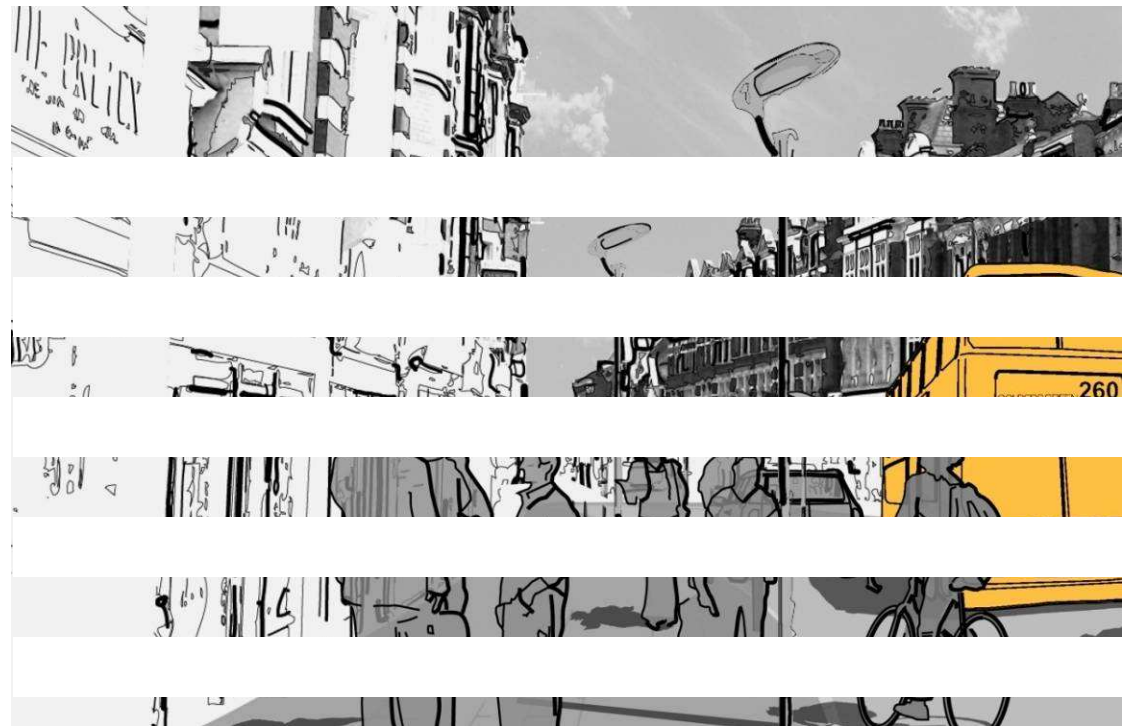
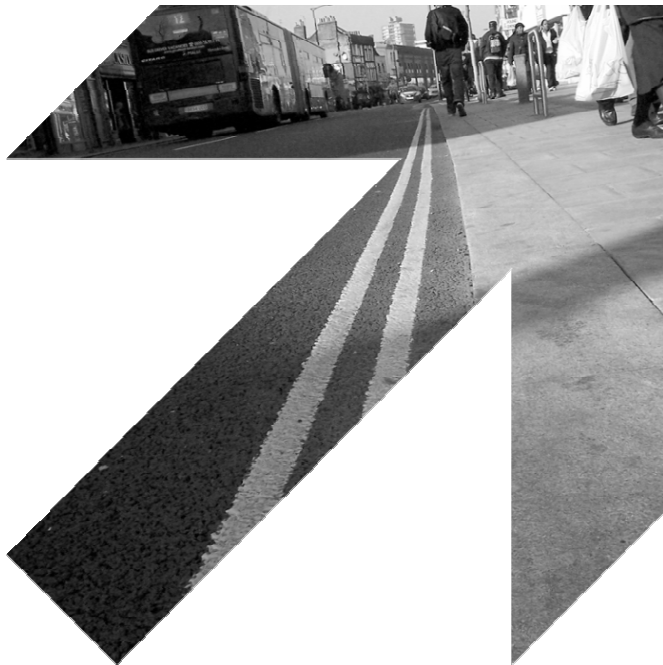


Crown Court Residences Travel Plan





Job No.	NW90474
Report No.	1
Prepared By	HN/HC
Verified	PS
Approved By	PS
Status	Final
Issue No.	2
Date of Issue	15 May 2012

JMP Consultants Limited
Il Palazzo
7 Water Street
Liverpool
L2 0RD

T 0151 229 1881
F 0151 229 1703
E liverpool@jmp.co.uk

www.jmp.co.uk



Crown Court Residences Travel Plan

This document has been issued and amended as follows:

Status/Revision	Revision Description	Issue No.	Approved By	Date
Final	-	1	PS	14/05/12
Final	-	2	PS	15/05/12

Contents

Section	Page
1 Background	1
2 Proposed Development	4
3 Policy Overview	9
4 Travel Plan Approach	12
5 Existing Conditions	14
6 Travel Plan Objectives and Targets	18
7 Travel Plan Measures	23
8 Travel Plan Implementation	38
9 Travel Plan Monitoring	41
10 Conclusions	42
Appendix	
A Campus Plan	43
B Site Plans	44
C Cycle Audit	46
D Site Audit	48
Tables	
6.1 Staff Modal Split Data	20
7.1-7.3 Site-Wide Travel Plan Measures	25
D1 Bus service timetables	49
Figures	
1.1 Travel Plan Pyramid	3
5.1 Site Location and Bus Stops	16
D1 Plusbus Operating Areas	53
D2 Walking and Cycling Isochrones	57
D3 Cycle Map	55

Introduction



JMP Consultants Ltd (JMP) has been commissioned by the University of Liverpool to prepare a Framework Travel Plan for a proposed student residential development comprising 1259 units in three accommodation blocks. The development is located at the east side of the University in central campus, to the east of Liverpool City Centre. The development is known as the Crown Court Residences site. A Transport Assessment has also been produced for the proposed development in conjunction with this Travel Plan as part of the overall planning application for the site.

The existing site is currently used as a Veterinary School, surgery and associated veterinary uses (to be relocated as part of a separate planning application). In addition, some existing staff and veterinary car parking is included in the proposed site area, as such, the proposed development will require the removal of 65 existing car park spaces. A location plan is included as **Figure 5.1**. In addition, a plan of the University campus is included at **Appendix A**.

The aim of the development proposals is to provide high quality accommodation due to increasing student numbers and deteriorating accommodation. In line with the 2007 Campus Urban Design Framework and associated 2008 Knowledge Quarter Urban Design Strategy, the University has identified opportunities for improving the situation on its central campus. The residential proposals at Crown Court will continue the substantial programme of investment that includes the 'Apex Project', Vine Court Residences, Central Teaching Laboratories and high quality public realm programme.

As agreed with Liverpool City Council, this Travel Plan relates to the proposed development in isolation, rather than the University site in its entirety. However, reference has been made to the overall site Travel Plan where considered appropriate. It is considered appropriate that once the site becomes operational the ongoing update, monitoring and review for the Crown Court Travel Plan is incorporated into the ongoing site-wide Umbrella Travel Plan update-monitoring and review process.

This Travel Plan has been produced in line with Liverpool City Council's criteria for framework / interim Travel Plans and DfT Travel Plan guidance. Some sections of this Travel Plan are repeated in the separate Transport Assessment to enable each to be read as a stand alone document.

Preliminary information regarding the development proposals was received from Lewis and Hickey Architects. JMP also liaised with key staff at the University of Liverpool and Highways Officers at Liverpool City Council throughout the masterplanning process to discuss and agree the main assumptions and methodologies to be used as the basis of this report.

University of Liverpool Travel Plan 2009 – 2013 (December 2009)

Since 2005, the University has had a site-wide Umbrella Travel Plan in place for staff, students and visitors to the site. The 2005-2009 Travel Plan was updated in 2009, for the period 2009-2013. The objectives of the Travel Plan as follows:

- To implement a package of initiatives which improves access by public transport, walking, cycling and car share and encourages staff, students and visitors to change their travel behaviour;
- To deliver a parking management system that is efficient, effective, equitable and acceptable to staff, which accommodates the University's growth and development aspirations and supports safe and uncongested Campuses with green space and high quality public realm;
- To increase the efficiency of staff and student inter-Campus travel and create opportunities for inter-Campus travel by sustainable modes, particularly to accommodate the anticipated future increases in movements between City Campus and Leahurst;
- To support the University's Estates Strategy and Capital Programme through managing access to Campuses;
- To meet Liverpool City Council's sustainable travel requirements of future planning permissions;
- To make a positive contribution to the University's emerging environmental sustainability policy and action plan; and
- To make a positive contribution to the University's Carbon Management Plan by reducing the University's transport Carbon footprint (from both commuting and business journeys).

In order to develop the Travel Plan, baseline data of current travel arrangements was set through undertaking regular staff travel habits surveys (2003, 2007, 2008, 2010) and site audits (2005 and 2009). In addition, a cycle facilities audit was undertaken in 2008 and 2012. The Travel Plan lists a number of recommendations relating to specific travel modes, reducing the need to travel, parking management strategy, reviewing car parking policies, marketing and communication and other measures relating to business travel, fleet vehicles and deliveries. Some of these measures are discussed further later in this report.

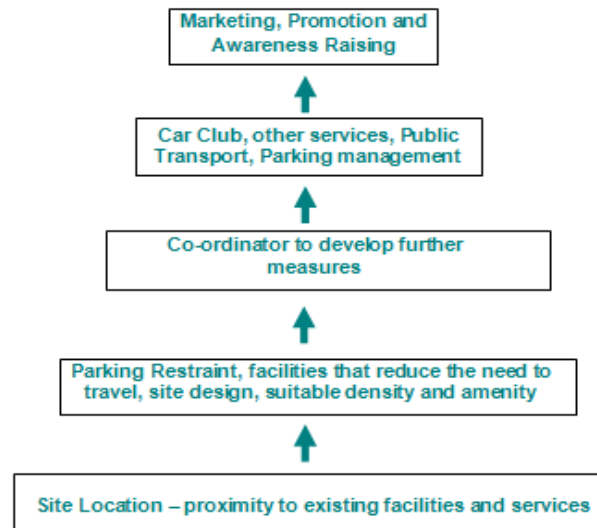
The 2009 site-wide Umbrella Travel Plan proposed that the current revenue stream for the Travel Plan initiative implementation can be increased through raising car parking charges across the University sites for staff, students and visitors, which would also assist in discouraging single-occupancy car use. As such, there has been several increases in car park charges since 2009 to support this aspiration. All revenue generated from car parking is ring-fenced for reinvestment into car park management and Travel Plan initiatives.

A Travel Plan Officer was appointed by the University in 2007, in order to coordinate the implementation of the Travel Plan process. The 2009 site-wide Travel Plan has supported the University's Capital Projects Masterplan through ensuring that the upcoming Travel Plan measures complemented the various development proposals. For example, the site-wide Travel Plan was developed in conjunction with a Car Park Management Strategy for the University. Together, the documents aim to effectively manage changes in car park provision as a result of development proposals, both through effectively managing the car parking available and through ensuring that the use of sustainable travel modes by staff and students is encouraged and maximised. An updated Travel Plan document including 2012 staff travel survey is proposed for completion in summer 2012.

Travel Plan Pyramid

Recent DfT guidance recommends that it may be useful to view the Travel Plan as a pyramid of measures, some of which will form the foundations of the Travel Plan whilst others will be the outcomes from the Transport Assessment. Figure 1.1 illustrates the pyramid approach.

Figure 1.1 Travel Plan Pyramid



Scope of the Report

This report is set out in eleven sections including this introductory chapter , as follows:

- Section two details the development proposal;
- Section three provides a relevant policy overview;
- Section four discusses the Travel Plan approach;
- Section five provides an overview of existing conditions;
- Section six details the Travel Plan objectives and targets;
- Section seven outlines the Travel Plan measures;
- Section eight discusses the Travel Plan implementation;
- Section nine details the Travel Plan monitoring requirements;
- Section ten concludes the report.

