

BSUH Green Travel Plan

May 2014

Green Travel Plan updated 2013

Introduction

Brighton and Sussex University Hospitals NHS Trust (BSUH) approved the first Green Travel Plan in 2006. It was refreshed by WSP for both sites in 2011 as required by Brighton and Hove City Council (BHCC) as part of the planning submission. This document assesses the success of the implementation of the plan thus far and identifies actions required prior to the 3Ts development of the Royal Sussex County Hospital (RSCH) site, based on this progress.

It is structured as follows:

- Executive summary
- Benefits of the Travel Plan
- Policy context (national and local)
- Trust description and transport infrastructure
- Current travel plan
- Development proposals: 3Ts
- Impact of St Mary's Hall on Travel Plan
- Travel survey results and progress so far
- Management Structure for implementation of Travel Plan
- Conclusion and recommendations
- Appendices

Executive Summary

BSUH recognises the merits of the current successful Travel Plan which has led to the delivery of a range of travel initiatives and measures utilised by staff, patients and visitors. It signals a commitment from BSUH to tackle local traffic problems at the RSCH and within the wider local area. BSUH is also committed to continuing to develop the Travel Plan so that it is responsive to future demands at the site, particularly in terms of the proposed redevelopment of the RSCH site for 3Ts.

It is recognised by the Trust that the Travel Plan, whilst being a policy requirement of BHCC, is also essential as an operational management tool for the hospital. Without an effective and pro-active travel plan in place there is little doubt that the operational needs of the hospital in respect of ease of access to and from the hospital for all users will be compromised. It is therefore essential that the Travel Plan remains in place, evolves with the hospital and is monitored, managed and developed to serve the changing demands of users in the future. Taking account of these requirements, and the wider need to manage traffic growth and reduce the harmful impacts of vehicles on the environment, the commitment of the Trust goes beyond meeting planning and development control requirements. Even without these external influences the management, monitoring and review of the Travel Plan will remain embedded in the operational management requirements of the hospital for as long as the hospital remains in situ. The Trust recognises that it is important to reduce the use of the private car as the common mode of travel to work. BSUH is committed to continue working with the local planning and highway authority

to contribute to a solution for traffic and transportation issues which improves the experience of both staff and visitors to the site.

Benefits of Green Travel Plan

BSUH is required to produce a travel plan for several inter-related reasons:

Planning

The Travel Plan is required by Brighton and Hove as a part of the planning conditions relating to the 3Ts development. It forms part of the sustainability strategy within the City which sees a reduction in traffic as a key strategic priority.

Climate Change

The Plan signals the commitment of BSUH to the wider sustainability agenda, including the national Carbon Reduction Strategy 'Saving Carbon, Improving Health'.

Finance

Initiatives such as the 40X inter-site bus service enable staff and patients to save the money they would otherwise spend on parking and running their own cars or taking taxis. Moreover saving carbon saves the NHS money.¹

Health

"Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity²"

The increasingly sedentary lifestyle led by many people in the UK has led to higher levels of obesity which are associated with type 2 diabetes, cardiovascular disease, and cancer. There is evidence that reducing reliance on private car usage improves the health of our staff if they use alternatives such as cycling and walking^{3,4}. Moreover, increased travel by bus reduces traffic, which reduces vehicle emissions. This has a positive impact on health conditions such as asthma as well as the benefits from a reduction of stress associated with trying to find a parking space and still reach the desired destination on time.

Patient Experience

The Plan improves the experience of our patients and visitors who, when they do need to access the site by car because of illness, disability or other priority needs, will find it easier to do so. Reducing unnecessary car use thus improves the experience of those who do need to travel by car.

¹ Reduced energy building usage has provided direct energy savings of £10million (Noel Plumridge HSJ June 2013)

² World Health Organisation Definition

³ Woodcock, J, et al; Public health benefits of strategies to reduce greenhouse-gas emissions: urban land transport, Health and Climate Change 2. Lancet 2009; 374: 1930–43

⁴ <http://www.nice.org.uk/News/Article/commuting-by-walking-or-cycling-can-boost-mental-wellbeing>

Policy Context

The principles of sustainable travel and development are recognised nationally and several policy and guidance documents have been published for both developers and government bodies alike:

The NHS Carbon Reduction Strategy for England ⁵ identified the challenges and opportunities for the NHS in taking forward the sustainability and carbon reduction agenda. In 2010 the carbon footprint of the NHS was 20 million tonnes. This accounts for 25% of all public sector carbon emissions, or around 4% of total emissions in England. The breakdown of the NHS in terms of resource consumption is as follows:

- Energy 22%
- Travel 18% (staff and patients)
- Procurement 60%

Complying with the Climate Change Act⁶ targets of a 26% reduction by 2020 and an 80% reduction in energy use by 2050 will be a challenge. The NHS is responsible for circa 25% of the total public sector emissions and 5% of all road traffic in England. The carbon footprint of the NHS, public health and all local authority commissioned and provided adult social care services in England is estimated at 32 million tonnes of Carbon Dioxide equivalent, representing 40% of public emissions in England.

