan may need to be allocated.

**Equality & Diversity**

10. Equality and Diversity issues will be considered throughout the implementation of the specific actions outlined in the plan.

**Next steps/implications**

11. Following approval by Estates Committee, the Integrated Travel and Transport Plan 2017 - 2021 will be presented to CMG for approval. An action plan for the priority actions for the various methods of travel will be produced and success measured against this.

**Consultation**

12. In the development of this paper and the plan, consultations have taken place with EUSA Sabbatical Officers, Students, Staff, College Registrars, the Deputy Secretary, the SRS Department, the Director of Corporate Services, the Director of Estates and the Assistant Director of Estates.

**Further information**

13. Author

David Brook
Head of Support Services
10 May 2017

*Presenter*
Grant Ferguson
Assistant Director

**Freedom of Information**

14. This paper is open.

# University of Edinburgh Integrated Transport Plan 2017 - 2021

This Plan sets out how The University of Edinburgh will achieve its vision that by 2021 our students, staff and visitors will be able to access our estate by the mode of transport best suited to their needs.

The Plan supports the University's strategic objective of leadership in learning through facilitating equitable access to a variety of affordable transport options designed to enhance the student and staff experience. It supports both our Estate Strategy and Residential Accommodation Strategy and recognises that our dispersed estate presents significant transportation challenges for our students and staff. The University also recognises that transport makes a significant contribution to our carbon footprint and local air quality. The University Climate Change Strategy 2016 - 2026 lays out a comprehensive whole institution approach to climate change mitigation and adaptation in order to achieve its ambitious target of net zero carbon by 2040. Reducing carbon emissions from commuting and business travel will make an important contribution to this target. Since 2000, we have successfully reduced the proportion of staff who travel by car from 40% to 27%, and students from 9% to 6%. The majority of our students and staff choose to walk, cycle or use public transport and actions within this plan will support growth in travel by these methods. Student feedback is clear that the University must do more to improve the accessibility of the estate by all modes of transport, but with a particular emphasis on public transport. To achieve the targets below engagement with Lothian Buses, EAUC, EUSA, Sustrans, SEStrans, staff and students will be essential.

Targets to be achieved by 2021

1. Increase the proportion of staff walking to University to 30% (25% in 2016) and students to 60% (57% in 2016). *(New Target)*
2. Through negotiation with Lothian Buses, seek to introduce a number of student ticketing options better suited and priced to the needs of our students.
3. Increase the proportion of students and staff cycling to University to 15% (from 13% in 2016) *(to match CEC Local Transport Strategy Target.)*
4. Better the City of Edinburgh Council's target for all travel methods by 2021 as measured by our bi-annual travel survey. *(New target, specific data in table 1 below)*
5. Public transport provision to and between University sites regarded as good to excellent by 75% of our student and staff users as measured in our bi-annual travel survey. *(new target)*
6. Reduce car driving to 29% or less at each University campus. (excluding Easter Bush) *(to match CEC Local Transport Strategy Target.)*
7. Increase the proportion of parking permit holders using an electric vehicle from 0.4% in 2016-17 to 2%. *(new target)*
8. Increase the proportion of electric vehicles in the University fleet from 4% in 2016-17 to 30%. *(new target)*

**Table 1: City of Edinburgh Local Transport Strategy (LTS) transport method targets compared to University actual transport method share**

| Mode | City of Edinburgh Council - Travel to work mode share target 2020 | University of Edinburgh Mode share 2016 (student & staff) |
|---|---|---|
| Walk | 21% | 48% |
| Cycle | 15% | 13% |
| Public Transport | 32% | 29% |
| Car | 29% | 9% |
| Other | 2% | 1% |

The following action plans set out the specific proposals for each method of travel to achieve our targets.

## Walking

Walking is the most popular mode of transport to commute to the University. The 2016 travel recorded 48% of students and staff walking each day. Analysis of where our students and staff live in relation to where they study or work shows there is potential to increase the proportion of staff who walk to work, but that the proportion of students who walk is already near its maximum level.

| Target | By 2021, increase the proportion of staff walking to University to 30% (25% in 2016) and students to 60% (57% in 2016). |
|---|---|

| Walking | | |
|---|---|---|
| **Actions** | | |
| **W1** | **Provide and maintain safe accessible routes to and within University sites** | We will review our existing pedestrian infrastructure identifying and taking action to create safe routes, accessible for disabled students, staff and visitors. Careful consideration will be given to the inter-relationship of cyclists and pedestrians to ensure the appropriate use of shared and segregated paths. |
| **W2** | **Implement a pedestrian signage strategy for key University destinations** | We will liaise with the City of Edinburgh Council to develop and implement a pedestrian signage strategy to connect our main sites, with a particular focus on connecting our main accommodation and academic sites within the Central Area and King's Buildings. |
| **W3** | **Provision of information to support and encourage walking** | We will design communications and initiatives that raise the profile of walking as a means of commuting and travelling between sites, which highlight the signposted routes and the personal benefits of walking. These actions will be developed in conjunction with The Healthy University Project. |

## Cycling

Cycling is the regular method of travel for 13% of our students and staff to commute to University. This is a community of at least 6,500 regular cyclists making an important contribution to reducing carbon emissions, air pollutants and traffic congestion.

| **Target** | **By 2021, 15% of staff and students will be cycling to work and study (up from 13% in 2016).** |
|---|---|

| **Cycling** | | |
|---|---|---|
| **Actions** | | |
| CY1 | **Improve cycle routes to, between and within our sites** | We will work with our local authorities to identify where cycle routes need to be invested in to support access to and between our sites. |
| CY2 | **Increase cycle parking as well as shower and changing provision** | We will ensure that the Capital Development Programme (CDP) incorporates high quality cycle parking, shower and changing facilities to support the target of 15% of staff and students cycling to the University by 2021. Where possible these facilities will be combined to create cycle hubs for one or multiple buildings. More cycle parking, shower, locker and changing facilities will be delivered for buildings unaffected by the CDP and investment will be guided by the University's 2014 cycle infrastructure audit. |
| CY3 | **Provide vacation time cycle storage** | We will develop a solution to the lack of cycle storage provision during vacation periods, for students unable to take their bikes home with them. The current lack of provision is a disincentive to cycling at the University. |
| CY4 | **Relaunch the Cycle to Work salary sacrifice scheme for staff** | We will relaunch the existing scheme that has seen 1375 bikes purchased by staff since 2008. The scheme provides an important financial incentive for staff to commute to work by bike. |
| CY5 | **Continue to provide affordable access to bikes** | We will, following a careful evaluation of the impact and cost of providing the eCycle (electric bikes) and UniCycle (student bike rental scheme), further develop these and actively pursue an alternative model cycle hire scheme. |
| CY6 | **Provide more opportunities for cycle training** | We will provide guidance, advice and training on cycling safely and promote cyclist awareness amongst vehicle drivers. |
| CY7 | **Work with the Healthy University Project** | We will work with the Healthy University Project to broaden participation in cycling amongst students and staff as a means to increasing activity levels. |

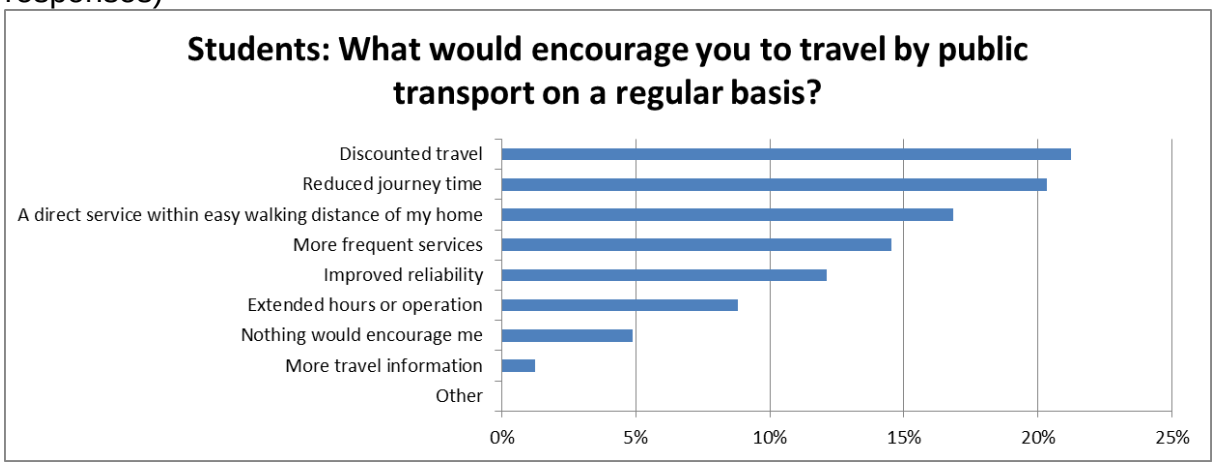
## Public Transport

We have approximately 12,000 regular bus users and 2,500 regular rail users amongst our students and staff. This includes 1,500 students and staff who utilise the King's Buildings Shuttle Bus as their primary means of travel to study or work. Our students and staff also need to use buses to travel between our sites to meet their academic timetable or business responsibilities.

### Buses

Edinburgh has an excellent public bus network, operated by Lothian Buses, and supplemented by other operators. The University is well served by this network, and there is significant potential for service route and frequency enhancements at King's Buildings where a dependency on the free shuttle bus service (paid for by the University) has evolved. This shuttle bus service remains the only free shuttle bus service provided between University campuses. Demand for this shuttle has grown massively from the initial intention of providing rapid inter-campus travel for a small group of students to meet their academic timetable needs. It is now used for commuting at key points of the day for the small proportion of the 50,000 students and staff who live close enough to the central area pick up point. Transferring demand from this service to other methods of travel will improve the fairness of the transport offering to all students, an issue consistently highlighted by students.

Figure 1: Results from the 2016 University of Edinburgh Student Travel Survey (3500 responses)




### Tram

The University is not directly served by the Edinburgh Tram, though it is part of the public transport network and offers interchange possibilities with bus services. Tramline 3 would, if developed, serve the BioQuarter and provide a connection with the Central Area and the city centre. Tramline 3 was not approved by the Scottish Government and further expansion of the Edinburgh Tram is likely to focus instead on North Edinburgh.