Detailed Development Proposals



Development Content

The proposed development consists of a student residential development comprising three accommodation blocks. The development is located on Brownlow Hill at the east side of the University in central campus, to the east of Liverpool City Centre. The development is known as the Crown Court Residences site and will be operational 24 hours a day. A copy of the site plan and ground floor plan for the development is included at **Appendix B**. The proposed development comprises the following content:

- 1259 residential units in three accommodation blocks. One student will be accommodated in each unit and the units provide a self catering facility.
- 92 *staff* car parking spaces in a basement car park – these are not associated with the student residences and are required, as determined by LCC, to replace the loss of 65 existing car park spaces on the proposed development site.
- Dedicated areas for student facilities (common room, meeting room, laundry etc.).
- Non residential accommodation to provide a management suite and staff working areas for site maintenance, security and provision of student services.
- A small amount of retail space, which, if any, will be a direct replacement of current facilities elsewhere on campus and will have a student focus.
- Storage, ancillary and services areas.
- A minimal net increase in staff numbers to provide the necessary staff requirements. However, this is likely to predominantly be a restructure of existing staff.
- At least 10% provision for student cycles i.e. 126 cycle parking bays to be provided in Block 3, fully secure and covered. Access to the facility will be via Crown Street, as illustrated in the Ground Floor Plan.
- The road closure of Crown Street (to the south of Brownlow Hill) to provide a new high quality full pedestrian zone to link to the wider strategic walk and cycle network. All hard landscape areas have been designed to accommodate emergency vehicles if required. *The University are coordinating the stopping up procedure requirements.*
- The creation of a new barrier controlled vehicular access into the staff basement car park area in Block 2 from Brownlow Hill. The car park will also have a shutter system.
- The creation of a new access into the site from Grove Street to provide infrequent access to facilitate deliveries (to science buildings and catering facilities) and maintenance needs for the existing substation.

Detailed Development Proposals

Development Content Continued....

The development involves the location of new and existing students into the new central campus facilities as opposed to University owned and private residences outside of the city centre. This in itself will reduce the need to travel by students and promote sustainability from the outset given that they will reside and study on site and are in close proximity to Liverpool city centre with its numerous facilities. The University has a policy to discourage car ownership by students and hence no car park provision is proposed for students residing at the Crown Court site.

In the summer months, when the residences are vacant, they are likely to be let to summer schools promoting pre-university education to future students. Such events already occur on campus and hence the new development itself will not initiate any new trips on the local network, it will simply provide an additional facility in which to accommodate attendees at such events.

Preliminary information regarding the development proposals was received from Lewis and Hickey Architects. JMP also liaised with key staff at the University of Liverpool and Highways Officers at Liverpool City Council throughout the masterplanning process to discuss and agree the main assumptions and methodologies to be used as the basis of this report.

Traffic Generation

There is no student car park provision associated with the development. The proposed basement car park is a necessity to mitigate the loss of existing staff car parking as a result of the proposals and therefore will not impact on traffic routings or levels. The overwhelming majority of travel associated with the development will thus be associated with sustainable modes of travel – for which there are excellent facilities in the vicinity of the development site.

Access and Servicing Arrangements

Vehicular Access

The proposed development will result in the closure of the existing vehicular access point via Crown Street. It is proposed that the residential site will be accessed by a new main vehicle access on Brownlow Hill. A new reinstated access to the Chemistry building is also proposed via Grove Street. Prior to the Hall Lane improvement scheme, a gated access point into the Chemistry building was provided via Grove Street, although this was closed as part of the improvement scheme. Hence, as part of the Crown Court proposals, a new reinstated access on Grove Street is proposed.

The plans in **Appendix B** show the general layout and access arrangements for the development.

The new vehicular access on Brownlow Hill provides barriered access to the staff basement car park area and therefore simply relocates staff-related traffic from the nearby existing vehicular access to car park 12 via Crown Street. Existing traffic will therefore slightly reroute to the alternative new access which is less than 100m from the existing (soon to be closed) Crown Street access.

The vehicular access on Grove Street is proposed to provide infrequent access to facilitate deliveries (to science buildings and catering facilities) and maintenance needs for the existing substation.

Pedestrian Access

Pedestrians will be able to access the site via Brownlow Hill or Grove Street or from the high quality internal footway network within the University campus. There will be convenient and easy access on foot between the three residential blocks. Footways are present as routes throughout the campus. For example, an internal footpath is present via an east-west path to the southern boundary of the site linking Grove Street and University Square at the junction of Mount Pleasant and Brownlow Hill. Footways within the campus and surrounding the site are considered to be of good in terms of width, standard and lighting.

Emergency Access

Emergency vehicles will be able to access the site from via controlled use of the new pedestrianised Crown Street, and externally via Brownlow Hill, Peach Street and Grove Street.

Servicing

All refuse locations have been positioned on primary routes leading from each building core so students can simply deposit refuse when leaving the building. These key locations coincide with being located with direct access from Brownlow Hill as required by Liverpool City Council.

In addition, a small amount of servicing which currently occurs via Crown Street is proposed to occur via new reinstated access on Grove Street to provide science-related servicing requirements, serve the canteen and bin storage area in the existing lecture theatres (Graduate Suite) and facilitate maintenance of the existing substation.

Parking Provision

Car Parking

There is to be no student provision for parking vehicles at the Crown Street Student Residences. Students wishing to bring a vehicle with them will be advised to find accommodation elsewhere. In the past, Liverpool City Council expanded the controlled parking zone near to the University campus in order to prevent University students and staff from parking on the local roads. Students who live at the Crown Street residences will have no requirement for a car given the location of the accommodation within both the campus and the city centre. This will help reduce the number of trips made to the University campus. The University has a car park management strategy which outlines measures to reduce the impact of ongoing development on parking within the campus to ensure the effective management of parking on site.

A total of 65 existing staff car parking bays will be lost from the proposed development area (i.e. from car park number 12 and the veterinary school). However, mitigation for these spaces is provided through the provision of a 92 space barrier controlled basement car park area for staff. The new car park will be managed as part of the site-wide car park provision for staff.

Although the mitigation provision is higher than the car park loss as a result of the development, it provides additional space which may be required to mitigate other car park losses as a result of other development at the University. Liverpool City Council has indicated that any loss of existing parking on site must be fully compensated through the provision of car parking at an appropriate scale in a convenient location. The University has a car park management strategy in place which coordinates car park requirements on a site-wide basis. A specific temporary (six-month) measure recently implemented to compensate the loss of car park spaces is an agreement to hire 40 car parking spaces at the Local Solutions Car Park, Hall Lane and 50 car parking spaces at Mount Pleasant Multi-Storey Car Park, Mount Pleasant, which will be offered to staff at a subsidised rate of £30 per month. This initiative is being introduced to support the development of the campus and to help relieve any addition pressures on existing University car parks resulting from the Capital Plan. The provision of 92 as opposed to 65 car parking spaces on the Crown Court site is therefore considered beneficial and necessary to support the University's overall car park management mitigation strategy.

The proposals therefore support the sustainable ethos of the University. Students wishing to drive to the University must make their own arrangements for parking – the University does not make parking available for able-bodied undergraduates.

Parking Provision

Cycle Parking

The University has a commitment to providing appropriate cycle storage facilities for staff and students and invest year on year in cycle provision in accordance with demand . As such, the University manage cycle parking on a campus-wide rather than building-by-building basis, which could otherwise result in massive underuse of parking in some areas and capacity issues in other areas.

There has been much progress and investment in cycle storage on campus over the past 4 years. In addition, an up to date audit of cycling provision has been undertaken which focused on use levels and capacity. This audit is included at **Appendix C**, and indicates that ample spare capacity is available on site.

The location of the site, on the University campus and within the city centre, means that the majority of trips made by students will be more practical and attractive on foot than by cycle. Hence, the cycle parking requirements will be less than a similar site located off campus and outside the city centre.

In agreement with Liverpool City Council, there has therefore been some flexibility agreed in the application of cycle parking standards to the Crown Court Residences, whereby cycle parking provision for 10% of students at the site is considered appropriate. Therefore 126 cycle parking spaces are to be provided in in a secure and covered cycle parking facility in Block 3. This provides 10% provision for students plus additional spaces for the minimal staff at the site.

The University will continue to provide parking in line with demand through a campus-wide strategy for future plans at the University. As such, if demand dictates that there is a requirement to increase provision, the University will be committed to do so. This strategy is in preference to providing excessive provision within the site which may remain unused when it would be better located at other sites on campus. After all, well used provision better promotes its use.

The minimal staff and students at the site can make use of the numerous campus-wide cycle parking provisions in addition to the site-specific cycle parking when travelling around campus.

National Context

The Department of Communities and Local Government [CLG] has issued both Planning Policy Statements [PPS] and Guidance [PPG] Notes which set out the Government's policies in relation to various aspects of planning. These have recently been superseded by the National Planning Policy Framework (NPPF) issued in March 2012.

The National Planning Policy Framework sets out the Government's planning policies for England and how these are expected to be applied. The purpose of the planning system is to contribute to the achievement of sustainable development, and the NPPF indicates that there are three dimensions to sustainable development: economic, social and environmental. Economic growth can secure higher social and environmental standards, and well-designed buildings and places can improve the lives of people and communities.

In addition the NPPF states that pursuing sustainable development involves seeking positive improvements in the quality of the built, natural and historic environment, as well as in people's quality of life, including (but not limited to) making it easier for jobs to be created in cities, towns and villages.

At the heart of the National Planning Policy Framework is a presumption in favour of sustainable development, which should be seen as a golden thread running through both plan-making and decision-taking.

Insofar as transport is concerned, the NPPF says the following:

- Transport policies have an important role to play in facilitating sustainable development but also in contributing to wider sustainability and health objectives.. Encouragement should be given to solutions which support reductions in greenhouse gas emissions and reduce congestion.
- All developments that generate significant amounts of movement should be supported by a Transport Statement or Transport Assessment.
- Development should only be prevented or refused on transport grounds where the residual cumulative impacts of development are severe.
- If setting local parking standards for residential and non-residential development, local planning authorities should take into account the accessibility of the development; the type, mix and use of development; the availability of and opportunities for public transport; local car ownership levels; and an overall need to reduce the use of high-emission vehicles.

Local Context

Merseyside Local Transport Plan 2011 - 2015

The third Local Transport Plan for Merseyside (LTP) provides the statutory framework for the policies and plans that will guide the future provision of transport in Merseyside. The vision for transport on Merseyside is:

"A city region committed to a low carbon future, which has a transport network and mobility culture that positively contributes to a thriving economy and the health and wellbeing of its citizens and where sustainable travel is the option of choice."

In order to support the city region and achieve the vision the LTP has six key goals:

- Help create the right conditions for sustainable economic growth by supporting the priorities of the Liverpool City Region, Local Enterprise Partnerships and Local Strategic Partnerships.
- Provide and promote a clean, low emission transport system which is resilient to changes to climate and oil availability.
- Ensure the transport system promotes and enables improved health, wellbeing and road safety.
- Ensure equality of travel opportunity for all, through a system that allows people to connect easily with employment, education, healthcare, other essential services and opportunities.
- Ensure the transport network supports the economic success of the city region by the efficient movement of people and goods.
- Maintain our assets to a high standard.

LCC Supplementary Planning Document: Ensuring a Choice of Travel

The SPD sets criteria for when Transport Assessments/Statements and Travel Plans will be required for new development, LCC's 'minimum accessibility requirements', required parking standards and servicing arrangements. The main objectives of the document are to:

- Ensure a reasonable choice of access by all modes of transport to new development;
- Reduce the environmental impact of travel choices, by reducing pollution, and improving the local environment;
- Improving road safety;
- Promote healthier lifestyles by providing opportunities for people to walk or cycle for work or leisure purposes;
- Reduce the level of traffic growth and congestion on the strategic and local road network; and
- Encourage opportunities to improve the quality of development proposals by better use of space through the provision of less car parking spaces where appropriate.

Local Context

Merseyside TravelWise

Merseyside TravelWise is a partnership between the five local authorities of Merseyside and Merseytravel. The partners identify that the way we get around has a big impact on our quality of life and that growing dependence on car travel is having a detrimental effect on our environment, health and economy. Their programme includes raising awareness of the effects of increased car use and the benefits of walking, cycling, car sharing or increased public transport use. They also work with businesses and organisations to develop Travel Plans in order to reduce their impact on traffic generation and make it easier for staff to reach their place of work.