In the short term the NHS has a target of reducing its 2007 carbon footprint by 10% by 2015. The most recent policy guidance suggests that a reduction of carbon emissions by 34% by 2020 will be a key ambition nationally with a stretch target of 50% reduction by 2025.⁷

This dramatic reduction is necessary for many reasons; one example being the 1500 people who died prematurely during the heat wave of 2003. Unless energy usage and the carbon footprint is reduced this will speed up the effects of climate change which will have severe economic as well as social consequences. Another example in more recent memory is the severe flooding much of Southern England during February 2014. As the Kings Fund points out, carbon dioxide emissions attributable to the NHS in England alone are greater than the total emissions from all aircraft departing from Heathrow.⁸ Thus NHS organisations have important roles to play in this arena as good corporate citizens. The suggestions for action include having a Board approved travel plan, a reduction in staff inter site travel, increased use of tele-conferencing, a flat rate mileage system for reimbursement and considerable scrutiny of any long distance procurement of supplies.

Contemporary transport policy recognises the impact that workplace measures can have in encouraging a shift in mode choice, particularly when accompanied by demand management restraints on single-occupancy car use. National and local guidance documents are summarised in appendix 1, but suggest in summary that the NHS has a corporate responsibility to reduce its carbon footprint, as well as producing health benefits through the introduction of alternatives to private car usage.

⁵ The NHS Carbon Reduction Strategy for England (2009) Sustainable Development Unit
http://www.sdu.nhs.uk/documents/publications/1237308334_qyIG_saving_carbon_improving_health_nhs_carbon_reducti.pdf

⁶ <http://www.sdu.nhs.uk/corporate-requirements/legal-requirements/climate-change-act.aspx>

⁷ http://www.sduhealth.org.uk/documents/publications/2014%20strategy%20and%20modulesNewFolder/Strategy_FINAL_Jan2014.pdf Sustainable, Resilient, Healthy People & Places, A Sustainable Development Strategy for the NHS, Public Health and Social Care system, Sustainable Development Unit.

⁸ http://www.kingsfund.org.uk/sites/files/kf/field/field_publication_file/sustainable-health-social-care-appleby-naylor-mar2012.pdf

Trust Description

The geographical nature of the Trust varies dramatically between its two main sites, the RSCH and PRH. Apart from the obvious distance of one from the other, 17 miles, the areas in which the sites are located differ greatly.

The RSCH is set in a residential area in the East of Brighton and Hove. The roads around the site are restricted to residents only and pay and display with varying time limits that range from 30 minutes up to 11 hours. The charges range from £3.00 for 2 hours to £5.00 for 11 hours. The hospital site currently has 474 car parking spaces in total for staff, patients and visitors, dedicated parking for 35 motorbikes and parking for approximately 205 cycles. There are an estimated 2500 vehicles coming to the site each day which puts a tremendous strain on the on-site parking resources with queuing time for the car park averaging 45 minutes at peak times. The site is very well serviced by the 'Brighton and Hove Bus and Coach Company', which is widely recognised as a successful local operator, and runs an extensive service throughout the city with real time information on times available at many stops. There are areas however not covered by a frequent service, which does leave little other option than to come in by car.

The PRH site is set in the East Haywards Heath, which is a rural town, surrounded by other smaller rural towns and villages. The local area although residential is far less populated than that of RSCH. There are good number of buses that stop outside the Hospital and service the town and surrounding areas, run by several separate operators (Country liner, Metro Bus, and Arriva). Unfortunately the regularity and frequency of these services do not always meet the requirements of a large number of staff, patients and visitors. The PRH site has 1010 car parking spaces for staff, patients and visitors together with parking for approximately 20 motorbikes and 20 cycles. There are approximately 2500 vehicles (of which 2200 are cars) entering the site each day, accounting for approximately 70% of people coming to the hospital.

Existing transport infrastructure RSCH and PRH

The next section describes the access to both sites, although more detail is available regarding RSCH. PRH public transport details will follow in a separate paper.

Access to PRH- travel by foot

Pedestrian access around the site is facilitated by several dedicated footways which provide links from the car parking areas to the main hospital buildings, although there are several areas where pedestrians are required to walk on the access roads around the site. There are footways located along both sides of the A272 and there are two access points into the site for pedestrians, one along the main vehicular access and one for pedestrians only, located to the east of a reservoir adjacent to the bus stops on the A272.

Access to PRH- travel by bus

Public transport access to the site is principally by bus and there are two bus stops located just outside the PRH site on the A272 Franklynn Road, serving westbound and eastbound movement. There are 11 regular bus routes serving these bus stops, which provide services to other parts of Haywards Heath, Brighton, Lewes, Burgess Hill and Crawley. There are a further three bus services which provide less regular services (1-2 per day).

Access to PRH- travel by train

Haywards Heath Rail Station is located approximately 2.2 km by road to the north-west of the site and there are several bus services which provide a direct link between the rail station and the PRH, with a journey time of 5-10 minutes. From Haywards Heath Rail station there are direct train services to many destinations in the area including Brighton, Hove, Three Bridges (Crawley), Gatwick Airport, Redhill, Lewes, Eastbourne and London.