### Rail

Rail use is comparatively low, with just 5% of students and staff travelling by rail as their usual means of commuting. This reflects the fact that Edinburgh has a very limited local rail network and that the majority of our students and staff live within Edinburgh. Students and staff travelling by rail are commuting from Fife, the Lothians and Glasgow. From September 2015 the new Borders railway has been providing a rail connection to the city from the Borders and Midlothian.

| | |
|---|---|
| **Target** | **Public transport provision to and between University sites regarded as good to excellent by 75% of our student and staff users as measured in our bi-annual travel survey** |

| **Public transport** | | |
|---|---|---|
| **Actions** | | |
| **PT1** | **Address the capacity problems on the KB Shuttle Service from 2017-18** | We will address the issue of the lack of capacity on the KB Shuttle Service to meet the current level. Any solution will continue the principal of providing free travel between our two main campuses for those with an academic need for urgent inter-campus travel. |
| **PT2** | **Aim to secure a financially attractive student public bus ticketing product** | We will, in partnership with Lothian Buses, seek to introduce ticketing products that provide the flexibility students require, at a cost to the student that offers value for money. This will be available for all undergraduate and postgraduate students, regardless of their study location. |
| **PT3** | **Work with public bus operators to agree bus service enhancements** | We will work with bus providers to enhance services to our sites to better meet the commuting and inter-site travel needs of our staff and students. |
| **PT4** | **Ensure academic timetabling considers public transport accessibility** | We will work with the Timetabling Unit to ensure that the constraints of public transport are considered and prioritised when developing the academic timetables of students. |
| **PT5** | **Improve public transport information provision** | We will improve public transport information provision acknowledging the diverse expectations and requirements of different user groups. |
| **PT6** | **Engage with the development of the tram network** | We will continue to engage with the City Council's ongoing plans to develop the Edinburgh Tram network. |
| **PT7** | **Engage with rail operators** | We will engage with rail operators to improve commuter services and ticketing options, and aim to develop schemes to attract more staff to switch from road to rail |

## Reducing car travel

Over the last 15 years the University has successfully reduced the proportion of staff and students who commute by car, by supporting and encouraging a shift towards walking, cycling and public transport use. The proportion of students and staff travelling

by car is now very low at 9% and well within the City of Edinburgh Council Local Transport Strategy target of 29%, though this varies between our sites:

**Table 2: Proportion of car journeys to work or study at the main University sites (2016 travel survey)**

| Site | Car mode share |
|---|---|
| Central Area | 7% |
| King's Buildings/Royal Observatory | 15% |
| RIE/QMRI, BioQuarter | 22% |
| Western General Hospital | 21% |
| Pollock Halls of Residence | 47% |
| Easter Bush Campus | 50% |

| Target | Reduce car driving to 29% or less at each University site by 2021.(excluding Easter Bush) |
|---|---|

| Car travel | | |
|---|---|---|
| **Actions** | | |
| **C1** | **Evaluate and adapt the University's Parking Management System** | We will continue to evaluate and adapt the Parking Management System on a site by site basis to manage a decreasing provision of car parking in a manner that best supports the business continuity of the University. |
| **C2** | **Review parking permit charges** | We will review the levels of car parking charges at each campus on an annual basis. |
| **C3** | **Review of business travel by private car** | We will conduct a review of business travel by private car to understand the health and safety issues the University may need to address, and the environmental and financial impacts of the use of private vehicles to conduct University business. |
| **C4** | **Promote short term vehicle hire** | We will continue to work with Enterprise Car Club to consider opportunities to host more City Car Club vehicles on University sites and work to increase staff membership of the scheme. |
| **C5** | **Increase membership of the Tripshare scheme** | We will prepare annual communication plans to promote Tripshare and increase membership of the scheme. |

## Low Carbon Vehicles

The University has publicly declared its intention to address the challenges of climate change and reduce its carbon footprint by signing the Universities & Colleges Climate Commitment for Scotland. In Scotland the transport sector contributes 20% of the

nation's total carbon footprint, and therefore has an important role to play in contributing to carbon reduction.

The Scottish Government has committed to the phasing out all petrol and diesel fuelled vehicles in our urban environments by 2050. This ambition aligns with the emissions target set in The Climate Change (Scotland) Act 2009 of achieving at least an 80% reduction in greenhouse gas emissions by 2050. The University has acted in support of this through its ambitious Zero by 2040 target.

| | |
|---|---|
| **Targets** | **2% of University parking permit holders will drive an electric vehicle by 2021**<br>(from a baseline of 0.4%, and actual numbers of 10 vehicles in 2017 to 50 vehicles in 2021) |
| | **30% of the University fleet will be electric by 2021**<br>(from a baseline of 4% in 2017) |

| **Low carbon vehicles** | | |
|---|---|---|
| **Actions** | | |
| **LCV1** | **Increase the provision of electric vehicle chargers across the Estate** | We will identify 50 locations to install charge points within University car parks across the estate for the use of students and staff who commute by electric vehicle. We will install a sufficient number of charge points to support the target growth in the number of electric vehicles within the University fleet. These infrastructure improvements will be funded through existing government grant schemes. |
| **LCV2** | **Commitment to providing free access to charge points** | We will ensure that staff and student car park permit holders using electric vehicles will be provided with free access to charge points until 2021. |
| **LCV3** | **Commitment to provide free parking permits for electric vehicle drivers** | We will encourage staff and students to purchase electric vehicles by maintaining the free electric vehicle parking permit until 2021, subject to meeting parking permit eligibility requirements. |
| **LCV4** | **Counteract misconceptions about electric vehicles** | We will prepare a communication plan targeting parking permit holders and Vehicle Coordinators that aims to provide the facts about the benefits of owning or leasing an electric vehicle. We will organise events to provide students, staff and Vehicle Coordinators the opportunity to try vehicles and speak to manufacturers. |
| **LCV5** | **Undertake a fleet review** | We will undertake a fleet review to identify opportunities to reduce the size of the fleet, improve the fuel efficiency of the fleet and switch to lower and zero carbon vehicles. |

| | | |
|---|---|---|
| **LCV5** | **Provide access to electric vehicle driver training** | We will ensure all drivers of University electric vehicles undergo electric vehicle driver training, and provide opportunities for students and staff to access this training. |
| **LCV6** | **Increase the use of electric and low carbon vehicles in vehicle hire** | We will work with our vehicle hire suppliers and the Enterprise Car Club to provide opportunities for staff hiring vehicles for business journeys to use electric and low carbon vehicles. |
| **LCV7** | **Carry out a feasibility study for a salary sacrifice scheme** | We will investigate opportunities to offer a salary sacrifice scheme for staff to purchase electric and low carbon vehicles. |
| **LCV8** | **Provide access to fuel efficient driver training** | We will provide all authorised drivers of diesel/petrol University vehicles with Fuel Efficient Driver Training. |
| **LCV9** | **Introduce fuel efficient technologies to the fleet** | We will implement fuel efficiency technologies into the fleet as deemed appropriate by the Fleet Review. |

## Monitoring and Review

We will review progress toward our planned targets utilising the following data collection exercises and we will prepare an annual action plan to work towards achieving all the targets within this plan by 2021.

### *Student and Staff Travel Surveys*

We will continue to monitor how our students and staff commute to study and work through bi-annual University-wide travel surveys. The survey will continue to collect data that will allow us to assess our progress towards the 2021 targets.
The survey will continue to collect data to enable the calculation of an estimate of the University's Commuter Travel Carbon Footprint. This information will be used to contribute to the monitoring and evaluation of the University's Climate Change Strategy 2016-2026.

### *Car parking permit review*

Progress towards increasing the proportion of electric vehicles used by student and staff car parking permit holders will be monitored on an annual basis through an analysis of parking permit applications to identify the number of electric vehicle parking permit holders.

### *Fleet Review*

Progress towards increasing the proportion of electric and low carbon vehicles in the University fleet will be monitored on an annual basis.

## Context and Background Information

The University of Edinburgh has 36,500 students and 13,500 academic and support staff (9,500 FTE) working and studying across five main campuses. With our sites dispersed across the city and into Midlothian, and a teaching timetable that requires students and staff to move between sites during the course of the day, we collectively place significant demands upon the City of Edinburgh and south east Scotland's transport infrastructure. These travel demands make a contribution to traffic congestion, air and noise pollution as well as carbon emissions. The quality and provision of transport infrastructure directly impacts on the student experience and operation of the University. Student feedback is clear that the University must do more to improve the accessibility of the Estate by all methods of transport, but with a particular emphasis on public transport.

### Travel policy at The University of Edinburgh

The University has had a sustainable travel policy in place since 2000, which was updated and adopted by Court in 2010 as the Transport and Travel Planning Policy[1]. The policy plays a vital role in supporting capital development planning applications. A key target for the University has been to:

***Exceed travel to work mode share targets, set out in the City of Edinburgh Council's Local Transport Strategy, that are relevant to specific University sites.***

This Integrated Transport Plan 2017-21 has been developed to contribute to the objectives of key University strategies and policies. The University of Edinburgh Strategic Plan 2016 sets out our vision to be a truly global university, rooted in Scotland's capital city, making a significant, sustainable and socially responsible contribution to the world. The Strategic Plan commits to improving the local environment, ensuring sustainability and accessibility are built in to our estates, energy and transport policies and practices.

The University's Estate Strategy sets priorities for the estate that take seriously our social and environmental responsibilities. It specifically recognises the significant contribution that student and staff travel makes to the University Carbon Footprint, and commits to extending the range of measures already in place to encourage and facilitate sustainable travel.

The Integrated Transport Plan will contribute to the University's Zero by 2040 Climate Strategy. The actions to reduce car use, and promote active travel for the journey to work / study, inter-site travel and local business journeys will contribute to the ambitious carbon reduction target.

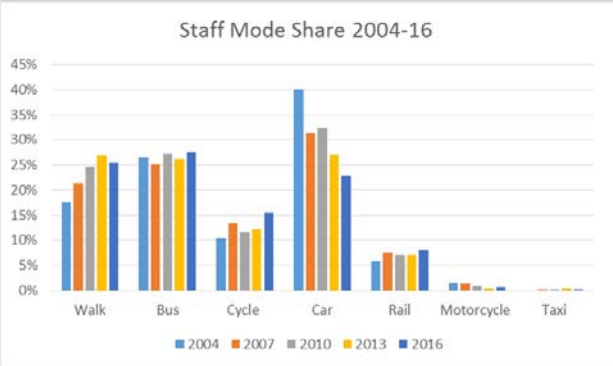
### Understanding how we travel

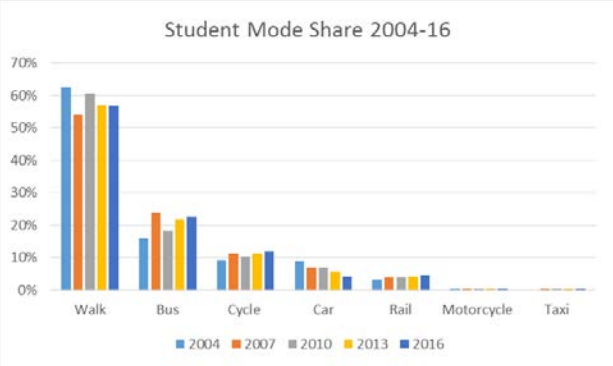
The Integrated Transport Plan 2017-21 was prepared following a review of existing travel behaviour and the travel policies and measures the University has implemented.