The Merseyside TravelWise team have a website, which provides a wealth of information on effective Travel Planning (including workplace, residential and school Travel Plans).

National and Local Policy Conclusions

There are numerous relevant national policy documents and guidance relating to Travel Plans and sustainable transport. This highlights the importance and benefits of Travel Plans. These wider policies should provide additional support to Travel Plans in terms of promoting alternative modes of transport to the car.

Travel Plan Approach

A Travel Plan is a package of objectives, targets and measures developed by an organisation or group of organisations to promote more sustainable means of travel and reduce reliance on the private car. A Travel Plan has the benefit of making the development more accessible to all users, therefore helping to promote social equality within the local community.

Travel Plans are an increasingly important tool in order to facilitate sustainable development. Together with Transport Assessments, they provide the mechanism for assessing and managing access to new or redeveloped sites. Travel Plan benefits can include an increased choice of travel mode, reduced journey times, and money savings for the site users. The local environment can benefit from improved air quality, and less congestion and noise. Developing and implementing a Travel Plan should be a dynamic process, subject to a continuous cycle of action-monitoring-review. To help give it direction and focus, it is important to set out objectives for the University and staff/students.

Land use at the site is predominantly residential. The majority of site occupiers will be student residents, with a minimal number of staff providing maintenance, security and student services and servicing the small potential retail units. As the proposed development is currently undeveloped and the full details of resident and staff travel patterns are not yet known, a framework occupier Travel Plan has been produced which will identify the main components to be taken forward. Prior to the occupation of the development, a Travel Plan is required as a means to reduce car-borne travel to the site and meet the objectives, targets and delivery mechanisms identified within the full site Travel Plan. The Travel Plan will build upon the measures implemented by the University of Liverpool to support sustainable travel to the proposed development for both staff and students.

The evolving campus-wide University Umbrella Travel Plan (2009), which is being updated in line with the University's carbon management programme and Higher Education Funding Council (HEFCE) requirements, includes site-wide objectives and measures for staff and students. As the proposed Crown Court Residences are located within the University campus, it is considered appropriate that the site-specific Travel Plan objectives, targets and measures should support and mirror those within the existing site-wide umbrella Travel Plan. As such, this Framework Travel Plan has identified the main components to be taken forward and can be built upon on occupation of the site, in line with the updated site-wide Travel Plan. It is considered appropriate that once the site becomes operational the ongoing update, monitoring and review for the Crown Court Travel Plan is incorporated into the ongoing site-wide Umbrella Travel Plan update-monitoring and review process.

Benefits of Introducing Travel Plan Measures

University of Liverpool

Decreased pressure on the car parks

Improved corporate social responsibility

Can be used as part of environmental management in support of initiatives such as the 'green flag' accreditation

Improved employee/student health and wellbeing

Improved site health and safety

Improved relationship with local community through reduced congestion and parking problems

Strategy in place to support future development aspirations

Staff and Students

Improved accessibility to the University site by all modes of transport

Improved health and wellbeing

Greater awareness and choice of travel options for staff and students

Less traffic congestion at the site

Visitors

Improved accessibility to the Crown Court site by all modes of transport

Less traffic congestion

Site Audit

A site audit was undertaken by JMP to assess the layout and accessibility of the proposed Crown Court site and the surrounding area. Full details of the site audit are included as **Appendix D** of this report.

Site location and existing land uses

The general location of the development site is shown in **Figure 5.1**. The proposed Crown Court residences site is located to the east of Liverpool city centre in the central area of the main University campus. It is bounded by Brownlow Hill to the north, Grove Street to the east, the University campus to the south and Peach Street to the west. The land use around the site is a combination of the University campus as well as commercial and residential leading to the city centre to the west and residential areas to the east and south. There are good walking, cycling and bus routes around the site which route westwards towards the city centre and eastwards towards Wavertree and Childwall.

Highway Network

The proposed site for development is located in the central area of the University Campus. The roads located within the campus are unadopted and maintained by the University. Brownlow Hill to the north of the proposed development, Grove Street (A5048) to the east and Crown Street to the north (and within the proposed development area) are outside the University boundary and are maintained by the highway authority. Grove Street is a key route around Liverpool city centre from the south and has a carriageway width of approximately 10 metres.

As part of the Hall Lane highway scheme, the section of Crown Street which routed through to Grove Street to the south of Brownlow Hill has recently been stopped up and a new Grove Street alignment has been constructed with an upgraded junction at Brownlow Hill with controlled pedestrian crossings on all arms. The new alignment on Grove Street has two lanes in each direction. Brownlow Hill runs in an east – west direction through the centre of the campus and meets Grove Street at the upgraded junction. Brownlow Hill crosses Crown Street (north and south) at a give-way junction.

Access

Vehicular access to the existing development site is via the access point on Crown Street (to the south of Brownlow Hill). This part of Crown Street previously routed through to Grove Street but was closed off as part of the Hall Lane highways improvement scheme. The road now serves only as an access into the University site, providing access to the barrier controlled staff car park number 12 and the few uncontrolled veterinary car park visitor spaces. In addition, this access provides servicing to a number of University science buildings in the vicinity of the development site, such as Chemistry. The proposed development will result in the closure of the existing vehicular access point via Crown Street and the introduction of a main new vehicular access points via Brownlow Hill and a new access to the Chemistry building via Grove Street.

Site Audit

Car Parking

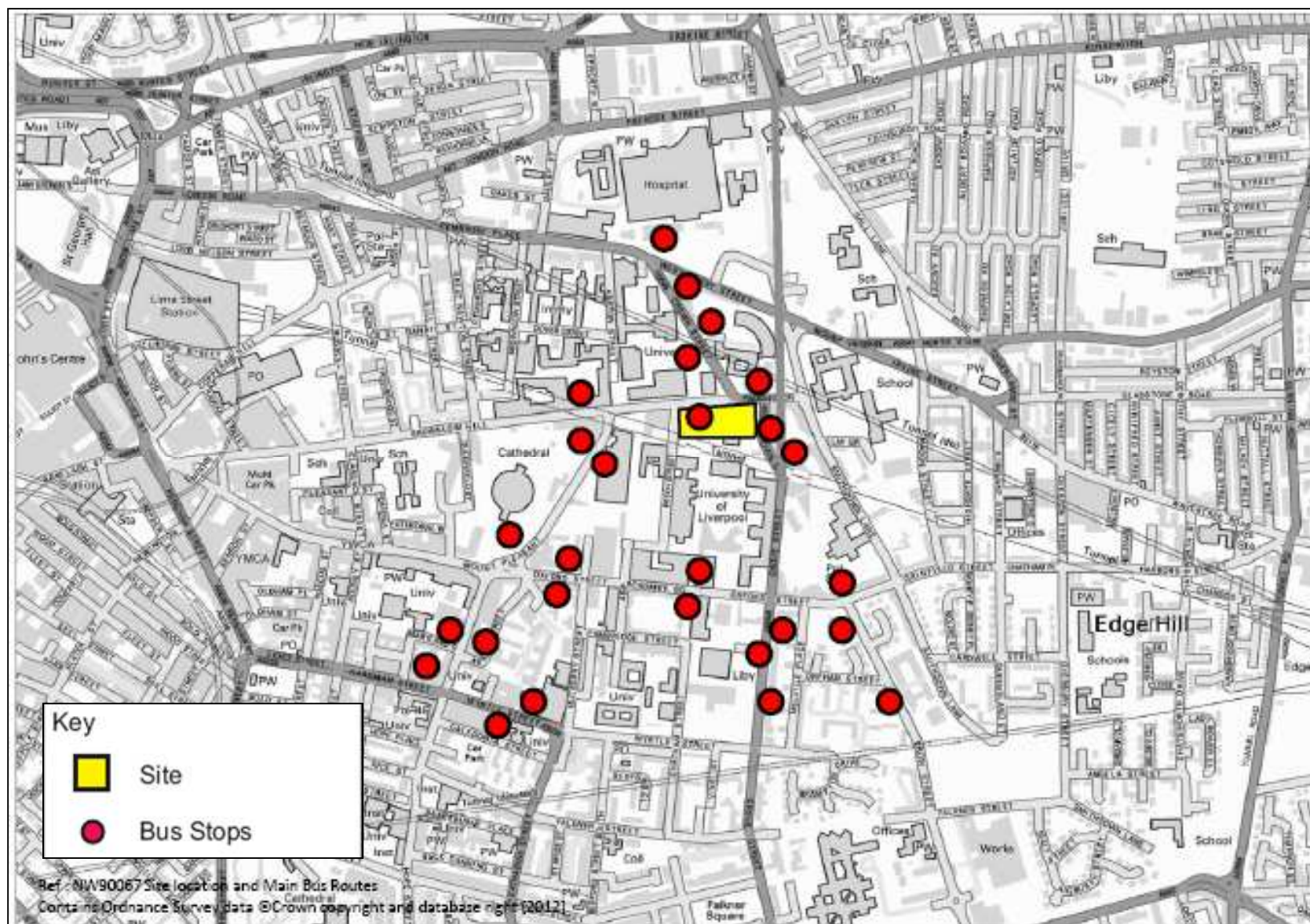
Students are not currently permitted to park on campus. Given the sustainable location of the site the University has a policy to discourage students from owning a car. Staff car parking is currently present at sites located across the University campus. The closest staff car parks to the site are numbers 12, 13, 18 and 19, as evident on the campus plan included at **Appendix A**. The proposed development will impact on a small area of parking associated with the existing veterinary uses in addition to staff car park number 12, however appropriate mitigation for the loss is proposed as part of the proposals, as discussed previously in this report. Car park access for staff is predominantly barrier controlled. During the site visits the car parks were busy but not full. The quality of surfacing within the car parking areas varies.

Traffic Flows

The existing site is comprised of veterinary teaching and surgery uses, with a minimal amount of car parking for use by visitors for veterinary treatment, as such it does not currently generate vehicular transport demand.

5. Overview of Existing Conditions

Figure 5.1 Site Location and Bus Stops



Site Audit Summary

Full details of the site audit are included as **Appendix D** of this report. A summary is provided below.

Pedestrian access

Pedestrian access across the site is generally good. Pedestrian routes within the University are all well lit and signposted.

Cycling access

The University campus is very accessible by cycle and ample bicycle parking is available at allocated bicycle parking areas across the campus (as set out in the recent cycling audit included at **Appendix C**).

Public Transport Access

Public transport access to the proposed development is good. Buses serve the roads surrounding the University Campus. In the immediate vicinity of the development site there are bus stops located on Brownlow Hill, Crown Street and Grove Street.

The nearest train stations are located at Central and Lime Street located 1.2km away from the Crown Court development site on campus. Edge Hill is located 1.3km away from the development. Staff may choose to travel by train to travel to work, most likely coupled with walk, cycle or bus. Students may choose to use the train for part of their journey for employment or leisure trips outside of the city centre, most likely coupled with walk, cycle or bus.

The pedestrian routes to the various bus stops and railway stations are all considered adequate in terms of footway widths and quality, the presence of crossing facilities and street lighting. The pedestrian route to/from Central Station would be westwards from the development via Brownlow Hill. The pedestrian route to/from Lime Street Station from the development would also be westwards via Brownlow Hill and Lime Street. The pedestrian route to/from Edge Hill Station from the development would be eastwards via Smithdown Road, Grinfield Street, Chatham Place and Harbord Street. The majority of bus routes which serve the development link to one or more of the various railway stations. Therefore, were preferred, these services can be utilised by staff and students to access the site by interchange from rail onto bus rather than making the journey on foot.

Site Audit Conclusions

Following the Travel Plan site audit and desk top review of travel options to the University it is considered that the proposed development is located in an accessible location.

Travel Plan Objectives and Targets

Introduction

Objectives are required in order to give the plan direction and provide focus. Targets are measurable goals which are set in order to assess whether the objectives have been achieved. It is also useful to identify a number of indicators which can be monitored to determine whether the targets have been met and thus if objectives have been achieved.

The Travel Plan recognises that there is not one specific mode of transport suitable for all staff and students and that there needs to be a number of alternatives in place. The Travel Plan is intended to promote flexibility and choice, focusing efforts on encouraging a reduction in car use rather than prohibiting it.