Access to RSCH- travel by foot

The hospital site is located centrally in the Brighton urban area with excellent pedestrian facilities with footways on both sides of the roads surrounding the hospital site. Pedestrian access to the site is currently gained via a network of footpaths running along Upper Abbey Road, Eastern Road and Bristol Gate. These provide excellent permeability from the local surrounding area to the site as well as to local facilities. The footways are of a good standard and include associated provision of street lighting and signage. A formalised puffin crossing is available for pedestrians crossing Eastern Road to access the hospital main entrance. It should be noted that this is being moved as part of the 3Ts development as required within the Section 106 agreement.

Access to RSCH- travel by cycle

In terms of cycle facilities, there are few dedicated cycle routes in the immediate vicinity of the hospital site. Abbey Road is identified as a 'quieter road' recommended for cyclists by Brighton & Hove City Council although it is of a 'hilly' nature and therefore may not be suitable for all cyclists. Brighton & Hove City Council has identified particularly hilly routes as walking sections for cyclists.

The nearest dedicated cycle route to RSCH is along Marine Parade, which forms part of the National Cycle Network (NCN) Route 2. This route provides access to Brighton city centre and Portslade-by-Sea to the west and Rottingdean and Newhaven to the east. Large parts of this route also benefit from being designated as 'Traffic Free Routes Signed for Cyclists'.

Other NCN routes in Brighton are Route 20 and Route 90. Route 20 follows the A23 London Road corridor and provides a direct route from Patcham to Brighton city centre and Route 90 follows the A270 Lewes Road from Coldean. Following these routes down to the Royal Pavilion (which is traffic free from St Peter's Church) allows direct access onto the western end of Edward Street. Edward Street is the subject of redevelopment proposal which will significantly improve the experience of walking and cycling along Eastern Road.

Access to RSCH- travel by bus

The site enjoys excellent accessibility by bus with a range of bus services operating in the area. The nearest bus stops to the site are along Eastern Road and Abbey Road immediately adjacent to the site. Table 1 shows the bus services which run within the vicinity of the Hospital site and the level of service provided.

Table 1: Existing Bus Services: Royal Sussex County Hospital

Service	Operator	Route	Frequency (Minutes)			First Bus (M-F)	Last Bus (M-F)	
			Mon-Fri (Peak)	Mon-Fri (Off-peak)	Saturday			
1/1A	Brighton & Hove Bus	Whitehawk - Brighton - Hove - Portslade - Mile Oak	6-10 minutes	6-15 minutes	6-20 minutes	0454	2346	
7 / N7	Brighton & Hove Bus	Hove - Brighton - Hospital - Brighton Marina	Every 7 minutes	15-30 mins	7-30 minutes	0420	0350	
14/14C	Brighton & Hove Bus	Hangleton - Brighton - Peacehaven - Newhaven	25-49 minutes	Every 30 minutes	Every 30 minutes	0600	1843	
23	Brighton & Hove Bus	Brighton Marina - County Hospital - Universities	13-30 minutes	Every 30 minutes	Every 30 minutes	0704	1855	
37	Brighton & Hove Bus	Bristol Estate - Kemp Town - Brighton - Meadowview	15-25 minutes	15-30 minutes	15-30 minutes	0638	2301	
37B	Brighton & Hove Bus	Bristol Estate - Kemp Town - Brighton - Meadowview	Hourly	Hourly	Hourly	0845	1805	
47	Brighton & Hove Bus	East Saltdean - Rottingdean - Brighton Station	50-60 minutes	Hourly	Hourly	0652	1858	
52	Brighton & Hove Bus	Brighton Station - Ovingdean - Woodingdean	Hourly	Hourly	Hourly	0645	1941	
71/73; 90;	Brighton & Hove Bus	Whitehawk - Brighton - Hove - Park School;	These buses provide 1-2 school peak hour services each, on school days only, and route past the site along Eastern Road.					

94/94A		Whitehawk - Queens Park - Falmer School; Arundel Rd - Queens Park - Varndean Schools						
40X	Brighton & Hove Bus	Royal Sussex County Hospital – Burgess Hill – Haywards Heath Princess Royal Hospital	Hourly	Hourly	No Service	0600	2230	

Brighton & Hove Bus and Coach Company provide the most comprehensive services within the local vicinity of the development. They all provide a high level of service to the hospital site, with some services operating a frequency of every 6 minutes. These routes provide good permeability from Whitehawk, Hove, Mile Oak, Brighton Marina and Brighton City Centre to the site.

Additionally the Trust's own service, the 40X, has become extremely popular. This popularity has led to capacity issues which have recently been addressed.

Access to RSCH- travel by train

Brighton rail station is the closest rail station to the site, at approximately 2.35 km from the RSCH. This equates to approximately a 25 - 30 minutes' walk or 10 minutes bus journey. Trains running to/from this station offer the opportunity to travel across the regional and national rail network, but in particular to destinations shown in Table 2.