[1] University of Edinburgh Transport and Travel Planning Policy (2010): http://www.docs.csg.ed.ac.uk/EstatesBuildings/Transport/Policies/Transport%20and%20Travel%20Policy%202010.pdf

***Travel Surveys***
To monitor the effect of the travel policy and progress towards targets the University has undertaken travel surveys since 2004. Since 2007 the travel survey has collected data to provide an estimate of the overall carbon footprint for commuter travel at the University.

***Travel behaviour change***
Since 2004 the proportion of staff using a car to commute to work has decreased from 40% to 23%. A greater proportion of staff now walk, cycle or travel by rail. In 2004 just 9% of students travelled by car, and by 2016 this had reduced to 5%. Over this time period the proportion of students using public transport, shuttle buses and cycling that has experienced growth.




Collectively the travel behaviour of our students and staff provides an overall mode share to compare against our target to exceed the City of Edinburgh Council's Local Transport Strategy (LTS) Mode Share Targets for 2020 (Table 1). The Council's targets are to increase walking, cycling and public transport and to reduce car use. The proportion of students and staff walking to University is far in excess of that of the Council's targets for 2020, and we have a significantly lower mode share for car use than has been set for the city. The only mode falling short of the target overall is cycling.

## Walking
Walking is the most popular mode of transport to commute to the University. The 2016 travel survey recorded 48% of students and staff walking each day. Analysis of where our students and staff live in relation to where they study or work shows there is potential to increase the proportion of staff who walk to work, but that the proportion of students who walk is already at its maximum level.

We encourage students and staff to walk for the following benefits:
- Improved health and wellbeing
- Zero carbon emissions and other air and noise pollutants

Every student, member of staff, and visitor to the University accesses our estate on foot, whether that be for the whole journey, or from the bike parking space, the bus stop, rail station or car parking space. It is therefore critical that our buildings are easily and safely accessible on foot and by people with a disability. The University will continue to develop an estate with clearly defined and signposted pedestrian access routes within a high quality public realm.

The actions for walking within this plan focus on measures that will improve pedestrian infrastructure to and within our sites, and how we encourage walking through improved communication, information and support.

## Cycling

The popularity of cycling as a means of commuting to the University and across the city in general is experiencing growth, and this is attributable to a range of factors. At the University we have an excellent track record of providing infrastructure to support cycling, together with initiatives to encourage cycling including bike hire schemes, free bike maintenance and a cycle to work scheme for staff.

The University will continue to support and encourage more students, staff and visitors, by implementing a series of actions under the following themes:

### *Quality Infrastructure*

Quality cycling infrastructure is fundamental to supporting and encouraging more people to cycle. This means convenient and accessible routes that feel safe and enjoyable to use, combined with the right facilities at the end of the journey to securely store a bike and the opportunity to shower and change. We will work with the local authorities to improve cycle routes to our sites, and incorporate the provision of quality cycle routes through our estate as part of the delivery of public realm master planning. The University's Capital Development Programme (CDP) will incorporate the provision of cycle hubs (high quality cycle parking, shower and changing facilities). In addition there will be a 4 year investment of c. £350k (funding already agreed) to increase provision for the wider estate. We will also ensure that the provision of infrastructure is effectively communicated through the development and provision of signage and route maps.

### *Affordable access to a bike*

To encourage more students and staff to cycle they need easy and affordable access to a bicycle. Opportunities to try cycling before making the financial commitment of ownership can help individuals experience cycling and make an informed choice. Over the last 2-3 years the University has introduced a student bike hire scheme called UniCycles, and an electric bike pool scheme for staff called eCycle. We will evaluate both schemes and determine the longer term viability of further developing and operating bike hire schemes for the University. We are aware that the local authorities and transport operators are actively considering options to provide a bike hire scheme for the city. It is likely that there will be opportunities for the University to be closely involved both in terms of hosting hire facilities and utilising the scheme.

### *Training*

Our students and staff tell us that one of the barriers to taking up cycling is a lack of skills and confidence cycling in traffic. We will continue to provide opportunities for students and staff to receive cycle training, working with the Healthy University project to increase participation. In encouraging our students and staff to cycle we also have a moral obligation to ensure they are informed and educated about how to do so safely and with regard to the safety of other road users. The University has a duty to ensure that staff driving on University business are doing so with consideration to cyclists and that they directly contribute to making on-road cycling feel safer.

***Community***
The importance of peer to peer support and encouragement should not be underestimated in widening participation, particularly given the size and structure of the University. Our four existing Bicycle User Groups (BUGs) offer an opportunity to work with a community of cyclists to nurture a culture of participation. The Healthy University Project is aiming to encourage physical activity amongst our students and staff. Through the project we have an opportunity to widen the support we provide to encourage our students and staff to cycle both as a means of commuting and increasing their physical activity levels.

## Public Transport

Our overall method of transport share statistics show that public transport use is 4 percentage points below the City of Edinburgh Council LTS target of 32% for 2020, however this is because the majority of students and staff walk or cycle, and we have a very low proportion of car users at just 12%.

The 2016 Travel Survey asked students and staff who do not currently use public transport (including rail), what would encourage them to use it on a regular basis. The most popular measure selected by 21% of students was “discounted travel”, whereas for staff the most popular measure was “reduced journey time” (21%).

To date the University has taken a non-strategic, site specific approach to the provision of bus transport that has produced large inconsistencies across the University. The existing approach is inequitable because some students and staff benefit from access to free bus transport, but others have to pay. The free shuttle service connecting Central Area and King’s Buildings has grown well beyond its original remit to provide inter-site travel to support the academic timetable of a small group of students and staff. The capacity and operation of the service has grown to such an extent that it is now relied upon for commuting journeys from home to place of work or study. This is primarily because users are attracted by the free fare - alternative public transport is available.

Elsewhere in the estate the University has worked with Lothian Buses to provide adequate public bus transport to enable the vast majority of students and staff to commute to their place of work / study, by paying the normal public bus fares. The only exception being that Undergraduate students of the Vet School receive a subsidy for their bus transport costs reflecting the greater distance they must travel to Easter Bush compared to other University sites. The University also provides a subsidy to Lothian Buses to support the continued operation of the Service 67, without which Lothian Buses would withdraw the service due to it being financially unsustainable.
The growing opinion amongst students is that public bus fares are too expensive, and that there should be both a cheaper student single bus fare, and cheaper season tickets.

As the University Estate continues to develop and expand we will place an increasing demand upon the public transport network. Furthermore, the Residential Accommodation Strategy, which will support the development of student residences outside the traditional southside area, will disperse student accommodation across the

city and further from the main University sites. This will mean that more students will require access to quality, affordable public transport.

It is imperative that the University adopts a strategic approach to the provision of public transport that addresses the inequality of the provision of free or subsidised travel, secures cheaper public bus fares for students, improves access to bus services, and considers the longer term development of the Estate. Extensive consultation regarding bus service access was undertaken across the University during 2015 to support the development of the public bus actions contained in this plan, which will be implemented under the following themes:

***Providing attractive student public bus ticket products***
Supporting and encouraging our students and staff to use public transport for commuting and inter-site travel offers a sustainable strategy to support our growing University. All students should have equal and affordable access to public transport to travel to their place of study. The University will work with the higher and further education sector in Edinburgh and the Lothians to convince Transport for Edinburgh and Lothian Buses to offer lower-priced, affordable student ticket products. Following student feedback that pay as you go options are favoured over pre-paid season tickets, there will be a particular emphasis on securing a cheaper single fare for students.

***Reduce dependency on the free King's Buildings Shuttle Bus Service***
The free King's Buildings Shuttle Service has outgrown the original remit to provide inter-site travel for a small, defined group of students and staff with an urgent requirement to travel between sites to meet their academic timetable. It is now also being used as a free commuter service and for non-urgent inter-site travel, and is unable to provide for the demand being placed on it.

The King's Buildings Masterplan aims to consolidate College of Science and Engineering teaching to the King's Buildings site by 2030. This would dramatically reduce the number of students and staff requiring to travel between Central Area and King's Buildings, and therefore the dependency on the Shuttle Bus Service for inter-site travel. Analysis undertaken by Timetabling Services indicates that based on the 2016-17 academic timetable this would remove 1,200 instances per day of students requiring to travel between Central Area and King's Buildings. The timeline for the implementation of the specific elements of Masterplan is to be determined, and it is therefore not possible at this time to determine exactly when consolidation of teaching will be delivered. The operation of the Shuttle Bus Service will be reviewed alongside the delivery of the masterplan, with the expectation that it will be gradually scaled back as inter-site demand reduces. Equally, the operation of the service during peak commuting times (pre-10am, post 4pm) will also be reviewed alongside the introduction of cheaper student bus fares, with the ultimate aim of students utilising public bus services to commute to King's Buildings.

In the short term, there is a requirement to address the capacity issues on the Shuttle Bus Service, to ensure that students and staff can travel between their academic and business commitments across King's Buildings and Central Area. Additional capacity was provided through allowing staff and students free use of the pre-existing public bus Service 41 for a trial period during Semester 2, 2016-17. Evaluation of this trial has shown that the costs associated were 350% higher than those of simply increasing

shuttle bus capacity for the same period. Data from the trial also showed that the use of the 41 caused a further increase in demand rather than just providing additional capacity to the shuttle service. Furthermore it resulted in capacity problems on the service 41.

***Improving public bus services***
The growing number of students and staff will place an increased requirement for additional capacity on the public transport network. We will maintain and develop our positive working relationship with Lothian Buses to plan public transport routes and enhancements alongside the implementation of the Estate Strategy. In the case of King's Buildings, there is a specific opportunity to develop and enhance public bus connections to the site as we work to reduce demand for the Shuttle Bus Service.

***Considering public transport access when developing the academic timetable***
The University supports students who wish to pursue cross-curricular studies, but this does increase the likelihood that students have to travel between University sites to attend courses being delivered by different schools. Unfortunately, the dispersed nature of the estate means that it can be physically impossible to attend consecutive lectures or tutorials without having to leave early or arrive late. The Personalised Timetable Service launched in 2016-17 will eventually offer students the ability to select optional modules and we will seek to ensure that travel implications and recommendations are included as part of this service.

***Improving public transport information***
The needs and expectations of our students and staff are diverse, and the provision of information on bus travel should reflect this. We will work with bus operators and transport authorities to improve access to public transport information, and consider how our own communication channels can be utilised.

***Tram***
Alongside actions to improve public bus provision we will continue to engage with the City Council's ongoing plans to develop the Edinburgh Tram network.

***Rail***
The highest rail transport share amongst students and staff is within the Central Area, which is within walking distance of Waverley Train Station. In the Central Area 28% of staff and 12% of students live outwith the city boundary, yet just 10% of staff and 5% of students commute by rail. There is an opportunity in the Central Area to grow the proportion of students and staff commuting by rail, however commuter rail travel is considered to be expensive, often overcrowded and unreliable.