The following features of the site location make it suitable for encouraging sustainable travel behaviour:

- The site is located close to Liverpool City Centre, where an excellent range of public transport facilities are available.
- The site's location within the campus boundary, and city centre where various facilities are located within walking distance of the site, including entertainment, health, shopping and recreational facilities, makes it an ideal location for promoting travel by foot and cycle;
- The site is well served in terms of bus provision. There is a good level of services utilising bus stops within walking distance of the site. These provide frequent services to destinations within Liverpool and beyond (via interchange in the City Centre).
- There will be no car park provision for the residential proposals, the car park provision proposed is intended and necessary to mitigate the loss of existing staff parking at the site as a result of the Crown Court proposals.

It is vital therefore that the objective of the Framework Travel Plan and timetable for the Full Travel Plan is to maximise the potential of this site by encouraging a high percentage of travel to and from this site by sustainable transport modes. This is to be done by encouraging the use of the walking, cycling and public transport infrastructure already in place.

Travel Plan Objectives and Targets

Travel Plan Objectives

The main objectives of the Travel Plan are as follows:

1. To improve access and provide safe access to the development site by a variety of transport modes;
2. To seek to reduce the overall level of car use journeys to and from the site;
3. To promote and maximise the proportion of employees and visitors travelling to the site by more sustainable modes, for example, public transport, walking and cycling;
4. To provide information regarding the choice of alternative transport modes available;
5. To promote healthy lifestyles and a sustainable vibrant community i.e. through raising awareness of the environmental and health benefits of using more sustainable modes of transport;
6. To manage the demand for parking; and
7. To minimise traffic generation on the local road network.

Some of these objectives may carry more weight than others, in this case, where the development location is within easy access of key destinations and sustainable transport modes, it may be necessary to give first priority to maximising sustainable travel which would manage any demand for car parking and minimise traffic generation by staff (car park demand for students should be minimal given the University's non car policy for student residents).

The site-specific objectives complement the site-wide Travel Plan objectives.

Travel Plan Objectives and Targets

Travel Plan Targets

Travel Plan targets should be specific, measurable, achievable, realistic and time-bound (“SMART”). The framework for setting staff targets will be informed by staff travel surveys. The target for students will be 100% of travel by sustainable modes, given the none car policy implemented by the University.

Staff Travel Plan Targets

Staff travel surveys are undertaken regularly by the University’s Sustainability Officer as part of the site-wide Travel Plan and can therefore be used as a basis for the staff-based targets for the minimal staff to be located at the Crown Court site. The targets can then be monitored as part of the site-wide Umbrella Travel Plan update, monitoring and review.

Table 6.1 demonstrates that since 2003, there has been a steady downward trend in the percentage of single occupancy vehicle travel on the journey to work. This indicates that the University Comprehensive Car Park Management Strategy and site- wide Umbrella Travel Plan (and associated measures implemented) have had a positive impact on reducing single occupancy vehicle travel. Although the 2010 survey has indicated a slight increase in single occupancy vehicle travel since 2008, there has been a decrease in car sharing and hence overall levels of car use have remained fairly steady between 2008 (54.3%) and 2010 (55%).

Table 6.1 Staff Modal Split Data

Mode	2003 result (%)	2007 target (%)	2007 result (%)	2009 target (%)	2008 result (%)	2010 target (%)	2010 result (%)	2011 target (%)	2012 target (%)	2013 target (%)
Car driver (Single Occupancy Vehicle)	68.8	50.0	47.9	42.0	41.0	35	44.4	31	30	28
Car passenger	3.9	17.0	11.7	19.0	13.3	14	10.6	15	15	15
Cycling	2.4	5.0	5.2	7.0	6.8	9	8.0	10	11	11
Public transport total	17.8	20.0	28.4	22.0	29.0	32	28.9	33	33	34
- Bus	n/a	n/a	12.1	n/a	9.7	12	9.3	13	13	13
- Train	n/a	n/a	16.3	n/a	19.3	20	19.6	20	20	21
Walking	4.0	6.0	4.5	7.0	6.3	7	6.4	8	9	10
Motorbike/ scooter	1.1	2.0	0.65	3.0	1.1	2	0.7	2	2	2
Other	2.0	0.0	1.65	0.0	2.5	1	0.9	1	0	0

Travel Plan Objectives and Targets

Travel Plan Targets

Staff Travel Plan Targets Continued

The site-wide 2009 Umbrella Travel Plan mode split targets for single occupancy vehicle travel may now be somewhat ambitious. However, given the ongoing implementation of the Car Park Management Strategy, which includes recent increases in car park charges for staff, in addition to the ongoing implementation of Travel Plan measures (including a personalised journey planning service provided in 2010-2011, a Rail/Trio Season Ticket Loan introduced in 2010-2011 and a University car share scheme and car share bays introduced in 2011), it is recommended that the targets remain as stated and can be revisited in line with the results of the 2012 staff travel survey, in conjunction with Liverpool City Council's Travel Plan Coordinator. These targets are set for staff on a site-wide basis and will therefore incorporate the staff at the Crown Court Site.

Student Travel Plan Targets

In terms of student resident targets, given the fact that the Crown Court Residences provide a car free development for students and the controlled parking zones surrounding the University site, it is considered appropriate that a target of 100% of travel by students should be via sustainable travel modes. The student target will be agreed with Liverpool City Council's Travel Plan Coordinator from the outset of the development occupation. If deemed necessary, a travel behaviour survey will be distributed to all residents alongside Travel Plan material once the development opens in order to determine that 100% sustainable travel is occurring at the site. The surveys can ascertain the views of student residents regarding travel, prior to any influence from the Travel Plan.

More specifically, as agreed with the Cycling Officer at Liverpool City Council, in order to maximise the use of the cycle provision for students at the site i.e. provision for 10% of students, a target of 10% of travel around campus by bicycle should be set for the student residents.

Finalised targets should be set approximately 3 months after initial occupation of the site in conjunction with Liverpool City Council's Travel Plan Coordinator.

The targets set for the Crown Street Residences will feed into the site-wide Travel Plan.

Travel Plan Objectives and Targets

Travel Survey Outcomes and Future Surveys

Travel surveys can test the reaction of staff and (if necessary) students (particularly non-residents) to a range of measures aimed at meeting the Travel Plan objectives, such as views on walking, cycling, car-sharing, public transport incentives that would encourage use of sustainable modes and current deficiencies (actual and perceived) of the sustainable modes. The survey results will therefore assist in identifying the most appropriate Travel Plan measures for the future. In addition, postcode plots of staff (and non residential students) can assist in identifying potential improvements to encourage sustainable travel. For example, through identifying potential opportunities to improve bus provision and through identifying potential car share matches.

It is important to ensure that the momentum of the Travel Plan is sustained beyond the initial induction period. To ensure a continued level of participation at subsequent reviews, it may be necessary to offer incentives such as discount vouchers or a prize draw to survey respondents. It is also important to inform new residents and staff of the Travel Plan as necessary. The main emphasis of the Travel Plan will be to aid residents and staff in travelling sustainably. Residents are a known entity, meaning their travel habits will be predictable and therefore easier to influence.

As there is no single solution to deal with all of the Travel Plan objectives, a combination of measures are required in order to allow people to 'pick and mix' according to what complements their own day to day requirements and lifestyle. It is important that the Travel Plan measures include both "carrots" and "sticks" to encourage changes in travel behaviour. However, the focus should be on the incentives to use more sustainable modes of transport, rather than lots of disincentives to travel by car. Experience has suggested getting the incentives in place first in order to make people more supportive of the Travel Plan and to encourage a change in behaviour, and then to put any disincentives in place later on. It is also worthwhile to go for the most popular measures first, as revealed by the travel surveys.

Delivery of the Travel Plan

Introduction

As the proposed Crown Court Residences is located within the University campus, the ongoing implementation of the site-wide Umbrella Travel Plan measures will be appropriate for incorporation of the Crown Court site. This section identifies a range of measures that will assist in promoting sustainable transport choices at the site.

Site-Wide Travel Plan Measures

The University has a site-wide Travel Plan budget allocated to staff costs and specific measures.

Since 2006, the University has successfully implemented the following initiatives on campus:

- The University appointed a Travel Plan Officer / Coordinator in January 2007;
- The University joined the Merseyside Travelwise Wise Moves (now Employers Network) scheme;
- University representatives began attending the quarterly Travelwise Transport Forums;
- The University was involved in daily promotions to raise awareness, for example during National Cycle week in conjunction with TravelWise;
- The University introduced a salary sacrifice cycle loan scheme;
- A Sustainability Advisory Board was set up.
- As a pilot scheme, cyclists were able to utilise sports centre facilities free of charge;
- The University Walk access route was made available to both walkers and cyclists;
- There have been ongoing improvements and increases in cycle storage facilities, in addition to new campus walking and cycling routes such as the new north-south route from Chatham Street through to Abercromby Square and up to the vet site i.e. Crown Court site (this improvement formed part of the recent Central Teaching Laboratory constructed on site);
- A Bicycle User Group (BUG) was established;
- A personalised Travel Planning (PTP) service was made available to staff;
- An interest free Rail or Trio Season Ticket Loan was made available to staff, which includes a month of free travel for participants and is subsidised by the university of liverpool travel plan budget;
- A car share scheme was set up and a number of dedicated car park bays; and
- The University helped establish a city centre Public Transport Group, comprising the various Liverpool Universities, the Royal Liverpool Hospital, the City Council and Merseytravel.

Delivery of the Travel Plan

Travel Plan Budget

The University allocate an annual budget to the Travel Plan implementation. For 2010-2011, the car park revenue at the University totalled £550,000. This is ring-fenced and substantial investment is put into the Car Park Management Strategy and Travel Plan implementation. The budget has been maintained at a similar level in 2011-2012. In addition to investment in Travel Plan measures on site, a proportion of the 2011-2012 budget is being secured in reserve in order to support necessary large scale Travel Plan / Car Park Management initiatives required as a result of potential future large scale Capital Projects coming forward.

Travel Plan Measures

Tables 7.1-7.3 sets out a summary of key site-wide Travel Plan initiatives for the 2008-2009, 2009 – 2010 and the 2010 – 2011 financial years, all of which are now in place or ongoing. The tables provide a description and the cost budget for each initiative and indicate the substantial investment made on Travel Plan measures in previous years.

In the current 2011-2012 financial year, the University has a commitment to the following measures which are either complete, ongoing or proposed:

- Travel Plan Guide / How to Get to Guide promotion.
- Promotional events in conjunction with Bikeright.
- Ongoing improvements to cycle facilities.
- Improvements to pedestrian and cycling routes; for example the recent construction of the new dedicated walk and cycle route from Chatham Street through to Abercromby Square and the vet site.
- Employee cycle loan scheme.
- Rail ticketing scheme - interest free loan scheme for Merseyrail/Trio season tickets (staff).
- Set up of staff car share scheme and dedicated bays / ongoing promotion.