Table 2: Existing rail services: Brighton Station

Origin	Destination	Quickest Duration (HH:MM)	Frequency (services per hour)			
			Arrivals		Departures	
			AM Peak	PM Peak	AM Peak	PM Peak
Hove	Brighton	00:03	6	7	7	5
Lewes	Brighton	00:11	7	5	5	5
Hayward's Heath	Brighton	00:12	4	5	5	5
Worthing	Brighton	00:16	5	5	6	4

Origin	Destination	Quickest Duration (HH:MM)	Frequency (services per hour)			
			Arrivals		Departures	
			AM Peak	PM Peak	AM Peak	PM Peak
Gatwick Airport	Brighton	00:25	3	4	5	3
Eastbourne	Brighton	00:32	3	3	2	2
Chichester	Brighton	00:48	2	3	3	2
London Victoria	Brighton	00:51	2	2	1	2
Hastings	Brighton	01:03	2	2	1	1
St Pancras International	Brighton	01:17	3	3	3	3
Portsmouth Harbour	Brighton	01:18	1	1	2	1
Southampton Central	Brighton	01:40	2	2	1	1
Ashford International	Brighton	01:46	1	1	1	1
Luton	Brighton	01:50	3	3	3	2
Bedford	Brighton	02:16	2	2	3	2
Bristol Temple Meads	Brighton	03:29	1	1	0	1

Source: Nationalrail.co.uk

Table 2 demonstrates that Brighton station offers a comprehensive range of direct train services to surrounding settlements. This includes Hove, Worthing, Fareham and Gatwick with journey times of up to 36 minutes.

In order to enhance safety of pedestrians and commuters Brighton station provides CCTV operation 24 hours a day. Further facilities available for commuters include secure sheltered cycle storage (260 spaces), waiting rooms, pre-pay phones and toilets.

Car Parking

At present, there are 474 car parking spaces provided at RSCH. Table 3 shows a breakdown of existing and proposed parking arrangements for the hospital.

The car parks are principally Pay & Display and have Visual Messaging Signs (VMS) outlining the number of available spaces in order to remove potential queuing from the car park onto the highway.

Table 3: –Parking

Car Park	Access via	Total Spaces
Multi-Storey	Bristol Gate	337
Barry & Jubilee Building	Eastern Road	49
Latilla Building & Annex	Eastern Road	12
Nuclear Medicine Building	Eastern Road	10
Sussex Cancer Centre	Eastern Road	19
Sussex House	Abbey Road	39
Out-Patients	Eastern Road	4
TOTAL NUMBER OF SPACES		474

Table 4: –Parking

Princess Royal Hospital								
Car Park	New Name	Location	Use	Total Spaces (inc Disabled/drop off etc)	Disabled Spaces	Drop off Bays	Motorcycle Spaces	Bicycle spaces
1		Opposite Main Entrance	Public	173	25			
Lower disabled		Opposite Main Entrance	Public	5	5			10
2	Day Surgery Unit	Outside DSU	Public	11	3	8		
3 (SOTC)		Outside SOTC	Public	4	4	1		10
4		Rear of Main Building	Public	56	1			
5		Adjacent to Villa	Staff	19			5	
Villa road		Adjacent to cp5	Staff	8	1			
HWP			Shared	12	6	1		
Rear of HWP		Theatre	staff	8				
Downsmere		Downsmere	Staff	54	3			
Road		Ring Road opp Downsmere	Shared	75	1			
Estates	Pool car park	Outside Estates Compound	Trust Vehicles only	8				
Martletts		Site of old Martletts Lodge	Shared	14				
Colwood		Opposite A&E	Staff	195			2	20
MRI		Outside MRI Unit	Public	4	4	2		
A&E		Past MRI	Staff	77	2			

A&E		Main A&E	Public	3		3		
Royal Sussex County Hospital								
Car Park	New Name	Location	Use	Spaces (inc Disabled)	Disabled Spaces	Drop off Bays	Motorcycle Spaces	Bicycle spaces
Sussex House Rear		Off Bloomsbury St	Staff	21				
Sussex House Forecourt		Sussex House	Public	3		1		
Nursery		Sussex House	public	3	1	2		50
Pool Car park		Sussex House	Trust Vehicles Only	16				116
OPD Front		Out Patients	Public	3	3			
OPD Rear		Out Patients	Staff Only	1				12
West End		Adjacent to Fractures	Trust Vehicles Only	4				
Main Car Park		Eastern Rd	Public	57	4	4	12	50
Nuclear Medicine		Eastern Rd	Staff Only	30				
Sussex Cancer Centre		Sussex Cancer Centre	Public	23	7			
Sussex Cancer Centre (Drop Off)		Sussex Cancer Centre	Public			2		
South Service Rd				5 (Contractors)				
A&E		A&E	Public	7		4		22
North Service Rd								10
Hammerhead				7		7		
North Car Park			Shared Use	337	45	0	15	10
RACH Bays		RACH Roundabout	Public	4				
St Mary's 1		Tennis Courts	Staff	10				
St Mary's Main Building			Shared Use	13	1			50

Current Travel Plan 2014 update

The aim of the BSUH Green Travel Plan is to reduce the numbers of cars going to, from and between its sites by introducing travel plan initiatives and schemes, encouraging people to switch to sustainable alternative travel modes. The Trust achieves this through a range of measures which make life easier for staff, patients and their visitors. This section summarises the measures and initiatives that are currently in place as part of the Travel Plan.