As a major employer in the region we will convey the concerns of our students and staff to rail operators and seek to secure better services, more attractive season ticket deals and better information provision. We have already initiated discussions with Scotrail to introduce an incentive scheme to attract more staff onto rail for business travel purposes, and we intend to work with the other major rail operators to develop similar schemes both for business and commuting.

## Reducing car travel

As the University Estate continues to grow, new buildings will be delivered across all of the main sites, accompanied by limited or zero provision of car parking. The ratio of car parking spaces per student/staff will reduce to reflect this.

The strategies to encourage walking, cycling and public transport use are essential to support our students and staff to switch from car use.
Providing quality alternatives to the car does not necessarily address all of the reasons why people come to rely on the car as their main mode of transport. Other factors such as the overall cost of car travel versus public transport, the need to travel by car during the working day for business reasons, or to care for dependents must also be considered.

We will implement actions to reduce dependency on car use, with a particular focus on sites that are not yet within the City of Edinburgh Council Local Transport Strategy target of 29%. This target will not apply to Easter Bush Campus, which is outwith the City of Edinburgh Council and does not benefit from the same levels of walking, cycling and public transport access.

The University will continue to reduce and manage car dependency under the following themes:

### *Parking management*

Parking management plays a critical role in encouraging a switch to sustainable methods of travel. The University's Parking Management System assigns parking permits based on the individual applicant's need to drive to work or study. It has been used successfully to manage the reduction in parking spaces in the Central Area, ensuring only those who can demonstrate a need to drive may park in University car parks. The parking management system will continue to support the development of the estate.

### *Use of personal vehicles for business travel*

Just under 60% of University staff permit holders state they require to bring their car to work for business travel purposes for more than 5 days per month. If the business need for a car can be reduced or eliminated then so can the need to commute by car. The use of personal vehicles for business use is commonly referred to as the "Grey Fleet". Actions set out in the public transport, walking and cycling plans will serve to support and encourage staff to utilise these alternative modes for business travel. Such alternative modes are not always appropriate, and in some instances the car offers the most practical method of transport. For staff with a daily requirement to use a car for business, their own vehicle offers the most practical solution. It is also the duty of the University to ensure that work related journeys are safe, staff are fit and are competent to drive safely and the vehicles used are fit for purpose and in a safe condition.
Staff with a less frequent need could instead use Enterprise Car Club or short term car rentals, which may work out cheaper per mile than grey fleet mileage, and produce lower CO2e emissions as the average age of hire vehicles is lower than that of privately owned vehicles.

## Low Carbon Vehicles

The decarbonisation of road transport in Scotland is to be achieved in part through the mass adoption of plug-in electric vehicles, powered by renewable energy. The Scottish Government is also supporting the adoption of emerging low or zero carbon technologies including hydrogen fuel cell vehicles.

The Scottish Government is working with public and private sector organisations to provide the financial incentives and support to switch to low or zero carbon vehicles. From 2015-20 the Government will be focusing on: creating a public network of charge points; supporting the uptake of home recharging facilities; and providing charge points in the workplace.

To date the University has accessed Scottish Government funding to install twelve public electric vehicle charging points. These are located in the Central Area, King's Buildings and Pollock Halls. The charging points form part of a Scotland-wide network of public charging points.

The targets will be delivered by actions under the following themes:

***Commuting***

There are approximately 2,600 University parking permit holders using combustion engine cars (with the exception of 10 electric car drivers). The 2016 Travel Survey report estimates that just over 7,000 tonnes of $CO_2e$ are emitted annually by the vehicles used by students and staff who travel to work and study by car.

As an incentive to use an electric vehicle, students and staff who are eligible for a parking permit and have an electric vehicle do not pay to park at the University, nor are they charged a fee to charge their vehicle using one of the University charge points. There are currently 10 electric vehicle permit holders. The existing provision of charging points is adequately serving these permit holders who require the certainty of being able to charge their car at their workplace.

In order to support the target to grow the number of electric vehicle permit holders to 50 by 2021, the University will need to provide a similar number of charging points across the estate. The University will continue to apply for government funding to provide more electric vehicle charging points and continue to work in partnership with the City of Edinburgh Council and large employers to contribute to the development of a strategic network of charging points in the city.

The 2016 Travel Survey asked car drivers why they have not yet switched to an electric vehicle. Almost half of the respondents said that it is because the upfront costs of purchasing an electric vehicle are too high. Promoting an awareness of the cost savings from switching to an electric vehicle will help to increase their uptake. We will commit to the provision of free parking permits for electric vehicles, and access to free charging points until 2021 for our staff and students. This will provide a degree of financial certainty when considering an electric vehicle. There will be an annual review of electricity consumption and cost and the two initiatives will be reviewed in 2020. We will also investigate the feasibility of offering a salary sacrifice scheme for staff to purchase electric and low carbon vehicles, which could offer a further 30-40% saving on the cost of purchase.

***University Fleet***
The University has a fleet of 143 vehicles, of varying type and fuel used, which emitted 436 tonnes of CO2e in 2015/16 (latest data available).

Large and small diesel vans make up the largest component of the fleet at 43%. Over the last 5 years low or zero carbon vehicles have successfully entered the fleet to replace traditional diesel or petrol vehicles. These vehicles are based in the Estates Department and include 6 small electric vans, 4 petrol hybrid cars and a diesel hybrid transit van.

The Transport Office will work with University Fleet Vehicle Coordinators to undertake a review of the fleet to identify where electric or low carbon vehicles can replace petrol/diesel engine vehicles. Events will be arranged for Vehicle Coordinators to be updated on low carbon and electric vehicles, including opportunities to meet with manufacturers and test-drive vehicles.

In addition to pure electric vehicles there are a variety of low carbon vehicle technologies which may be more appropriate for some parts of the University fleet, and for staff and students. These include petrol and diesel hybrid technology, hydrogen fuel cells and Biofuels.

A substantial increase in the provision of charging points will be necessary to support the fleet. This will be addressed by continuing to secure Government funding for charge point infrastructure (in tandem with providing for University car parking permit holders).

***Business travel***
During 2015-16, University staff travelled 700,000km in hired vehicles for University business, emitting 130 tonnes $CO_2e$. We have an opportunity to work with our vehicle hire suppliers and the Enterprise Car Club to provide opportunities for staff hiring vehicles for business journeys to use electric and low carbon vehicles.

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**ESTATES COMMITTEE**

**24 May 2017**

# Estates Committee Sub-Group Approvals

## Description of paper

1. This paper provides a consolidated list of decisions taken by Estates Committee Sub-Group (ECSG) since the last Estates Committee meeting on 22 March 2017. The paper also presents a list of contracts awards (greater than £250,000) over the period 2 March 2017 to 10 May 2017.

## Action requested

2. Estates Committee is asked to homologate the decisions taken by ECSG referred to in point 5.

## Recommendation

3. The Committee is recommended to homologate ECSG decisions taken since Estates Committee last met on 22 March 2017.

## Background and context

4. This paper enhances the 'transparency' in relation to the operation of the ECSG, highlighted in the effectiveness review.

## Discussion

5. Since the Estates Committee last met, ECSG approved the following contract awards and acquisitions:

<u>Fully Approved (fully funded) Projects</u>

- Large Animal Research and Imaging Facility – Main contract awarded to Robertson Construction in the sum of £15,786,151.53. The works commenced on site on 10 April 2017 with contract completion scheduled for 18 February 2019.

- Quartermile – Phase 3 Main Enabling Works – Main contract awarded to Sir Robert McAlpine in the sum of £3,609,184.54. The works commenced on site on 31 May 2017 with contract completion scheduled for 23 March 2018.

6. A list of works contracts awards (greater than £250,000) over the period to 2 March 2017 to 10 May is included in the Appendix.

## Resource implications

7. Fully Approved (fully funded) Projects – No additional implications. Projects already contained in the Fully Approved (fully funded) Estates Capital Plan.

## Risk Management

8. There are no specific risks identified.

**Equality & Diversity**

9. No specific Equality and Diversity issues are identified.

**Next steps/implications**

10. The Estates Department will oversee any procurement processes.

**Consultation**

11. Convener, Director of Finance, Director of Estates, Head of Estate Development, Head of Estates Planning and Special Projects and Head of Estates Finance.

**Further information**

12.

| *Author* | *Presenter* |
| --- | --- |
| Graham Bell,<br>Depute Director, Head of Estate Development<br>10 May 2017 | Graham Bell<br>Depute Director, Head of Estate Development |

**Freedom of Information**

13. This is an open paper.

## Works Contracts Awards = > £250,000
## 2 March 2017 - 10 May 2017

| Appointed Contractor | Project Description | Contract Award |
|---|---|---|
| Castle Group Scotland Ltd | Firbush Point Outdoor Centre Harbour Wall Repairs | £ 306,571.00 |
| CSG (Scotland) Ltd | Appleton Tower - reconfigure Levels 3 - 9 | £ 1,494,718.73 |
| Robertson Construction | Large Animal Research and Imaging Facility | £ 15,786,151.53 |
| Maxi Construction | Alterations to 9-11 Infirmary Street | £ 658,479.17 |
| Sir Robert McAlpine | Quartermile Phase 3 Enabling Works | £ 3,609,184.54 |
| Ashwood Scotland Ltd | Salle, Centre for Sports and Exercise | £ 355,966.07 |
| Morris and Spottiswood | Kincaird's Court Refurbishment | £ 2,840,762.99 |
| Cornhill Building Services | Charles Stewart House, Reception and Access alterations | £ 360,952.04 |
| Clark Contracts | Warrander Park Crescent Phase 3 | £ 403,812.69 |
| SJS Property Services | Meadows Lecture Theatre Refurbishment | £ 276,932.24 |
| | **Total** | **£ 26,093,531.00** |

## Services Contracts Awards = > £250,000
## 2 March 2017 - 10 May 2017

| Appointed Consultant | Project Description | Contract Award |
|---|---|---|
| Hassell | Usher Institute for Population Health Sciences (Lot 2) | £ 1,974,000.00 |
| Sheppard Robson | School of Chemistry Refurbishment - Joseph Black Building (Lot 3) | £ 1,262,000.00 |
| Norr Consultants Ltd | Hospital for Small Animals Remodelling (Lot 4) | £ 376,200.00 |
| BDP | Engineering Phases 1 and 2 (Lot 5) | £ 1,206,600.00 |
| Oberlanders Architects | HiSS relocation to Holyrood, Design Team | £ 299,250.00 |
| | **Total** | **£ 5,118,050.00** |

## Goods Contracts Awards = > £250,000
## 2 March 2017 - 10 May 2017

| Appointed Supplier | Project Description | Contract Award |
|---|---|---|
| Godfrey Syrett Ltd | Holland House Furniture | £ 424,000.00 |
| Mediascape | Appleton Tower Lecture Theatres and Mezzanine - Audio Visual Equipment | £ 260,692.75 |
| | **Total** | **£ 424,000.00** |

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**ESTATES COMMITTEE**

**24 May 2017**

# Teaching Rooms - Integrated Scenario Planning

## Description of paper

1. This paper presents updated teaching room modelling analyses for each campus, and the projected requirement over the next 10 years across the estate.