Table 7.1 August 2008 – July 2009 Site-Wide Travel Plan Initiatives

Measure	Description	Budget
Walking Calorie Map	A single map that encourages staff and students to walk by providing route specific information to key facilities.	£2,000
Travel Plan Guide	A brochure that targets staff and details the Travel Plan schemes available	£10,000
Promotional Events	Travel Plan resources to be allocated to campaigns which support the Year of the Environment (Liverpool City Council led initiative)	£3,000
Hospitality	To support the Travel Plan Partnership and Bicycle User Group	£400
Cycle Storage Compounds	Cycle storage capacity is to be significantly be increased by 100-150 spaces across several locations (each area will be covered and gated and cater for at least 20 bicycles). A new storage area will be by Sydney Jones Library, close to the proposed development site.	£105,000
Refurbishment of existing cycle storage	Improvements to existing cycle storage facilities in the Maths Building.	£1000
Access Improvements	Physical landscape improvements which will provide better access to the campus for cyclists. Improvements are likely to include dropped kerbs, re-surfacing and widening of access points when required.	£20,000
Equipment Lockers	Increase locker facilities in the sports centre sufficiently to cater for cyclists. Cyclists can already utilise shower facilities in the sports centre at no cost and hence this will provide a more complete package for cyclists.	£6000
Cycle Loan Scheme Contingency Fund	To pay for the cost of salary sacrifice cycle loan schemes until it is reimbursed through salary deductions.	£15,000

7. Travel Plan Measures

Measure	Description	Budget
Public Transport Consultants Study	A study to analyse the existing public transport network at the University and to assess ways this can be improved in the future.	£20,000
Cycle Storage Signage	New signage to support the new cycle storage compounds.	£800
Personalised Travel Plan Project	Assistance towards a project commissioned by TravelWise Merseyside which will offer personalised journey planning for staff.	£2,000

Table 7.2 August 2009 – July 2010 Site-Wide Travel Plan Initiatives

Measure	Description	Budget
Travel Plan Officer Training and Development	Courses, conferences and seminars	£2,000
Travel Plan Schemes	Consultant studies to contribute to Car Park Management Strategy and Travel Plan Strategy	£50,000
	Cycle access improvements to reduce barriers	£10,000
	Personalised Journey Planning Project for staff with Travelwise and JMP consultants	£20,000
	Rail ticketing scheme - interest free loan scheme for Merseyrail season tickets – contingency	£10,000
	Signage to support new facilities	£2,000
	Cycle to work scheme	£15,000
	Car parking infrastructure improvements - minor works to increase capacity on campus	£50,000

Table 7.3 August 2010 – July 2011 Site-Wide Travel Plan Initiatives

Measure	Description	Budget
Travel Plan Administration	Training and Development - Courses, conferences and seminars	£500
	Promotion – Travel Plan Guide	£5,000
	Promotion – General Promotion	£1,500
Travel Plan Schemes	Car share scheme - University car share database	£10,000
	Public Transport subsidies – subsidising annual passes	£30,000
	Cycle Facilities - Storage at Alder Hey, Quad, Chemistry and Harold Cohen Library	£20,000
	Improved motorcycle bays - Life sciences motorcycle bays	£1,000
	Car Park Schemes - ticketing enforcement scheme	£12,000
	Car Park Schemes - Foundation Building and Hart Building alterations	£22,000
	Car Park Schemes - Elizabeth Street Car Park works	£63,000

Site-Wide Measures Conclusions

The wide range of measures scheduled or complete indicates the University's commitments to the Travel Plan implementation.

All of the measures featured in Tables 7.1-7.3 and those listed for the 2011-2012 financial year will be beneficial for staff at the proposed Crown Court site. The particularly useful measures for the students at the site will include the following:

- Walking calorie map;
- Display stands;
- Promotional events e.g. With Bikeright;
- Cycle storage compounds and cycle facilities;
- Access improvements;
- Improved pedestrian and cycle routes;
- Equipment lockers;
- Cycle storage signage;
- General signage improvements; and
- The Travel Plan Guide / How to Get to Guide.

Travel Plan Measures

Introduction

In addition to the significant site-wide Travel Plan initiatives that are ongoing at the University campus, a number of additional measures for further consideration by the University are outlined below. Measures which have been recently implemented or already have a commitment to be implemented by the University are acknowledged, whilst potential measures are discussed which are to be considered for future implementation by the University.

Measures to Reduce Car Use

Parking Management

As there is no increase in car park provision as a result of the proposed development, but rather a replacement of existing staff facilities, this will act as a form of car park management in itself. The proposed Crown Court development is located on the University campus and has an excellent range of facilities within close proximity of the site and good sustainable transport options available, which will remove the need for car travel. The residents parking zone implemented by Liverpool City Council on streets near to the University campus prevents University students and staff from parking on the local roads. In addition, there has been ongoing increases in car park charges for staff on site, increasing from zero through to £1.26 per day, then £1.68 per day and more recently £1.89 a day - these charges are a form of car park management. These measures will assist in the effectiveness of the site-wide and site-specific travel plan.

Car Sharing

Car-sharing is a proven method of reducing trips to a site, and can therefore have a positive influence on peak time congestion. It has proved popular on account of the cost-benefits to users and the reduction in stress from shared responsibility. The University has recently set up a staff car share scheme (www.livshare.ac.uk). The University Travel Plan Coordinator promotes the new scheme to staff. The scheme will be promoted to the staff at the Crown Court Residences from the outset.

Whilst the benefits of car sharing may be incentive enough for some users i.e. the cost incentive; it may also be necessary to provide further inducements to encourage participation in the existing Livshare scheme. Therefore, the following measures could be implemented to increase the attractiveness of car-sharing: List of options:

- Social events within work time to allow participants to meet employees within the same or neighbouring postcode;
- A free taxi ride home in an emergency for sharers.
- Postcode targeted coffee mornings or meetings.

Car Share Bays

In late 2011, the University introduced 38 dedicated car share bays at the Foundation Building Car Park and Hart Building Car Park. Once staff have found a car share match through LivShare there is the option to apply to use one of the dedicated bays, from which 38 car share groups are selected as authorised users. Car share spaces are allocated in 6 monthly windows and the University has a strict car share policy which users must adhere to.

Travel Plan Measures

Measures to Reduce Car Use continued...

Car Club

Due to the absence of car parking at the site, the need may exist for residents to utilise a car club. The University should ensure that staff and students are made fully aware of any Car Club schemes that become operational in the local area. In addition, the University could consider liaising with any new Car Club operators in order to promote the introduction of Car Club cars to be parked on the University campus for use by staff and students.

Any Car Club scheme may assist in reducing the number of staff and students who travel by car to the University, particularly as it can provide a good alternative for staff who make frequent business travel trips and student residents who are not able to bring a car to the site.

Travel Plan Measures

Measures to Promote and Facilitate Walking

Introduction

Accessibility by non-car modes is recognised as being particularly important, not only in terms of sustainable development, but also to reduce social exclusion.

Travel Information

A travel information notice board will be provided within each residential block. This should include details of safe walking routes within the vicinity of the site.

A copy of the site-wide walking calorie map will be available to all staff and students, both in hard copy format at key locations on site and on the University's website.

In the short term, the University will ensure that their website and other marketing media (for example, email, notice board, display boards etc.) promote all Travel Plan schemes and provide travel information.

Walking Buddy Scheme

The University will consider the set up of a pedestrian group could be set up at the site to facilitate a 'walking buddy' scheme for example, to key University buildings or the City Centre, particularly in the darker winter months.

Other measures which would assist in promoting walking that the University will consider include:

- Improved safety of routes in terms of lighting and security, more direct routes;
- The promotion of safer routes, such as the improved pedestrian and cycle route via Abercromby Square.
- Free personalised alarms could be offered to staff and students as these will act to reassure those concerned for safety;
- Pedometers could be offered to walkers to encourage them to consider the health impact of their actions, and to monitor how far they are walking;
- Walking audits should be undertaken similar to the cycle audits undertaken in 2008 and 2012. These should examine lighting, security and maintenance issues along routes to key destinations. Any improvements to the routes should be promoted to all staff as part of the wider Travel Plan promotion.

Travel Plan Measures

Measures to Promote and Facilitate Cycling

Travel Information

The travel information notice boards will include details of safe cycling routes within the vicinity of the site. The production of a cycling calorie map similar to the walking map will also be considered by the University. Any improvements to cycle routes/facilities as a result of the cycle audit in 2008 and cycle facilities audit in 2012, will be promoted to staff and students as part of the wider Travel Plan promotion. For example, such as the improved pedestrian and cycle route via Chatham Street / Abercromby Square.

Cycle to Work Scheme

The University have set up two cycle loan schemes whereby employees can sacrifice a percentage of their salary in exchange for cycle vouchers which are non-taxable and exempt from National Insurance. These should be promoted to staff at the Crown Court site.

Bicycle User Group

A bicycle user group could be set up at the development by the Travel Plan Coordinator, using the notice boards as a forum for information.

Storage and changing facilities

The new cycle parking provision at the Crown Court site in addition, the numerous cycle facilities located across campus will be particularly beneficial for the staff and students at the proposed development. Over 530 cycle parking spaces are available across the site, as indicated in the recent cycle audit included at **Appendix C**. The University have an ongoing annual budget to support cycle storage improvements. Cycle parking should be effectively promoted to site occupiers at the Crown Court site.

Cycle Discounts / Loans

As members of the TravelWise Employers Network scheme, staff at the University are entitled to 10-15% discounts at local cycle retailers on production of their staff card. This service should be promoted to staff at the Crown Court site.

Free Training and Maintenance Checks

In the past, the University has held free cycle training schemes and maintenance workshops for staff and students. The University will endeavour to continue to provide these measures and are working with Bikeright to hold a number of events, including Dr. Bike etc.

A local bike retailer can also be encouraged to visit the site periodically, to offer students and staff free cycle maintenance checks. This will ensure that staff and students are confident that their bicycles are in good working order. Holding a maintenance clinic during the spring may further encourage staff and students to cycle more as the evenings get lighter and the weather improves. Regular training sessions could also occur on-site to encourage confidence in this mode.

Travel Plan Measures

Measures to Promote and Facilitate Cycling

Reflective clothing

Safety can be a key concern for people considering cycling. The University will consider the provision of free reflective clothing such as vests or arm bands. Staff and students may feel more secure cycling on the local roads in the knowledge that they are more visible to other road users.

Travel Plan Measures

Measures to Promote Public Transport

Physical Measures

Due to the good range of facilities in place, public transport improvements are not considered necessary (in terms of new or enhanced bus/rail services or interchange improvements). However, the University will undertake regular audits of public transport facilities. For example, in the past the University has recently undertaken a Public Transport Network Study. The study assessed staff home postcodes to identify gaps in public transport provision and hence investment and improvement opportunities. Such studies will continue to be undertaken in the future.

Travel Information

The travel information notice boards should publicise sustainable travel information to raise awareness of its potential convenience. The information may include the following:

- Timetables and promotional literature from regular operators;
- Special Promotions offered by operators (discounts, return tickets, weekly/monthly tickets etc);
- Details of Merseylink and Community Transport schemes currently operating within the area;
- Details for the Merseyside 'Traveline' telephone number;
- Telephone numbers of taxi companies operating in the area;

Travel Plan Measures

Measures to Promote Alternatives

Provision of Travel Information / Marketing

Car use will be discouraged at this site through the absence of car parking at the development. Therefore, it is essential that residents and staff are made fully aware of the travel modes available to them. Physical measures (i.e. bus stops) and good public transport facilities are in place. Promotional material and awareness raising are therefore vital for encouraging sustainable travel at this site and informing residents of the accessibility of the site to key services.

An effective promotion and awareness raising package will be provided by the site-wide Travel Plan Coordinator.

The purpose of the 'Travel Plan Guide', (currently in its second edition), is to raise staff and student awareness of the Travel Plan and the measures available to them. The guide has been distributed to all staff and is distributed to students during the 'welcome week' in September each year. The guide is also provided to new staff at induction on appointment. It will be updated and redistributed regularly to reflect ongoing and upcoming measures. It is also available on the University's website. The Guide was reviewed by Travelwise Merseyside prior to publication. The guide will be made available to residents and staff based at the Crown Court Residences.

In addition to the Travel Plan Guide, the University have produced a walking calorie map and a 'How to Get to Guide' which will also be available to staff and students at the new Crown Court development.

The Travel Plan Guide, walking map and How to Get to Guide, together with the travel information boards, provide an effective promotion and awareness raising 'welcome package' for all staff and students at the new site.

Communication of measures will be carried out through the Travel Plan Guide and through information provision on the University's website, email systems and on staff and student notice boards. In addition, the University's online news will feature and promote details on Travel Plan measures. The Travel Plan Guide and the notice boards will hold information about the Travel Plan and the reasons behind it.

The following list of options for inclusion in the awareness raising package will be considered by the University:

- Details on Travel Plan measures (already included in staff Travel Plan Guide);
- Cycling/walking maps (walking maps already in production);
- Public transport information, contact details for Traveline, and information on discounted ticketing (if available)
- Any relevant Car Club information;
- Information about access to services, facilities and local amenities e.g. supermarkets within walking distance, post offices, cash machines;
- Information on the bicycle user group / walking buddy scheme; and
- Personal travel advice/journey planner.