- Transport Bureau
- An intranet (now Info-net) page was set up to host information, links and useful documents online.
- Inter-site bus (40X)
- The operation of City Metro 270
- Pool Cars / City Car Club
- Cycle parking
- Cycle mileage Lift share.
- Information packs for new staff

These developments are described in more detail below:

Transport Bureau

The Transport Bureau was set up in July 2007 to cover all aspects of transport operations and travel plan implementation. The Transport Bureau is responsible for sustainable transport initiatives such as the permit system, pool cars, cycle loans, bus pass loans, the 40x bus service and the lift share scheme. The Bureau is the central point for all travel information, ranging from leaflets, individual advice on journeys to work and providing updates on travel information on the Trust's intranet.

The Bureau promotes sustainable transport initiatives daily, which includes running Transport clinics on induction days for new starters and existing staff. The Bureau also runs a Bicycle User Group (B.U.G), which is popular and has a growing membership. This group involves staff across the board, sharing and discussing and implementing ideas to improve facilities for cycle users on the Trust's sites for both patients, visitors and staff.

Inter-site bus service (40X)

BSUH has introduced a bus service 40X, linking the Royal Sussex County and the Princess Royal Hospitals. This initially provided an hourly service from 7am – 7pm, Monday to Friday with a 2 hourly service on Sunday and Bank Holidays. Service 40X had its operating hours extended in 2011. Patients are able to use the service for free upon production of a valid appointment card, reducing reliance on cars for journeys to/from either hospital. Staff may also use it for journeys not originating or terminating at the hospital in order to carry out errands and to visit patients.

Subsidised 40X bus permits are also available to purchase for staff commuting to work.

The operation of City Metro 270 which runs 10 times per day between RSCH and PRH is a new commercial development which has been operating since 2013 and is welcomed by BSUH.

These initiatives have resulted in a reduction in travel cost claims from patients on low incomes and from staff needing to travel for work purposes. Any journeys which could have been made by bus but for which a car was used are only reimbursed at public transport mileage rates instead of the equivalent car rate.

Pool Cars and City Car Club

The Trust runs a pool car scheme which enables staff to carry out their duties within the community. Bookings are made over the phone, and staff collect keys from the on-site Transport Bureau. There are 6 pool cars at RSCH and 5 at PRH.

The Trust is also a corporate member of the Brighton City Car Club. The cars are located off-site, near to the hospital. Every member of staff registered with the scheme is given a key. When they wish to use the car they use an online form to book it; their key is then activated allowing them to unlock and drive the car. This scheme is administered via the City Council.

There are dedicated spaces for both these schemes have, which ensure that parking is always available upon return.

These schemes reduce the need for staff to use their own vehicle or taxis, and thus where alternatives are available, staff do not need to drive to work.

Parking Permit System

Staff are able to apply for a permit for onsite parking and this process is governed by the Trust's Transport Policy, which determines and clarifies the grounds upon which a permit may be issued⁹. This permit system is an integrated part of the Trust's Travel Plan, and is designed to minimise disruption to local residents whilst meeting the needs of staff as far as is reasonably possible.

For a permit to be issued there are a number of criteria that must be met. A scoring mechanism has been set up by the Trust to ensure each criterion is given the relevant score in accordance with its importance. All permits are assessed and scored purely against the criteria and additional information supplied. The following are the list of criteria that have to be met for a Trust permit to be issued:

■ Principle 1 – Mobility

Permits are granted to blue badge holders or those staff who have a permanent mobility impairment but are not eligible for a blue badge.

■ Principle 2 – Essential business use

⁹ The Parking Policy was updated during September 2014 and is available upon request.

Permits are granted where staff are contractually required to use their vehicle for Trust business use on a regular/daily basis, but this only applies if the member of staff is not able to use any of the transport provided by the Trust (i.e. pool cars or 40x bus service).

■ **Principle 3 – Hours of work**

Permits are granted to shift workers who live outside the BN1, BN2 or BN3 postcode, where no other alternative transport is available or appropriate (e.g. public transport) **and** shifts finish after 7pm. Doctors on rotation are also granted permits.

For night shift workers parking is free between the hours of 16:45pm and 08:30am, Monday – Friday. Weekends and Bank Holidays, the staff car parks are free of charge for staff all day.

■ **Principle 4 – Equality and Diversity**

Permits are granted where staff have specific caring responsibilities for a dependent immediately before, after or during the working day.

■ **Principle 5 – Travelling to work**

Scoring is undertaken on how long it would take each applicant to travel to the hospital by public transport / cycle / walking, with categories split between 5-30 minutes and >2hrs. Those with longer travel times by these modes are more likely to be allocated a parking permit.

■ **Principle 6 – Distance travelled home to work**

Scoring is also undertaken on the distance from home to the hospital for each applicant. Those with greater travelling distances are more likely to be allocated a parking permit.

Permits are renewed annually and any additional transport services provided by the Trust, changes to existing service(s) and or changes in job activities or home address are taken into account when processing the renewal.