## Action requested

2. Estates Committee is asked to:

- note the modelling analyses, which incorporates relocation and growth of specific CSE, CMVM and CAHSS teaching and predicts a net increase of between 43-71 in general teaching space estate (across the five zones analysed) required over the next 10 years;
- note that an additional spread of 30-32 rooms is predicted for the BioQuarter on the assumption that all existing Central area CMVM teaching relocates there;
- note that overall there is predicted to be sufficient number of rooms across the estate on the basis of the scenarios presented, with the exception of Holyrood which shows an emerging deficit on the basis of proposed School of Health in Social Science (HiSS) relocation.

## Background and context

3. This report is a summarised version of the Integrated Scenario Planning: Update presented to the Space Strategy Group meeting on 19th April 2017 and serves as a follow-up to the paper presented to March 17 Estates Committee.

## Discussion

4. Analysis across the included teaching zones (details within appendices) confirms the following zone-by-zone summary:

1) **Central Area:** confirms a high-level of incoming, good quality teaching space that currently exceeds the predicted additional requirement. This should afford the opportunity to begin the process of decommissioning existing inaccessible teaching space and strategic re-purposing on a wider level.

2) **King's Buildings:** confirms a level of incoming space that aligns well with predicted requirements. There may be opportunities for short-term re-purposing with the planned inclusion of Murchison House from 18/19.

3) **Holyrood:** currently the area of highest concern. The planned decommissioning of Charteris Land, as part of School of HiSS relocation, creates a significant shortfall of teaching space.

4) **Lauriston:** confirms a level of incoming space that aligns well with predicted requirements.

5) **New College:** confirms a projected neutral position relative to current provision.

6) **Little France:** The summary table below – the first detailed analysis conducted – confirms the projected requirement in the event that all CMVM teaching relocates from the Central area.

The analyses predict the following net increase in general teaching space estate (excluding Little France and Easter Bush) required over the next 10 years

| | **Scenario result** |
|---|---|
| 60% Frequency | 71 |
| 65% Frequency | 43 |

The transfer of all CMVM teaching to Little France would generate an anticipated requirement of 30-32 rooms (as detailed below in Table 1 and 2)

| | | **2026/27** |
|---|---|---|
| **Table 1:** CMVM only 60% frequency | 300+ | 1 |
| | 200-299 | 1 |
| | 100-199 | 2 |
| | 50-99 | 3 |
| | 21-49 | 6 |
| | 1-20 | 19 |
| | | **32** |

| | | **2026/27** |
|---|---|---|
| **Table 2:** CMVM only 65% frequency | 300+ | 1 |
| | 200-299 | 1 |
| | 100-199 | 2 |
| | 50-99 | 3 |
| | 21-49 | 5 |
| | 1-20 | 18 |
| | | **30** |

**Analysis methodology**

5. The Timetabling Unit has carried out a modelling exercise of the teaching room requirements from 2017/18 to date up to and including 2026/27 using the Room Prediction Model (RPM).

6. The scenarios are presented using the following parameters:

- An applied **frequency threshold** of either 60% or 65%
- A **scenario** which reflects assumed relocation of teaching from Central area to other zones such that:
    - CMVM is excluded from Central Area throughout (representing relocation to Little France).This assumes that the New Medical School proceeds.
    - CSE is transferred from Central Area to King's Buildings from 2021/22 onwards.
    - HiSS is transferred to Holyrood.
- A **growth model** derived via the University Diagonal Tables (see Appendix A)

Within the RPM, contingency provision is applied through:

- Upwards rounding of room calculations
- An addition to percentage growth advised (e.g. 1%)
- The addition of an ad hoc booking threshold (often applied by considering lowered frequency)

**The Timetabling Unit is happy to take further guidance/instruction on the most appropriate way to apply diagonal table growth and contingency thresholds.**

**Ad-Hoc bookings:**
By way of determining whether the TTU should move forward with planning at either 60% or 65% frequency threshold, additional analysis was conducted on all 'non-core teaching' activity, or 'ad-hoc' bookings:

- Analysis confirms an average of 10% contribution to published Frequency-based usage analysis
- A standard 10% addition to analysis may not be appropriate to apply to lecture theatre analysis, as this category of space generally accommodates a very small level of ad-hoc activity
- The general expectation that ad-hoc bookings will have much greater scheduling flexibility may be considered as part of the decision regarding the frequency threshold to apply to standard models going forward

**Resource implications**
7. There are no immediate resource implications with this paper.

**Risk Management**
8. There are no key risks with this paper, beyond the wider potential risk of not acting on emerging evidence

**Equality & Diversity**
9. There are no Equality & Diversity issues with this paper.

**Next steps/implications**
10. The results should act as an indicator for future Estate provision planning.

**Consultation**
11. TTU, Estates and Governance and Strategic Planning colleagues.

**Further information**
12. *Author*
Amy Partridge-Hicks,
Timetabling Operations and Modelling Manager
Marianne Brown,Timetable Modelling Officer
Scott Rosie
Head of Timetabling & Examination Services
11 May 2017

*Presenter*
Graham Bell
Depute Director, Estate Development

**Freedom of Information**
13. This paper can be included in open business.

## Appendix A – Growth Model

The growth model applied:

- College level growth (plus 1% contingency) for the first three years
- University peak of 4.1% (2017/18) cumulative growth thereafter for all subsequent years
- Growth in line with Governance and Strategic Planning recommendation for diagonal table use and interpretation

The summary tables provide both a real taught student number breakdown (Table 1) and percentage of growth (Table 2) across the 10-year period analysed.

| | | Table 1: Real Taught Student Growth Breakdown (Derived from University Diagonal Tables) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | College-Level Student Growth | | | University-Level Student Growth (4.1%) | | | | | | |
| | | 2016/17 | 2017/18 | 2018/19 | 2019/20 | 2020/21 | 2021/22 | 2022/23 | 2023/24 | 2024/25 | 2025/26 | 2026/27 |
| REAL | CAHSS | 19,337 | 19,825 | 20,219 | 20,659 | - | - | - | - | - | - | - |
| 1% | | 19,337 | 20,014 | 20,614 | 21,274 | - | - | - | - | - | - | - |
| REAL | CSE | 7,065 | 7,404 | 7,653 | 8,033 | - | - | - | - | - | - | - |
| 1% | | 7,065 | 7,475 | 7,804 | 8,272 | - | - | - | - | - | - | - |
| REAL | MVM | 4,821 | 5,264 | 5,733 | 6,226 | - | - | - | - | - | - | - |
| 1% | | 4,821 | 5,313 | 5,839 | 6,399 | - | - | - | - | - | - | - |
| REAL | TOTAL | 31,223 | 32,493 | 33,605 | 34,918 | 35,608 | 36,015 | 36,194 | 36,292 | 37,780 | 39,329 | 40,941 |
| Contingency | | 31,223 | 32,801 | 34,257 | 35,945 | 37,419 | 38,953 | 40,550 | 42,212 | 43,943 | 45,745 | 47,620 |

| | Table 2: College Growth | | | | | |
|---|---|---|---|---|---|---|
| | College-Level Taught Student Growth | | | | | |
| | 2017/18 | (+)1% | 2018/19 | (+)1% | 2019/20 | (+)1% |
| CAHSS | 2.5% | 3.5% | 2.0% | 3.0% | 2.2% | 3.2% |
| CSE | 4.8% | 5.8% | 3.4% | 4.4% | 5.0% | 6.0% |
| MVM | 9.2% | 10.2% | 8.9% | 9.9% | 8.6% | 9.6% |

# Appendix B – RPM Summary Tables

**Scenario: excl. CMVM, CSE to KB, HiSS to Holyrood**

The summary tables 1 and 2 in Appendix B amalgamate current estate provision and the scenario results for all wider Central and KB zones and predicts the overall 10-year requirement for general teaching rooms in these areas.

| | **Table 1: 60% Frequency of Use** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Central** | | **Holyrood** | | **Lauriston** | | **New College** | | **King's Buildings** | | **Overall** | |
| Capacity | Current | 2026/27 | Current | 2026/27 | Current | 2026/27 | Current | 2026/27 | Current | 2026/27 | Current | 2026/27 |
| 300+ | 4 | 7 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 4 | 6 | 13 |
| 200-299 | 5 | 5 | 1 | 1 | 1 | 1 | 0 | 0 | 2 | 3 | 9 | 10 |
| 100-199 | 9 | 9 | 2 | 2 | 0 | 1 | 1 | 1 | 6 | 9 | 18 | 22 |
| 50-99 | 26 | 18 | 9 | 6 | 4 | 1 | 2 | 1 | 18 | 16 | 59 | 42 |
| 21-49 | 52 | 50 | 26 | 35 | 2 | 3 | 2 | 2 | 19 | 22 | 101 | 112 |
| 1-20 | 99 | 145 | 30 | 37 | 2 | 4 | 5 | 4 | 6 | 17 | 142 | 207 |
| Overall | 195 | 234 | 68 | 82 | 9 | 11 | 10 | 8 | 53 | 71 | 335 | 406 |
| | | | | | | | | | | | **Net Increase** | **71** |

| | **Table 2: 65% Frequency of Use** | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | **Central** | | **Holyrood** | | **Lauriston** | | **New College** | | **King's Buildings** | | **Overall** | |
| Capacity | Current | 2026/27 | Current | 2026/27 | Current | 2026/27 | Current | 2026/27 | Current | 2026/27 | Current | 2026/27 |
| 300+ | 4 | 6 | 0 | 1 | 0 | 1 | 0 | 0 | 2 | 4 | 6 | 12 |
| 200-299 | 5 | 5 | 1 | 1 | 1 | 1 | 0 | 0 | 2 | 3 | 9 | 10 |
| 100-199 | 9 | 8 | 2 | 2 | 0 | 1 | 1 | 1 | 6 | 8 | 18 | 20 |
| 50-99 | 26 | 16 | 9 | 6 | 4 | 1 | 2 | 1 | 18 | 15 | 59 | 39 |
| 21-49 | 52 | 46 | 26 | 33 | 2 | 3 | 2 | 2 | 19 | 21 | 101 | 105 |
| 1-20 | 99 | 134 | 30 | 34 | 2 | 4 | 5 | 4 | 6 | 16 | 142 | 192 |
| Overall | 195 | 215 | 68 | 77 | 9 | 11 | 10 | 8 | 53 | 67 | 335 | 378 |
| | | | | | | | | | | | **Net Increase** | **43** |

## Appendix C – Lecture Hall Analysis Summary Tables

**Scenario: excl. CMVM, CSE to KB, HiSS to Holyrood**

The lecture theatre analysis focuses on a key sub-set of general teaching space. Student growth may adversely affect the ability for this space sub set to facilitate increases in upmost capacity and/or generate a requirement for repeat lecture provision. In the analysis, capacity bands are derived by assuming an occupancy threshold of 70% as part of ensuring an acceptable match of group size to room capacity.