Travel Plan Measures

Measures to Promote Alternatives

Provision of Travel Information

The responsibility for the overall promotion and awareness raising programme is with the site-wide Travel Plan Coordinator. The responsibility for maintaining the notice boards and collating appropriate information will also lie with the Travel Plan Coordinator.

Travel Plan Branding

It is recommended that the Travel Plan for the University be given a name under which all Travel Plan activities could be promoted. Names such as 'Clearways', 'WiseMoves' and 'Smartways' are examples of Travel Plan names from other sites. A competition could be held amongst staff and students to name the plan, which would assist with ensuring staff and students are aware of the Travel Plan, and provide some element of ownership.

Small incentives such as pens, public transport ticket holders and ice scrapers, branded with the Travel Plan name/logo, could be provided to staff and students who take part in Travel Plan activities.

Measures for Visitors Staying at the Residential Development

In the summer months, guests attending pre-University courses at the University are likely to stay at the Crown Court Student Residences. All guests should be provided with a travel information pack in order to encourage sustainable travel to the site. This should include details on sustainable travel options and local taxi companies.

Implementation of the Travel Plan

Introduction

The previous sections have examined elements of the site-wide Travel Plan and have set out a series of potential Travel Plan measures that should be considered for implementation.

Due to the lack of car parking at the proposed site, there is a need for an effective travel plan which will raise awareness of and promote sustainable travel by residents and staff and discourage car use.

This section identifies the requirements for ensuring the effective implementation of the Travel Plan, as follows:

- Management of the Travel Plan
- Monitoring and reporting of the Travel Plan

Management

Travel Plan Coordinator

The implementation of the Travel Plan recommendations requires effective co-ordination and management.

The first key step toward developing the Travel Plan strategy is to ensure that there is an effective management and administrative structure in place. Thus, a Travel Plan Coordinator (TPC).

There is currently a site-wide Travel Plan Coordinator at the University. Travel Plan resources for staffing and measures are allocated a yearly budget, as set out earlier in this report.

The contact details for the site-wide Travel Plan Coordinator are as follows:

Graham Pollard
University of Liverpool
FM Strategy and Business Support
Bedford House
Oxford Street
Liverpool
L69 7ZP
Tel. +44 (0)151 794 1375
email: graham.pollard@liv.ac.uk

The Travel Plan will be implemented at the Crown Court site under the control of the campus-wide Travel Plan Coordinator (TPC). The site-wide TPC will work in conjunction with the local planning authority for the continuing progression of the Travel Plan.

Management

Travel Plan Coordinator

The role of the site-wide TPC will be as follows:

- To promote and encourage the use of sustainable travel modes other than the car, including the distribution of publicity material;
- To provide a point of contact and travel information for staff and students;
- To ensure that all relevant information is available to staff and students and that up to date information is clearly displayed on the site notice boards and in the staff Travel Plan Guide;
- To arrange for travel surveys to be undertaken when necessary (as part of the site-wide travel surveys);
- To respond to all staff and student comments regarding the Travel Plan;
- To maintain the provided facilities;
- To review the Travel Plan and all associated targets and measures, in conjunction with the Local Authority.

The site-wide TPC should conduct staff travel surveys regularly. This will reveal the success of the Travel Plan.

Senior Management Support

The substantial annual Travel Plan budget invested by the University highlights the senior buy in to the development of a successful Travel Plan on site.

There is a Sustainability Advisory Board at the University, chaired by the Pro-Vice Chancellor, who oversee the strategic approval of sustainable initiatives, including the Travel Plan.

The University is committed to the development of its site-wide Travel Plan, demonstrated by the annual budget commitment. As the proposed Crown Court development forms part of the overall future masterplan for the site, senior management is also committed to ensuring an effective Travel Plan at the site, as part of the ongoing site-wide Umbrella Travel Plan.

Monitoring

Monitoring travel behaviour is key to understanding the success of measures introduced to promote the use of alternative travel modes. In order to ensure the Travel Plan's ongoing success, it will be important for the site-wide TPC to monitor the outcome of implemented measures at the Crown Court site.

Staff travel surveys have been undertaken in 2003, 2007, 2008 and 2010, with new surveys scheduled to be complete by summer 2012. However, there have not been any student travel surveys undertaken at the University to date. This is due to the fact that historically, students have not been able to park on site (as is still the case). As such, the focus of the site-wide Travel Plan has been to reduce car travel to the site by staff, although some Travel Plan work aimed at students in addition to staff has occurred. It is now proposed that in the future the site-wide Umbrella Travel Plan will provide a greater emphasis on students than has been the case during previous years.

A systematic approach to monitoring the Travel Plan is required at the Crown Street Student Residences. Staff travel surveys will be carried out as part of the site-wide Umbrella Travel Plan. However, the fact that it is a car free development for students and the surrounding controlled parking zones eliminates the potential for car travel by students. As such, a target of 100% sustainable travel by students is considered feasible. This target for student travel will be agreed with Liverpool City Council's Travel Plan Coordinator from the outset of the development occupation. If deemed necessary, a travel behaviour survey will be distributed once the development opens and at regular intervals as deemed necessary by the Travel Plan Coordinator at Liverpool City Council.

It is considered appropriate that once the site becomes operational the ongoing update, monitoring and review for the Crown Court Travel Plan is incorporated into the ongoing site-wide Umbrella Travel Plan update-monitoring and review process. The monitoring procedure should be discussed and agreed with the Local Authority throughout the lifetime of the development. This will then allow the survey type and time period for monitoring to be reassessed by the Local Authority to suit the current practice.

The main areas of monitoring, in addition to the staff and student travel surveys, will encompass the following:

- Uptake of car sharing / car-clubs.
- Uptake of any public transport discount tickets / Rail Season Ticket Loan / patronage levels.
- Travel by sustainable modes (revealed by mode split data from the travel surveys and information collected by staff on-site regarding student travel).
- Interest in sustainable travel information (e.g. number of staff/students approaching TPC for travel advice, level of interest in travel notice boards).
- Car park usage across campus.
- Use of cycle parking across campus.

Conclusions



This Travel Plan identifies the site-wide Travel Plan measures that will be implemented at the Crown Court development, as part of the site-wide Umbrella Travel Plan, in order to promote use of sustainable methods of travel and reduce single occupancy vehicle travel. In addition, a number of proposed beneficial site-specific Travel Plan measures have been discussed.

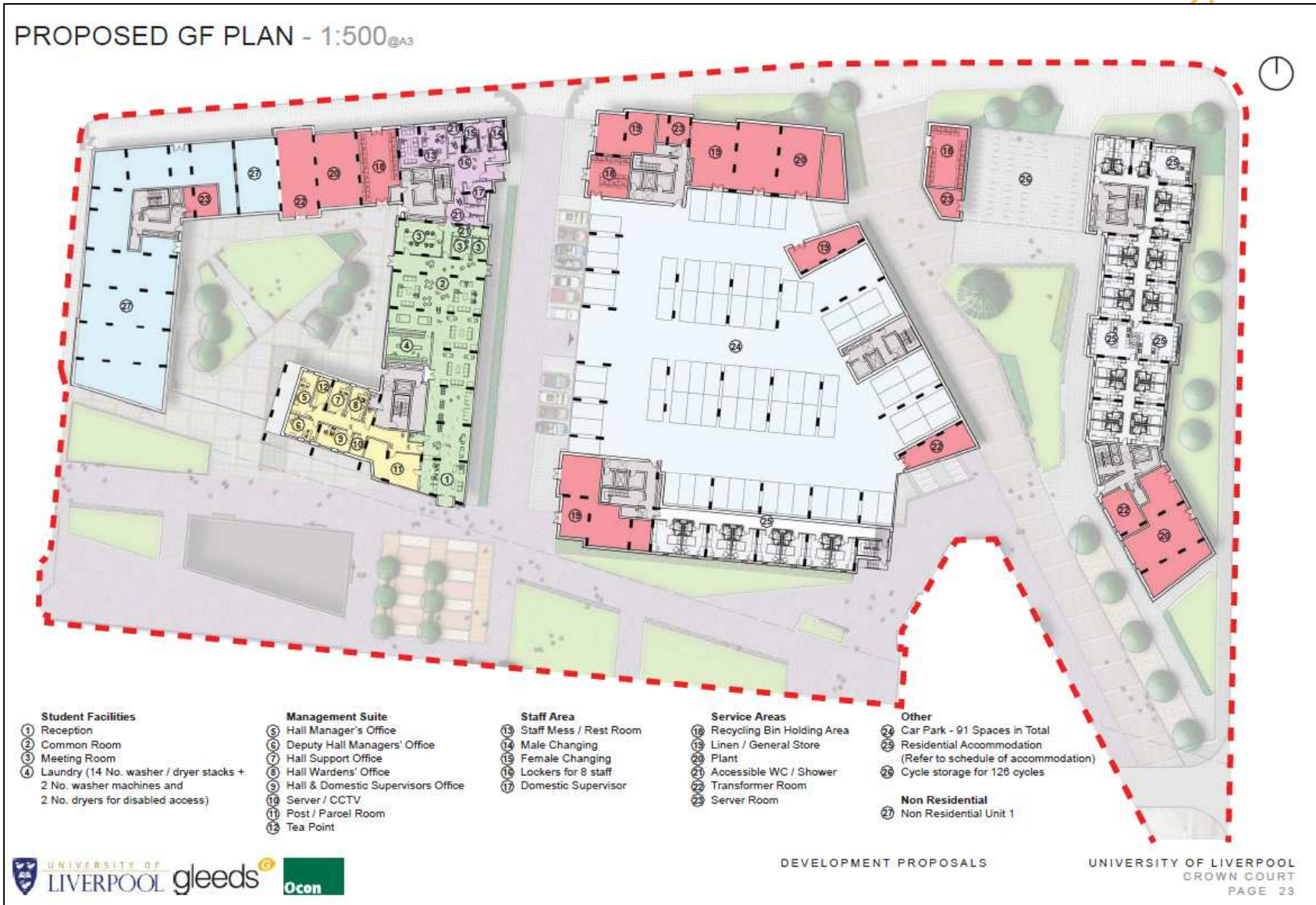
Given the highly accessible location of the site on campus, an effective Travel Plan will assist in promoting sustainable travel by staff and resident students and hence reducing the need for car use. Through delivery of the measures discussed, the Travel Plan objectives identified in Section 6 can be met, as follows:

- To improve access and provide safe access to the development site by a variety of transport modes;
- To seek to reduce the overall level of car use journeys to and from the site;
- To promote and maximise the proportion of employees and visitors travelling to the site by more sustainable modes, for example, public transport, walking and cycling;
- To provide information regarding the choice of alternative transport modes available;
- To promote healthy lifestyles and a sustainable vibrant community i.e. through raising awareness of the environmental and health benefits of using more sustainable modes of transport;
- To manage the demand for parking; and
- To minimise traffic generation on the local road network.

It is concluded that this Travel Plan provides a firm basis for ensuring that the objectives, targets and delivery mechanisms are taken on board in the Full Travel Plan when the Crown Court site becomes operational.