Tariffs for parking permits are based upon staff salary and vehicle CO2 emissions. This has recently replaced a system which was based solely on staff salaries, with the aim of providing a strategy that discourages travel by car and encourages travel by public transport or other forms of sustainable transport. The income raised from permits will be used by the Trust to contribute towards the improved 40x bus service.

Discounted Bus Passes

The Trust has formed an agreement with Brighton and Hove Bus and Coach Company to offer its staff bus season tickets through a salary sacrifice scheme. This provides the opportunity for staff to spread the cost of a season ticket over 12 months and also provides a discount compared to when purchasing directly on the bus.

Monthly Bus Tickets

Staff are able to buy monthly bus tickets from the Transport Bureau at RSCH. This allows them to purchase them at their convenience and not to worry about having the right money.

Patient Transport Services

The Patient Transport Service (PTS) provides for non-emergency trips to the hospital site. Requests for Patient Transport are now managed by the PTS which has been reconfigured and is now County wide to ensure that the service provided is efficient and responsive to individual need. The service has been provided by the local Primary Care Trust and subsequent Clinical Commissioning Group since 2011. The impact is yet to be determined, however, this has not led to an increase in traffic or congestion.

Cycling provision

The RSCH site provides 204 cycle parking spaces across the site. Many of these have recently been implemented in response to the level of demand for access by bicycle.

Liftshare

BSUH Trust has signed up to the Liftshare Scheme, which provides an online database of potential car sharing opportunities for staff accessing the hospital site. This is accessed by staff through a link on the staff intranet page. Potential car-sharers are automatically matched to suitable drivers and specific criteria can be defined to ensure suitable matches are made.

Salary Sacrifice for Cycle Loans

Staff are also able to purchase a bicycle through the "Cycle to Work Scheme". This provides a discount over the cost of the bike and also allows a spread of payments through the salary sacrifice scheme. This is similar to bus passes as staff can purchase a cycle up to the value of £1000 in any one financial year and have the amount taken monthly as a salary sacrifice which offsets the Tax and NI against the value of the bike saving between 30 and 40% of the overall value of the purchase.

Cycle mileage

Staff are able to reclaim 20p per mile for cycle use for work purposes. This encourages use and contributes towards wear and tear of cycles used for work purposes.

Staff Welcome Pack

To ensure that sustainable travel patterns are promoted from an early stage, all new starters are provided with a Travel Information pack advising them of all necessary transport and travel information. Additionally, the Transport Bureau has set a standard question within the interview process, which encourages potential new staff to use sustainable modes of transport to travel to the site.

3Ts impact on Travel Plan

BSUH has been granted planning permission to redevelop a large part of the site of the Royal Sussex County Hospital in Brighton to create a 'Regional Centre for Teaching, Trauma & Tertiary Care', known as the Brighton 3Ts project.

The redevelopment will involve rebuilding or refurbishing various buildings including the Barry Building, the Jubilee Building and the Sussex Cancer Centre, and will mean patient

care can be provided in modern, purpose-built facilities as well as making the hospital more attractive, welcoming and easier for patients and visitors to get around.

It is intended that the new and refurbished buildings will be used to:

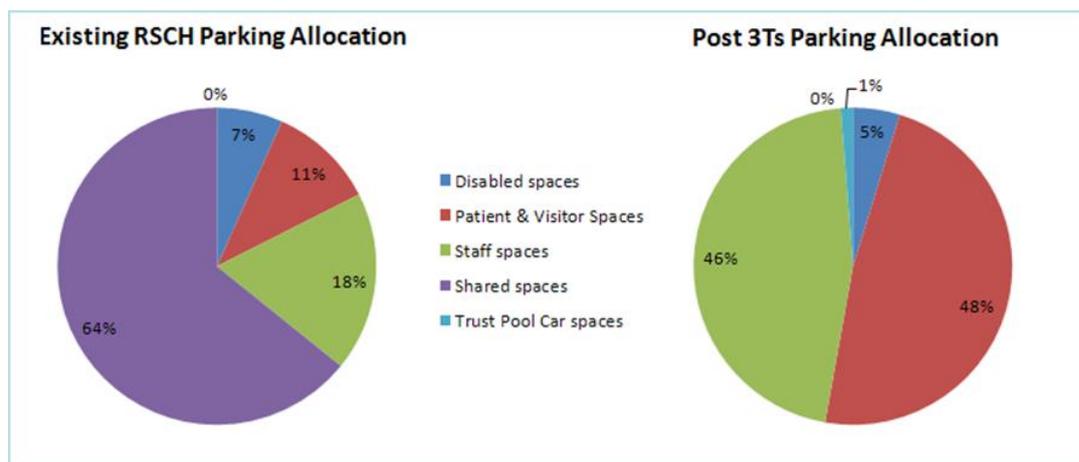
- Expand the Sussex Cancer Centre;
- Move the Hurstwood Park Regional Centre for Neurosciences from the Princess Royal Hospital and expand it to allow many patients who are currently referred to London to be treated locally;
- Create a Major Trauma Unit for patients with severe injury and trauma, many of whom are currently taken to London; and
- Replace aging wards and buildings, which present daily challenges in managing cleanliness, infection control and patient privacy.