For KB, a 50/50 model split of whole class has been included. This reflects the long-term requirement based on growth and maximum available theatre capacity of 400, with courses above 400 split evenly in a repeat lecture model. A capacity of 400 was used based on stated CSE position that 400 would be the largest lecture theatre capacity under current plans. Other iterations (such as single lecture or overspill iterations) are available by request.

Tables 1 and 2 in Appendix C summaries the generated capacity bands and the scenario results for all wider Central and KB zones (excluding New College).

**Table 1: 60% Frequency of Use**

| Central | | | Holyrood | | | Lauriston | | | King's Buildings: 50/50 Model | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Max capacity required | 70% Occupancy threshold | No of rooms (60%) | | 70% Occupancy threshold | No of rooms (60%) | Max capacity required | 70% Occupancy threshold | No of rooms (60%) | | 70% Occupancy threshold | No of rooms (60%) |
| 786 | 550 | 1 | | | | | | | | | |
| 549 | 384 | 4 | 480 | 336 | 1 | 600 | 420 | 1 | | | |
| 383 | 268 | 3 | 335 | 235 | 1 | 419 | 293 | 0 | 400 | 280 | 3 |
| 267 | 187 | 4 | 234 | 163 | 1 | 292 | 205 | 0 | 279 | 195 | 5 |
| 186 | 130 | 4 | 162 | 114 | 1 | 204 | 143 | 1 | 194 | 136 | 4 |
| 129 | 91 | 7 | 113 | 79 | 2 | 142 | 99 | 1 | 135 | 95 | 5 |
| | | **23** | | | **6** | | | **3** | | | **17** |

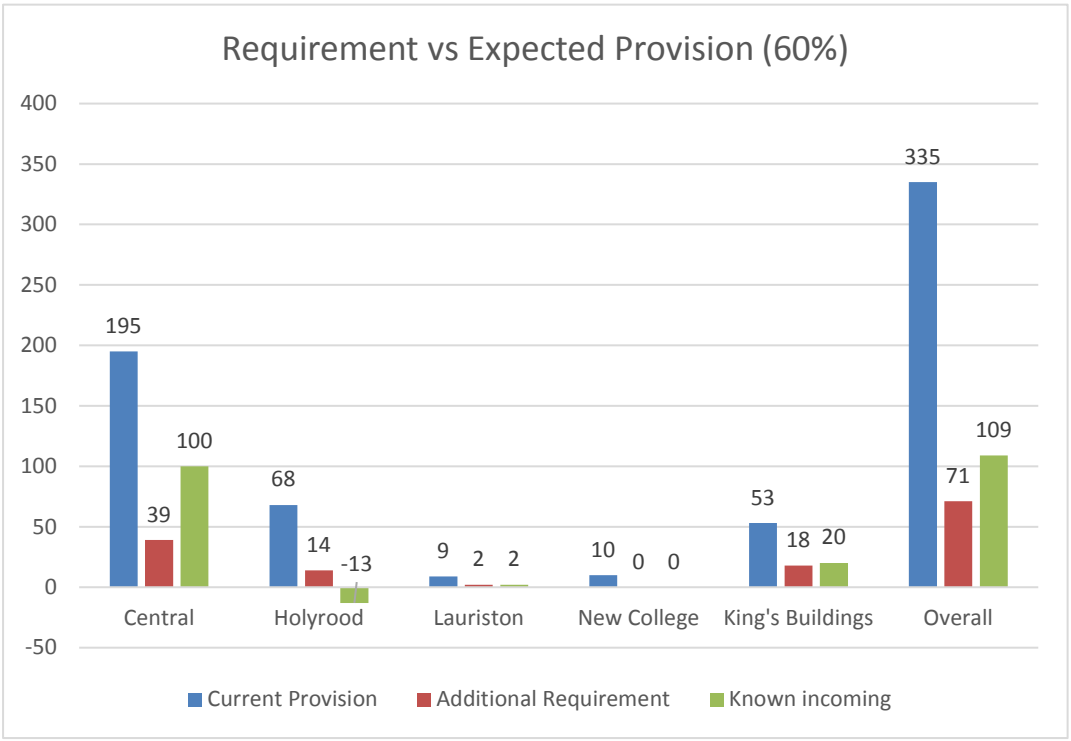
**Table 2: 65% Frequency of Use**

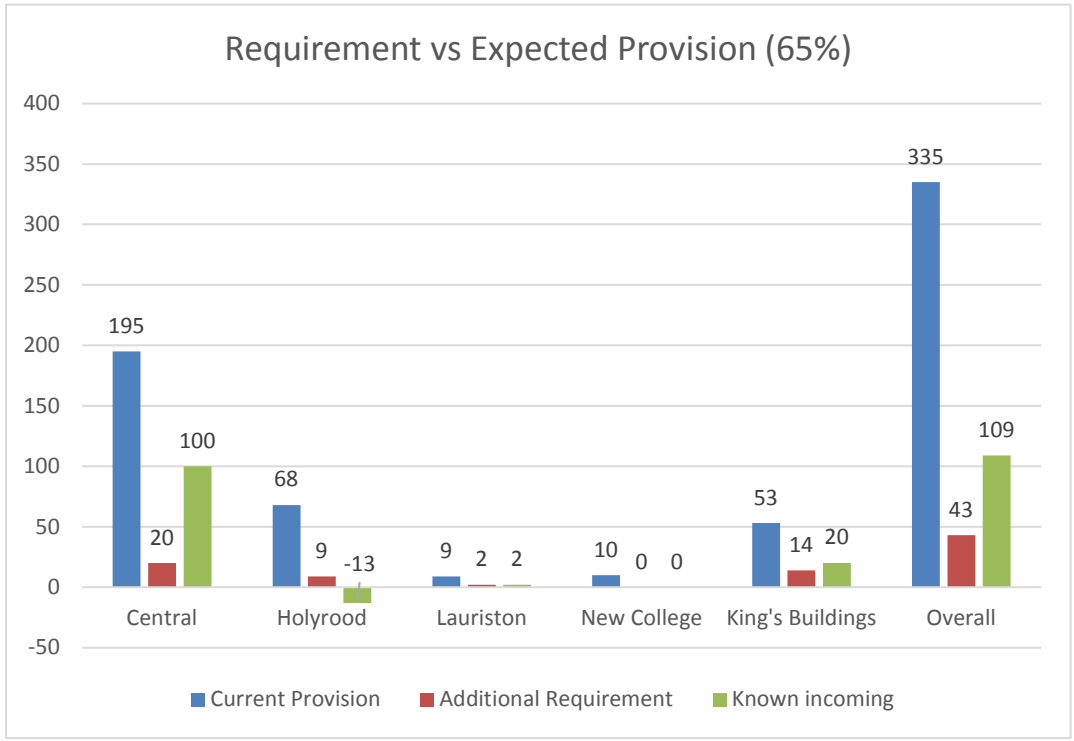
| Central | | | Holyrood | | | Lauriston | | | King's Buildings: 50/50 Model | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Max capacity required | 70% Occupancy threshold | No of rooms (65%) | | 70% Occupancy threshold | No of rooms (65%) | Max capacity required | 70% Occupancy threshold | No of rooms (65%) | | 70% Occupancy threshold | No of rooms (65%) |
| 786 | 550 | 1 | | | | | | | | | |
| 549 | 384 | 3 | 480 | 336 | 1 | 600 | 420 | 1 | | | |
| 383 | 268 | 3 | 335 | 235 | 1 | 419 | 293 | 0 | 400 | 280 | 3 |
| 267 | 187 | 4 | 234 | 163 | 1 | 292 | 205 | 0 | 279 | 195 | 4 |
| 186 | 130 | 4 | 162 | 114 | 1 | 204 | 143 | 1 | 194 | 136 | 4 |
| 129 | 91 | 6 | 113 | 79 | 2 | 142 | 99 | 1 | 135 | 95 | 5 |
| | | **21** | | | **6** | | | **3** | | | **16** |

## Appendix D – RPM Graphs

Appendix D provides a graphical representation of the anticipated additional room requirements needed for the wider central and KB zones. This reflects the "overall" results seen in Appendix B.

The graphical representation includes the expected additional estate to come online (e.g. Old College, Roxburgh) as part of the anticipated room requirement as advised by Estates. **It should be noted that this does not take fully into account potential decommissioning of estate (e.g. inaccessible teaching space) or actual shortfall over the time analysed.**

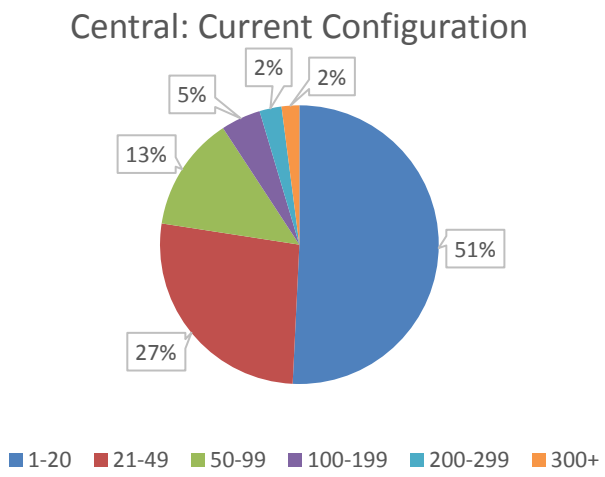
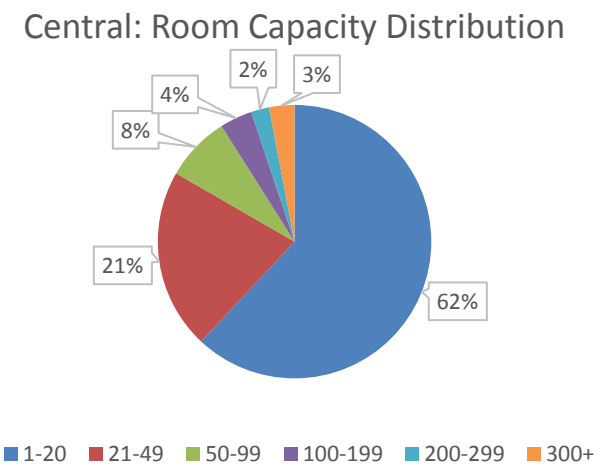
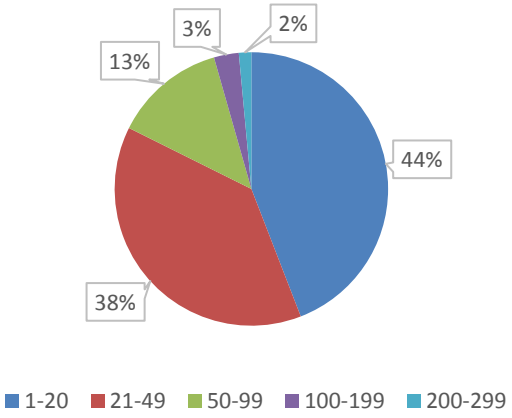
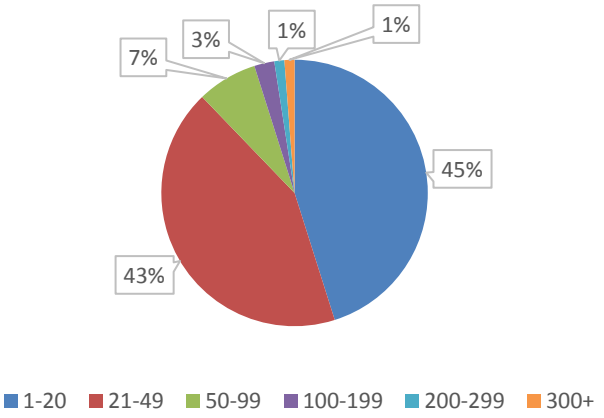