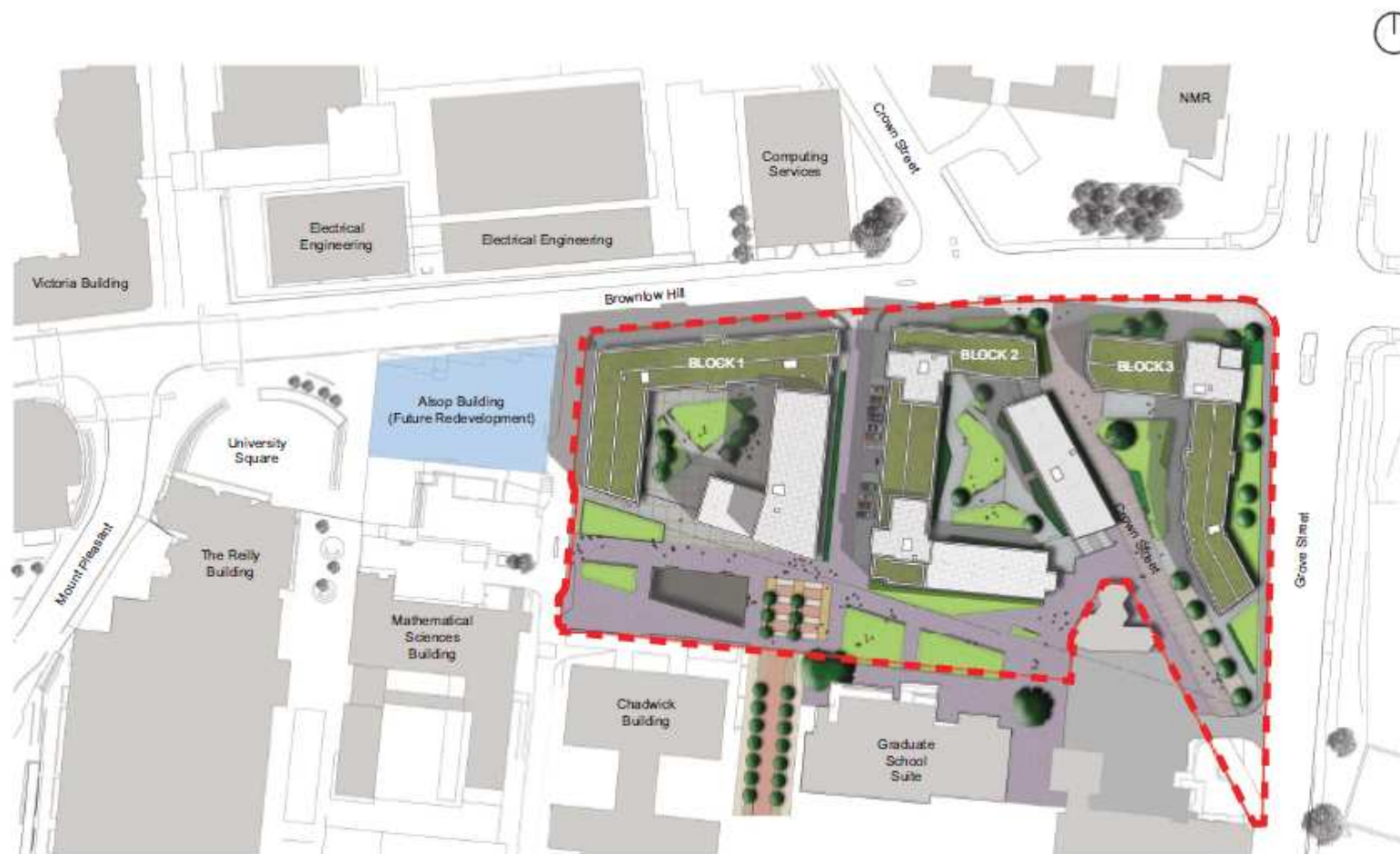


Site Plans – Ground Floor Plan



Site Plans – Site Plan

PROPOSED SITE PLAN - 1:1000 @A3

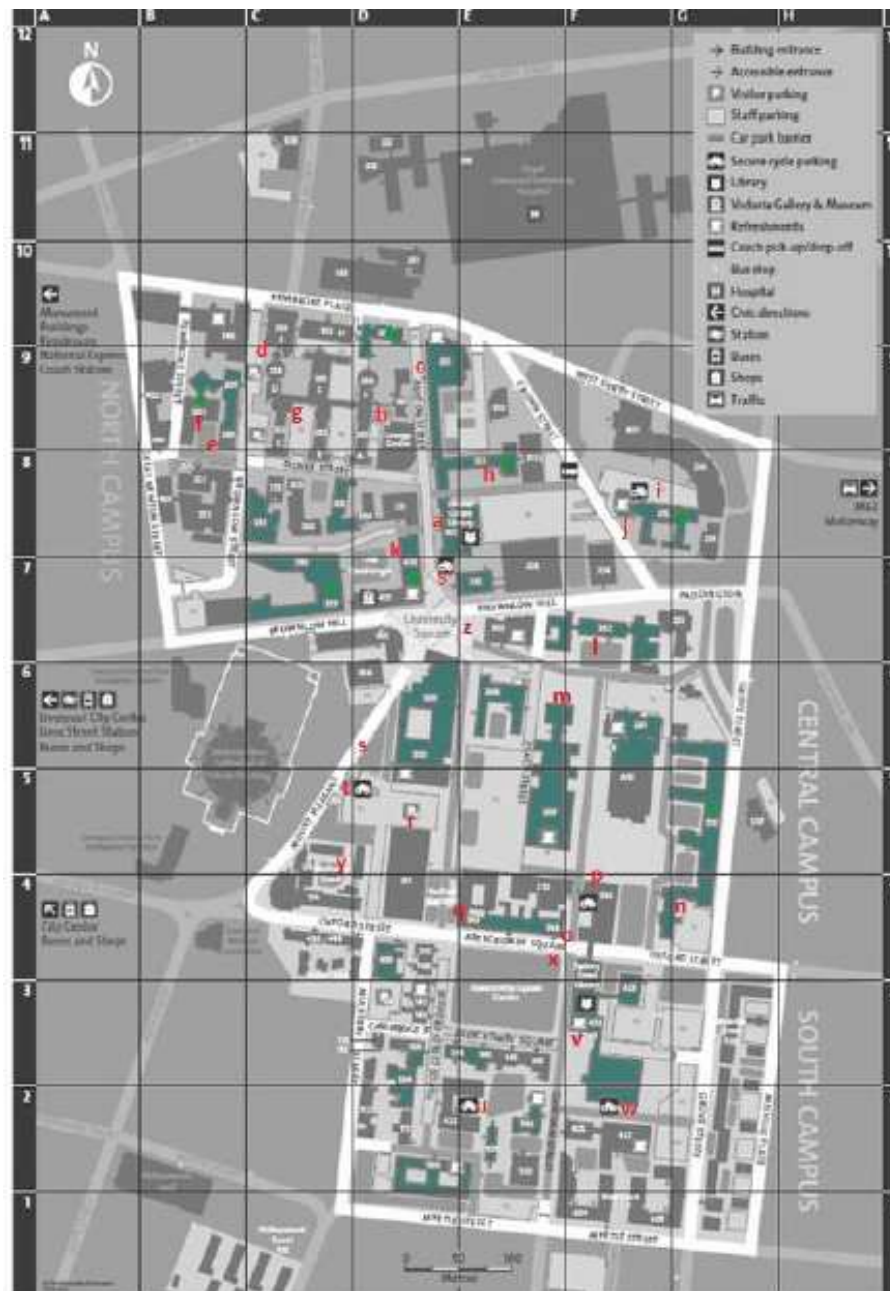


Cycle Facilities Audit

Cycle Parking For Staff and Students					
Site	Type of parking	Number	Number used	Sheltered	Secure
a	sheffield	10	4	no	no
b	sheffield	10	1	no	no
c	sheffield	20	5	no	yes
d	sheffield	4	0	no	yes
e	sheffield	15	7	no	no
f	sheffield	6	0	no	no
f	'wheel bender'	8	0	no	no
g	'wheel bender'	24	2	yes	yes
h	sheffield	8	4	yes	yes
i	sheffield	26	13	yes	yes
j	'wheel bender'	25	4	yes	no
k	sheffield	18	4	no	no
l	sheffield	28	2	no	no
m	sheffield	20	0	no	No
n	sheffield	34	13	yes	yes
o	sheffield	12	0	no	no
p	sheffield	12	0	no	no
q	sheffield	14	7	no	no
r	sheffield	70	16	no	no
s	sheffield	12	0	no	no
t	sheffield	20	3	yes	yes
u	sheffield	38	14	yes	yes
v	sheffield	40	11	no	no
w	sheffield	50	10	25	25
x	sheffield	6	0	no	no
y	sheffield	unknown	unknown	yes	yes
z	sheffield	6	0	yes	yes
\$	sheffield	10	8	no	no

Appendix C: Cycle Facilities Audit

Cycle Facilities Audit



Public Transport Provision

Bus Access

PPG13 states that developments should be located at or near public transport networks. The recommended walking distance from a development to a bus stop by IHT in their 'Guidelines for Planning for Public Transport in Development' is 400m. The Crown Court site benefits from bus stops being located within 400m of the site on Crown Street, Grove Street, and Brownlow Hill. In addition, there are bus stops on Oxford Street to the south of the development and West Derby Street to the north, also within 400m of the site. **Figure 3.1** highlights bus stops in the vicinity of the site.

All bus stops on Brownlow Hill, Oxford Street, Crown Street and Grove Street are of high standard and include timetable information (except two stops), are well lit, free from graffiti, sheltered and include seating provision. There was no vandalism noted at the time of the site audit and all stops are well lit.



The bus stops on Crown Street provide services to the City Centre, Halewood, Hunts Cross, Dingle Mount, Toxteth, Albert Dock and Penny Lane.

The bus stops on West Derby Street provide services to the City Centre, Wavertree, Woolton, Halewood, Childwall, Netherley, Runcorn, Widnes and Murdishaw.

The bus stops on Brownlow Hill provide services to the City Centre, Huyton, Wavertree, Roby, Prescott, Page Moss, Childwaal, Whiston and Broadgreen.

The bus stops on Oxford Street provide services to the City Centre, Huyton, Prescott, Toxteth, Aigburth, Old Swan, Broadgreen and Page Moss.

Table 3.1 overleaf shows the timetables for the bus services operating in the vicinity of the site.

Bus Access



Table D.1 below details the service number and timetable information of buses serving the Crown Court development site.

Table D.1 Bus Service Provision in the Vicinity of the Crown Court Site

Service	Route	Operator	Frequency		
			Mon – Fri	Saturday	Sunday
Brownlow Hill					
C1	Canada Boulevard – Vauxhall Road – Queen Square – Royal Hospital – The Cathedrals – Albert Dock –Canada Boulevard	Merseytravel	30	30	30
6, 116	City Centre – Edge Lane – Broadgreen – Roby – Huyton - Cronton - Penketh – Warrington	Arriva Merseytravel	30 (Huyton) 60 (Warrington)	30 (Huyton) 60 (Warrington)	-
7	City Centre – Edge Lane – Broadgreen – Page Moss – Huyton	Arriva	30	30	60
7A	City Centre – Edge Lane – Broadgreen – Page Moss – Huyton – Cronton - Penketh – Warrington	Arriva	60 Eve	60 Eve	60
14, 14C	City Centre – Edge Hill –Wavertree – Childwall – Belle Vale – Netherley – Hough Green - Widnes	Halton Transport	15	15	20
61, 161	City Centre – Wavertree – Huyton – Whiston - Prescott – Rainhill – Farnworth – Widness – Runcorn - Murdishaw	Halton Transport Merseytravel	20	20	60
79	City Centre – Brownlow Hill – Wavertree – Childwall – Belle Vale – Netherley	Arriva	5 daytime 30 evening	6 daytime 30 evening	15 daytime 30 evening
79C	City Centre – Wavertree – Childwall – Belle Vale – Netherley – Hough Green - Widnes - Runcorn – Halton Hospital - Murdishaw	Arriva	15 daytime 30 evening	15 daytime 30 evening	30
Oxford Street					
83	City Centre – Womens Hospital – Toxteth – Aigburth	Stagecoach	30	30	-
139	City Centre – Edge Hill – Wavertree Tech Park – Old Swan – Broadgreen Hospital – Page Moss – Dinas Lane – Huyton – Whiston – Whiston Hospital – Prescott	Comfybus	30	30	-
699	(Term time only) Carnatic Hall – Greenbank Rd – Liverpool University – Greenbank Road – Carnatic Hall	Arriva	10 daytime 20 evening	20	20

Bus Access



Table D.1 Bus Service Provision in the Vicinity of the Crown Court Site continued

Service	Route	Operator	Frequency		
			Mon – Fri	Saturday	Sunday
Grove Street					
76	City Centre – Womens Hospital – Ullet Road – Penny Lane – Menlove Avenue – Woolton – Okell Drive – Halewood	Arriva	30	30	-
76A, 77	City Centre – Womens Hospital –Penny Lane – Menlove Avenue – Woolton – Okell Drive – Halewood – Hunts Cross – Menlove Avenue – Penny Lane – Womens Hospital – City Centre	Arriva	30 Eve	30 Eve	30
201	Speke – Garston – Liverpool South Parkway – Penny Lane – Womens/ Royal Liverpool Hospitals	Merseytravel	3 services only	3 services only	3 services only
801	Royal Liverpool Hospital – Womens Hospital – Penny lane – Liverpool South Parkway – Springwood Cemetery	Merseytravel	-	-	2 services only
C5	Dingle Mount – Toxteth – Womens Hospital – Royal Hospital – Queen Square – James Street Station – Albert Dock – Brunswick Business Park – Dingle Mount	Merseytravel	30	30	30
699	Carnatic Hall – Greenbank Rd –Liverpool University – Greenbank Road – Carnatic Hall	Arriva	10 daytime 20 evening	20	20