In order to achieve these substantial clinical benefits, the redevelopment of the site will increase the overall footprint to 40 000msq (a 25% increase) and therefore increase staff and patients weekday use of the site as follows:

- Staff: 450 overall
- Patients 190 outpatients (inpatients are not assumed to be bringing cars)
- Visitors 300

In order to create capacity for this additional demand a new underground car park has been designed with additional capacity for patients as follows:

- Overall parking provision: 820 spaces, (additional 346 from existing 474 total).
- Additional spaces to be provided in Basement Car Park, accessed via Bristol Gate.
- Additional spaces represent approximately 95% of permissible allocation under the Supplementary Planning Document for Parking Standards 'SPG4'.
- Additional 132 cycle spaces.
- Proposed Parking Management Strategy provides a greater ratio of Patient / Visitor spaces per bed than the national average for surveyed Teaching Hospitals.



However, existing traffic reduction measures will be maintained and expanded for staff.

Impact of St Mary's Hall on Travel Plan

The former St Mary's Hall senior school site, Eastern Road, Brighton was purchased by BSUH in December 2010. The site is approximately 2km east of the city centre and 250m east of Royal Sussex County Hospital. The purchase offered a unique strategic opportunity to acquire a major site adjacent to the congested RSCH campus and to provide a permanent decant solution for the 3Ts development.

The site has an area of approximately 1.9ha (2.47 acres) and accommodates a variety of office buildings, swimming pool, residential blocks, tennis courts and landscaped grounds.

Access to and from the site is via three link roads onto Eastern Road. The western most access point provides a one-way entry onto the site and is shared with Brighton College Pre-Prep School. The central access point provides a one-way exit from the site (also shared with the School) and the eastern access point is two-way for access to St Mary's Hall only.

Each of the vehicle access points are shared with pedestrians. There is a further access point onto Bristol Gate for pedestrians and electronic carts only, giving direct access to the hospital and multi-storey car park.

The site provides office accommodation for support staff relocated from RSCH to St Mary's Hall. There are 335 workstations for about 470 staff.

The residential accommodation provides beds for 68 people.

The Swimming Pool has been leased to a private operator and continues to offer swimming lessons and instructor training to the community.

The total floor area of the site is 7,723m².

Parking on site is limited to 27 spaces, (25 standard plus two disabled spaces). The Planning Approval stipulates that the spaces should be retained solely for the use of occupants and visitors to the site. Therefore the vast majority of decant staff continue to use their existing parking patterns, utilising either the hospital multi-storey car park or on-street parking surrounding the site.

Cycle parking on-site is provided in the form of covered Sheffield Stands catering for 50 spaces.

Parking is restricted to staff who work on site, or visitors to, St Mary's Hall. Staff must also be permit holders in accordance with the Trust Parking Policy. Unauthorised site access and anti-social behaviour is managed through upgraded security and additional lighting.

In summary, the impact of St Mary's Hall should have a nil detrimental impact on the surrounding highway network due to the fact that the trips made to the site are already accessing the existing hospital site, and Eastern Road will continue to operate within capacity in future years;

St Mary's Hall actually helps to alleviate existing parking problems associated at the RSCH site by adding additional spaces for cars and bicycles.

Targets

The targets below are set to be realised after 3Ts has been completed and have been agreed as part of the Section 106 agreement:

- Reduce by 5% the number of staff and visitors travelling by car (5 years after redevelopment)
- Increase by 5% the number of staff and visitors travelling to the site by public transport (3 years after redevelopment)
- Reduce by 5% the number of staff travelling alone by car to the site (3 years after the redevelopment)
- Increase by 3% the number of staff who car share (3 years after the redevelopment)
- Increase by 5% the number of staff who cycle to the site.

The baseline was set in 2007. Information provided below shows that extent to which these targets are in the process of being met:

Progress so far

This document has highlighted the extensive range of opportunities that exist to encourage the sustainable travel of staff, patients and visitors at Royal Sussex County Hospital. This strong foundation of sustainable transport initiatives underpins the existing Travel Plan.

In addition BSUH commissioned a survey in 2011 prior to the planning submission to identify the main methods of transport use by staff to travel to the site.

The results are summarised below:

Survey

A detailed survey was carried out earlier in 2011. 341 staff responded, from the data collected we have been able to ascertain the current modal patterns of staff coming to the site as follows;

- Car driver (alone) 42.2%
- Car Share (as driver) 5%
- Car Share (as passenger) 3.5%
- Bus 21.7%
- Walk 12%
- Cycle 9.1%
- Motorcycle 3.5%
- Train 2.4%
- Other 0.6%

This compares favourably with other NHS providers based in comparable urban locations which have a higher rate of cars driven by single drivers (56% including London hospitals and 64% excluding London hospitals)¹⁰ Additional data also showed that there were 114 users of the Cycle to Work Scheme in one year, which showed the value of increasing the