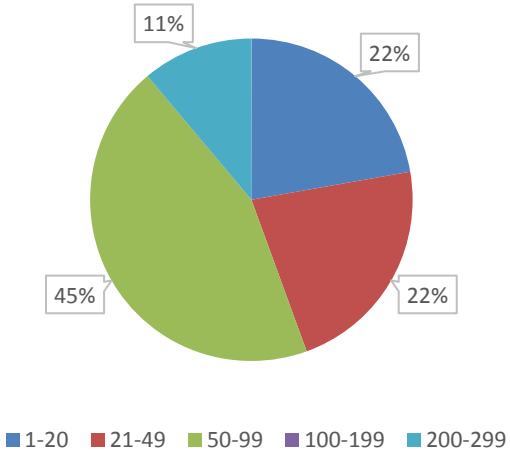
## Appendix E – RPM Capacity Distribution

Appendix E aims to show the predicted percentage difference in capacity distribution of rooms compared to the current estate provision (benchmark).

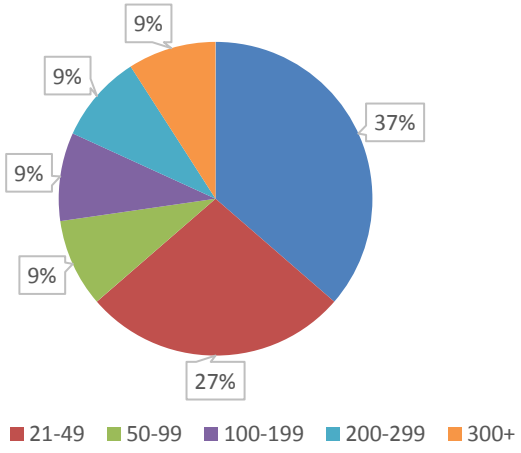
This representation may aid to identify the surplus or deficit of appropriate future room capacity ranges within the estate.