Bus Access



Table D.1 Bus Service Provision in the Vicinity of the Crown Court Site continued

Service	Route	Operator	Frequency		
			Mon – Fri	Saturday	Sunday
Crown Street					
76	City Centre – Womens Hospital – Ullet Road – Penny Lane – Menlove Avenue – Woolton – Okell Drive – Halewood	Arriva	30	30	-
76A, 77	City Centre – Womens Hospital – Penny Lane – Menlove Avenue – Woolton – Okell Drive – Halewood – Hunts Cross – Menlove Avenue – Penny Lane – Womens Hospital – City Centre	Arriva	30 Eve	30 Eve	30
C3	Canada Boulevard – Albert Dock – The Cathedrals – Royal Hospital – Queen Square – Vauxhall Road – Canada Boulevard	Merseytravel	30	30	30
C5	Dingle Mount – Toxteth – Womens Hospital – Royal Hospital – Queen Square – James Street Station – Albert Dock – Brunswick Business Park – Dingle Mount	Merseytravel	30	30	30
West Derby Street					
78	City Centre – London Road – Wavertree – Woolton – Gateacre – Halewood – Ravenscourt Bus Facility – Okell Drive	Arriva	20	30	30
79	City Centre – Brownlow Hill – Wavertree – Childwall – Belle Vale – Netherley	Arriva	5 daytime 30 evening	6 daytime 30 evening	15 daytime 30 evening
79C	City Centre – Wavertree – Childwall – Belle Vale – Netherley – Hough Green - Widnes - Runcorn – Halton Hospital - Murdishaw	Arriva	15 daytime 30 evening	15 daytime 30 evening	30
838	Hunts Cross – Childwall – City Centre – Liverpool Freeport	Merseytravel	1 AM journey	-	-

Rail Access

The closest rail stations to the Crown Court site are Central, Lime Street and Edge Hill stations which are located approximately 1.2km, 1.2km, and 1.3km away, respectively. However, students are most likely to travel to the site via Liverpool Central Station and Liverpool Lime Street Station in the City Centre. The IHT 'Guidelines for Planning Public Transport in Development' recommend a maximum walking distance of 900m from a development site to a train station. The railway stations are therefore just outside the maximum recommended walking distance. Although it is likely that some students and staff will be willing to walk this distance.

Liverpool Central forms the hub of the Merseyrail network being on both the Northern Line and Wirral Line. Liverpool Central Station provides services every 15 minutes during the daytime on each of several branches to stations on the Northern and Wirral Lines. Final destinations include Chester, Hunts Cross, Southport, Ormskirk, Kirkby, West Kirby, New Brighton, and Ellesmere Port, with a comprehensive network of local stations between these and the city centre. The rail services are reduced to a 30 minute frequency on each line on a Sunday and in the evening, except for the Southport line which continues to operate on a 15 minute frequency.

Lime Street Station is on the West Coast Main Line from London Euston and on the Wirral Line and City Line of the Merseyrail network. Liverpool Lime Street Station provides frequent services to Warrington, Manchester, Birmingham, Blackpool, London, Leeds, Nottingham, Scarborough and York.

Edge Hill station is on the City Line and provides a link to the various stations on this line i.e. Liverpool Lime Street, Widnes, Warrington Central, St Helens and Manchester. From Edge Hill Station there is a train on average every 15 minutes to Liverpool Lime Street Monday to Saturday daytime. There are services to Wigan North Western every 30 minutes; and services to Manchester or Warrington on average every 30 minutes. On Sundays no trains stop at Edge Hill station.

Students may choose to use the train for part of their journey for employment or leisure trips outside of the city centre, most likely coupled with walk, cycle or bus. Staff may choose to use the train on their journey to work, coupled with walk, cycle or bus. A Plusbus ticket scheme is currently in operation which facilitates easy interchange onto an appropriate bus service to the Crown Court site.

Rail Access - PLUSBUS

The Plusbus is a discount price 'bus pass' that is purchased with a train ticket. It provides the holder with unlimited bus travel around town, at the start, the finish, or both ends of their train journey. Plusbus tickets are available to purchase with a train ticket at the station or by phone. With a Plusbus ticket you can travel anywhere on Arriva, First, Stagecoach, Halton Borough Transport, Merseytravel, Huyton Travel and Peoplesbus buses around the whole urban area of Liverpool. The cost of a Plusbus ticket is £3 for adults, £1.50 children and £2 for a railcard holder. Season tickets cost £11.50 for 7days; £44 for a month; £122 for three months; and £440 for a year. Childrens season tickets are not available for this area.

Figure D.1 indicates the Plusbus operating area

Source: <http://www.plusbus.info/>



Figure D.1

Pedestrian Access

Footways on Crown Street, Grove Street, Brownlow Hill and Oxford Street are wide (at approximately 2m), well-lit, and generally in good condition with no overgrown vegetation. The junction of Brownlow Hill and Grove Street has controlled pedestrian crossings on all arms with dropped kerb, tactile paving, pedestrian refuges and call buttons. The junction of Grove Street and Oxford Street has comprehensive controlled pedestrian crossing facilities with dropped kerbs and tactile paving. Pedestrian refuges are present on Brownlow Hill.

The pedestrian routes within the University campus are in good condition, well signposted and well lit; there is also considerable CCTV coverage. Pedestrian routes through the campus in the vicinity of the Crown Court development site include an east-west path to the southern boundary of the site linking Grove Street and University Square at the junction of Mount Pleasant and Brownlow Hill. There is also a pedestrianised route running southwards from this route linking to Abercromby Square. A further footpath runs parallel to the southbound footpath just to the west of Peach Street and links University Square with Abercromby Square via the sports centre. This is the main pedestrian and cycle route through the campus.



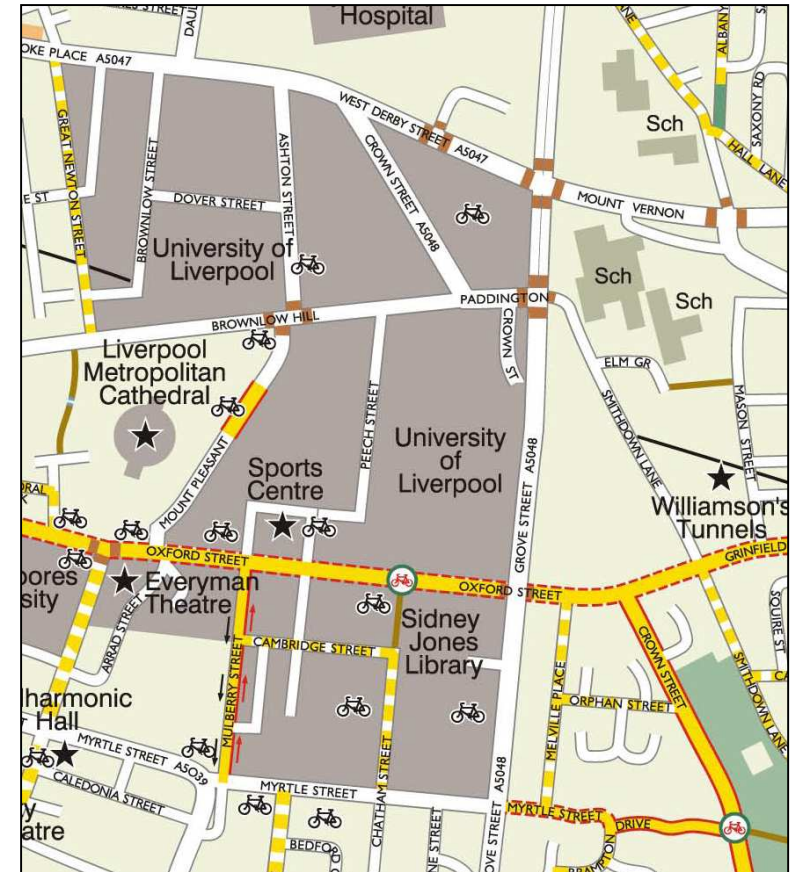
Good signage is present across the University campus and within the vicinity of the proposed development site.

PG13 states that for distances under two kilometres, walking offers the greatest potential to replace the use of the car, "Walking is the most important mode of travel at the local level and offers the greatest potential to replace short car trips, particularly those under 2km" (Paragraph 75 PPG13). Liverpool city centre, with its numerous facilities, including public transport facilities, is located within a reasonable walking distance of the development site, as indicated in **Figure D2**.

Cycle Access

Oxford Street to the south of the site provides an on-road sign posted cycle route linking the city centre with Broad Green and the TransPennine Trail (an off-road National Cycle Route). To the south east, from the junction of Crown Street and Oxford Street, there is a on-road cycle route which leads to cycle routes to the east and south of Liverpool eventually linking with National Cycle Route 56.

The roads around the site are sufficiently wide for cyclists to use and the local cycle routes are clearly marked, signed and in good condition. The local route is illustrated in **Figure D.3**, taken from the Liverpool Cycle Map produced by TravelWise Merseyside.



Key to map symbols

- On-road cycle route (both sides of road)
- - - On-road cycle route (one side only)
- Suggested cycle route
- - - On-road signed cycle route
- Traffic-free cycle route (good surface)
- - - Advanced stop line

Figure D.3

Cyclist Access

The University campus is accessible by cycle and there is ample bicycle parking with space to park over 530 bicycles at allocated bicycle parking areas across the campus (as set out in the recent cycling audit included at **Appendix C**), many of these are secure and undercover (note: a minority are council owned provisions)..

The nearest cycle parking provision to the proposed development is located at the Biosciences building to the north of Brownlow Hill. A total of 25 stands are provided in front of the Biosciences building entrance. At the time of the site audit there were 12 cycles secured at the parking facility which is located close to the building entrance. The cycle parking is therefore currently well used at the site.

Other cycle parking provision within close proximity of the site is located next to the Harold Cohen Building, near the Sports Centre, on Mount Pleasant, near the student Service Centre and off Oxford Street.



PPG13 notes that for journeys of less than 5km, cycling offers a potential substitute to car borne trips. Bootle, Everton, Mossley Hill, Wavertree and West Derby are all located within a reasonable cycling distance of the site, as indicated in **Figure D2**. As such, the potential will exist to encourage students who need to travel short journeys outside of the city centre to travel by this mode.

Figure D.2 Walking and Cycling Isochrones



Ref: NW90067 isochrones

© crown copyright. All rights reserved. License number 100030649

Vehicular Access

Vehicular access to the existing development site is via an access point on Crown Street (to the south of Brownlow Hill). This part of Crown Street previously routed through to Grove Street but was closed off as part of the Hall Lane highways improvement scheme. The road now serves only as an access into the University site, providing access to the barrier controlled staff car park number 12 and the few uncontrolled veterinary car park visitor spaces. In addition, this access provides servicing of a number of University science buildings and catering facilities in the vicinity of the development, and access to the existing substation.

The existing car park 12 is for staff use only and a swipe card barrier system is required in order to gain access to the parking areas. The car park was predominantly full on the day of the site audit.



All the streets in the vicinity of the site have 30mph speed restrictions and connect to the City Centre, South Liverpool and Wavertree.

Crown Street/Grove Street, Brownlow Hill and Oxford Street are all single carriageway roads and have 30mph speed restrictions. Peach Street forms part of the University Campus road network and therefore is unadopted, it has a speed restriction of 15mph.

The junction of Crown Street and Brownlow Hill (to the north and south of Brownlow Hill) is a give-way junction. The junction of Grove Street and Brownlow Hill and Grove Street and Oxford Street are both fully signalised junctions with pedestrian crossing facilities on all arms. Access via Peach Street and Oxford Street simply provide University access points onto campus rather than a formal road junction.