| Benchmark | Capacity Distribution Result |
|---|---|
|  |  |
|  |  |

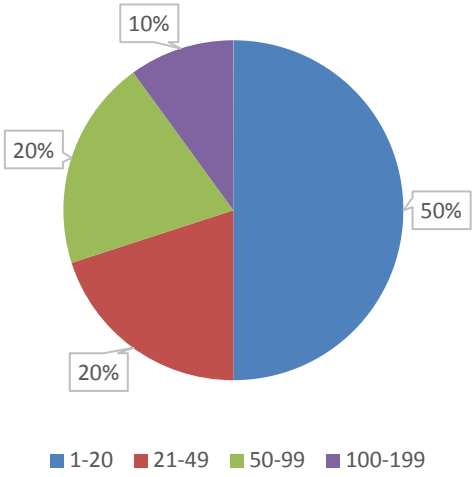
## Lauriston: Current Configuration



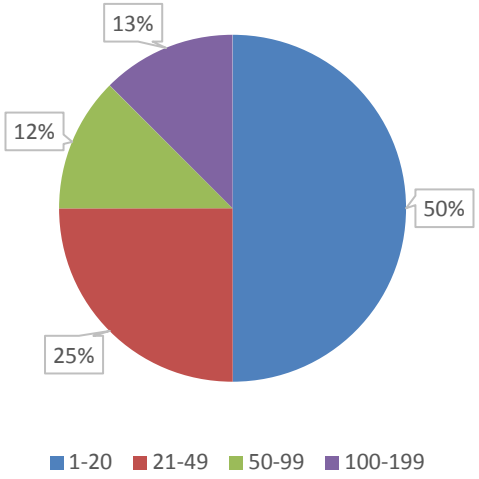

## Lauriston: Room Capacity Distribution

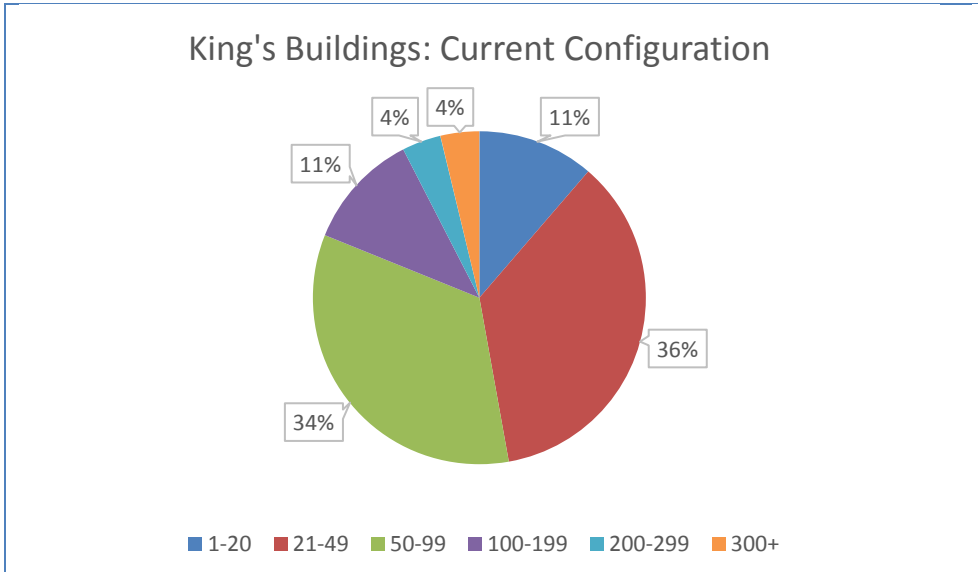


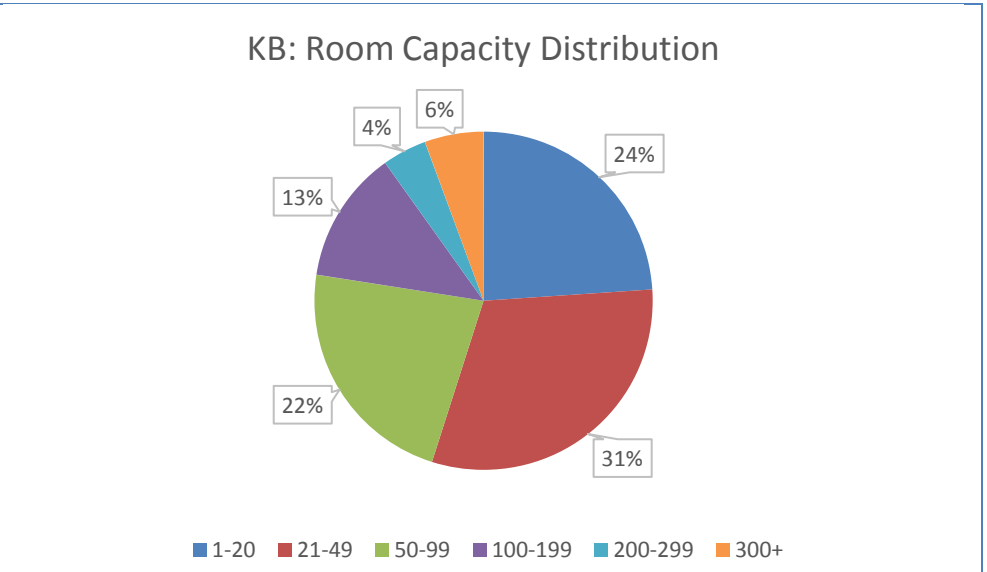

## New College: Current Configuration

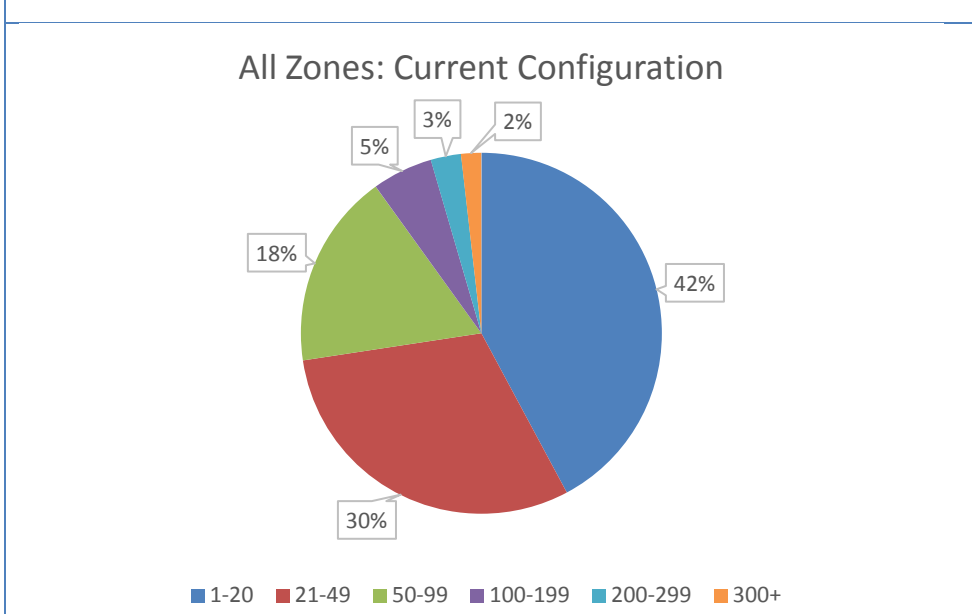


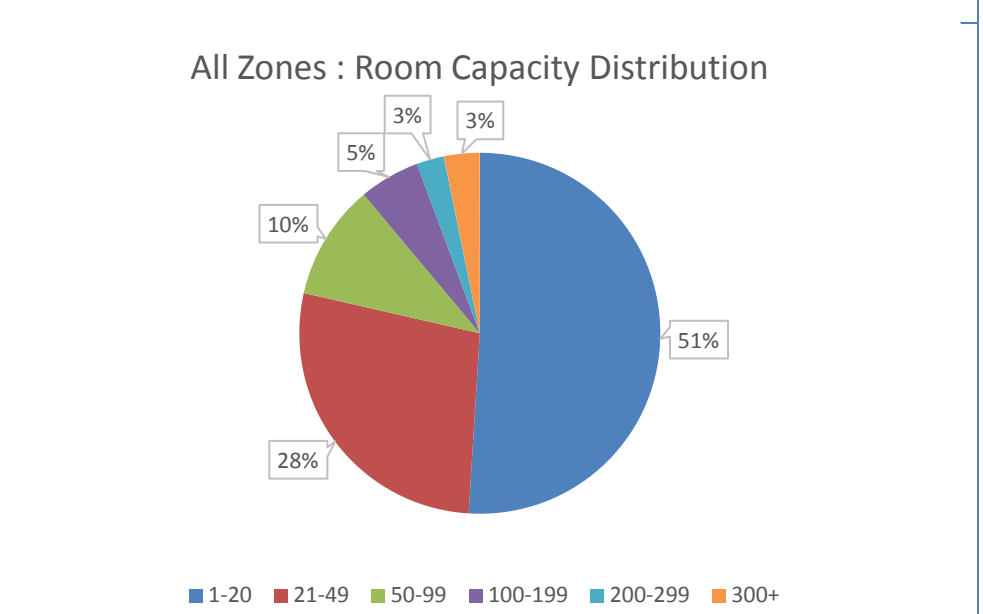

## New College: Room Capacity Distribution




King's Buildings: Current Configuration
11%
36%
34%
11%
4%
4%
1-20
21-49
50-99
100-199
200-299
300+


KB: Room Capacity Distribution
24%
31%
22%
13%
4%
6%
1-20
21-49
50-99
100-199
200-299
300+

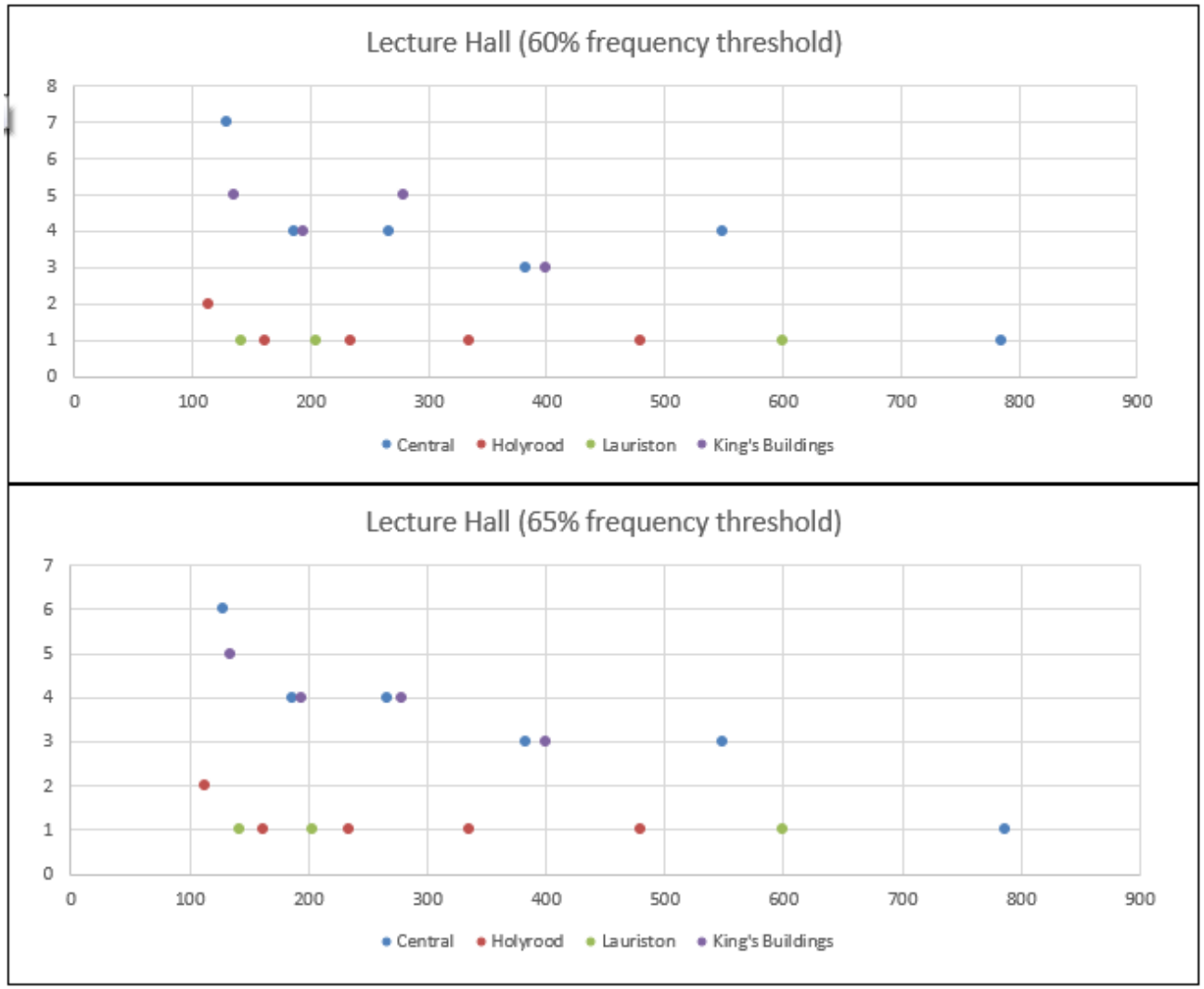

All Zones: Current Configuration
42%
30%
18%
5%
3%
2%
1-20
21-49
50-99
100-199
200-299
300+


All Zones : Room Capacity Distribution
51%
28%
10%
5%
3%
3%
1-20
21-49
50-99
100-199
200-299
300+

## Appendix F – Lecture Hall Analysis Trends

**Scenario: excl. CMVM, CSE to KB, HiSS to Holyrood**

Appendix F plots the maximum lecture theatre capacity band with the number of rooms required. This aims to graphically represent the “overall” results seen in Appendix C.



THE UNIVERSITY of EDINBURGH

Q2

**ESTATES COMMITTEE**

**24 May 2017**

# Sustainable Campus Fund: Performance Update

## Description of paper

1. This paper provides an update on the performance of the University of Edinburgh's Sustainable Campus Fund (SCF) in its first year.

## Action Requested

2. Estates Committee is asked to note the paper and provide any feedback or recommendations for future implementation and reporting.

## Background and context

3. The Sustainable Campus Fund was approved by Estates Committee in May 2016 with £2.75m allocated for 3 years commencing in 2016/17 and a Year 1 budget of £750k.

4. The Fund is an internal investment vehicle that provides financing to parties within the University for implementing energy efficiency, renewable energy, and other sustainability projects that generate cost savings.

5. Projects proposed are screened by a joint Estates-SRS working group using a points-based system that considers financial payback and minimum ROI of 6%, carbon savings, match funding, innovation, creativity, collaboration and additionality. These are then considered for final approval by the Director of Estates / Assistant Director of Estates and Director of SRS.

6. The original business case was that by investing £2.75m over 3 years, this would bring estimated financial returns of £675k per annum by Year 3 in addition to reducing our carbon emissions. For the whole fund, a simple payback period of 5.1 years, NPV of ca. £8.2m and an Internal Rate of Return of 30% were originally estimated.

## Discussion

7. The first year of the SCF has seen a strong performance in line with original expectations. At the end of Quarter 3 (28 April 2017):

- 19 Projects were approved following screening by the Utilities Working Group
- £533,420 was allocated and approved for spend for these projects
- Projects approved are estimated to bring annual financial savings of £193k and annual carbon saving of 950t$CO_2$e
- Approved projects to date have an average ROI of 477% and a combined payback of 2.8 years
- 11 projects have been rejected (either at the screening stage or at Directors' review). Some projects could not produce credible energy or cash savings, some fell outside of agreed financial metrics, and some, whilst generating savings, were really mainstream capital replacement items and thus more appropriate for local budgets to fund them. A few projects may be reviewed at a later date subject to criteria being met.

8. Savings are being achieved through a wide spread of projects such as: innovations in fume cupboards (constant to variable air flow); lighting replacements; use of sensors; a helium recovery project; replacement of Uninterrupted Power Supply (UPS); use of closed circuit chillers.

9. Staff and students from around the University have put forward ideas via an online platform. A network of over 100 Energy Coordinators has helped to disseminate information about the fund. The fund has helped to generate broader interest and awareness in energy efficiency. Organisations and stakeholders such as the Wellcome Trust have expressed interest in learning from our Fund delivery.

10. The Fund performance is reviewed quarterly. Information on potential pipeline projects is included in forecasting and updated to compare current assumptions against the original proposal. Year 1 is on track and Year 2 is expected to be on track while there are some uncertainties (as to be expected) in projects and their performance for Year 3.

**Table 1: Financial and Carbon Performance and Prediction**

| | tCO2e saving | | £ saving | | £ spend | |
|---|---|---|---|---|---|---|
| **Performance:** approved end of Q3 Year 1 | 950tCO2e (on track for target) | | £193,000 (on track for target) | | £533,520 (on track for target) | |
| **Target vs Current Forecast:** end of Q3 Y1 | **Target:** Original 3yr model | **Projects identified** (actual or potential) | **Target:** Original 3yr model | **Projects identified** (actual or potential) | **Target:** Original 3yr model | **Projects identified** (actual or potential) |
| **Year 1** | 1532 | 1795 | £287,000 | £376,900 | £750,000 | £1,080,607 |
| **Year 2** | 2813 | 2642 | £514,000 | £564,400 | £1,750,000 | £2,030,211 |
| **Year 3** | 3701 | 2943 | £675,000 | £631,300 | 2,750,000 | £2,494,211 |

**Resource Implications**

11. Resources to develop, manage and report on the fund come from existing budgets in the Estates Department and the Department for SRS.

**Risk Management**

12. All initially identified risks have been mitigated or are under active management.

**Equality & Diversity**

13. Currently no issues of concern have been identified in terms of equality or diversity of the project proposers or recipients. Gender split of recipients is approximately 1/3 female.

**Next steps/implications**

14. Year 1 approved projects will require a focus on implementation and projects that are in the pipeline will require to be developed with engagement of staff.

**Consultation**

15. The projects have been reviewed by Utilities Working Group Members.

**Further information**

16. *Author*
Michelle Brown, Head of SRS Programmes
3 May 2017

*Presenter*
Grant Ferguson, Assistant Director of Estates (Head of Estates Operations)

**Freedom of Information**

17. Open paper