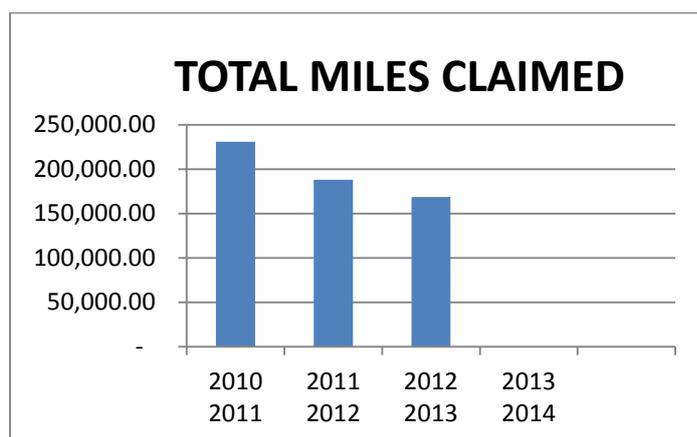
¹⁰ Brighton 3TsTravel Plan. WSP. September 2011.

provision for cyclists at RSCH. Nevertheless the survey showed that there was work to do to meet the targets which had been set.

Progress towards targets (updated in 2014)

Travel claims have continued to fall as staff utilise the alternative means of transport provided such as pool cars & buses. In the past 3 years, claims have fallen by approximately 25%.¹¹

	Business Miles	Public Transport Miles	Pedal Cycle Miles	Total Miles Claimed	%
2010					
2011	190,258.92	40,560.00	48.38	230,867.30	100%
2011					
2012	163,262.41	24,719.28	62.95	188,044.64	81%
2012					
2013	154,389.33	14,023.44	64.44	168,477.21	73%
2013					
2014					



The Travel survey was refreshed by BSUH in February 2014. In total 235 returns were received. We compared the results with the 2011 as follows:

Main mode of transport to work	2011 results	2014 results %	% change
Car driver (alone)	42%	29%	-13%
Car Share (as driver)	5%	4%	-1%
Car Share (as passenger)	4%	4%	0%
Bus	22%	28%	6%
Walk	12%	14%	2%
Cycle	9%	15%	6%

¹¹ This summarises mileage claimed through travel claims. Public transport includes trains, buses & taxis. NB: does not include taxis booked through switchboard which are recharged directly to the budgets, or the 40X bus.

Motorcycle	4%	3%	-1%
Train	2%	3%	1%
Other	1%	2%	1%

Discussion

The most recent survey indicates some encouraging changes to the way staff commute to work. There has clearly been a significant reduction in car use, with an increasing number of people choosing to cycle or take the bus.

The survey also contained some helpful comments regarding the reasons why people chose their mode of transport, as well as responses regarding the most effective incentives to persuade people to change their habits. A significant number of staff were either blue badge holders or had parental responsibilities which were cited as reasons to continue using their own cars. Shift patterns also featured as well as concerns about personal safety. Financial concerns seem to be a powerful incentive towards bus usage with the subsidised 40x and the salary sacrifice being mentioned. On the other side of the coin, 49% cited environmental reasons and 24% health/fitness reasons for either walking or cycling to work. This suggests that people were finding some benefits in reducing car usage. Finally it appears that people are still not attracted to car sharing:

I can't drive and value "quiet time" on bus so don't like the idea of lift sharing.

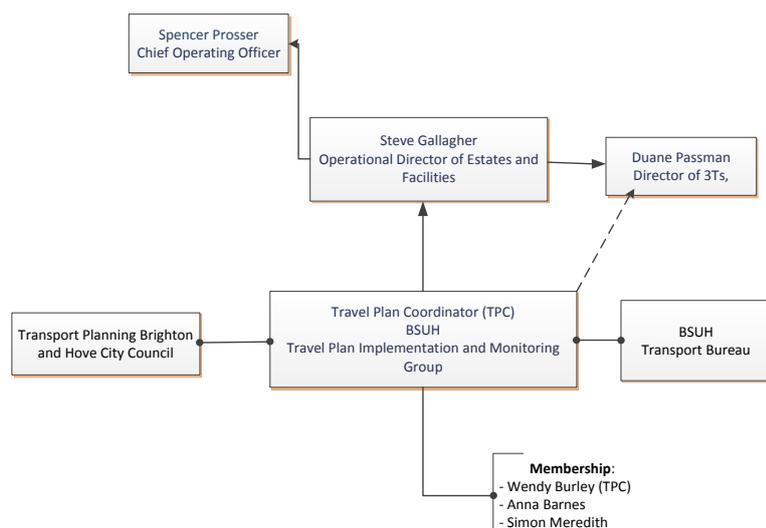
The comments section suggests that most of the work-related travel was to other BSUH sites, and the 40X bus was well used for this purpose. It does appear that there could be further opportunities to remotely video-conference or use other alternatives to travelling for work as 36 (40%) of staff still use their own cars to do so for reasons explained below:

It's difficult as I try to organise my diary so I only visit one site in a day but sometimes I have to travel between sites during the day - I would usually then go straight home from the other site as this saves extra travel time - so I wouldn't want to leave my car in Brighton to travel to PRH on the bus then have to return to Brighton to pick up my car.

However, respondents suggested that there was a limit to how much video-conferencing or working from home which could be accommodated in a patient-centred environment.

Management Structure

In order to continue to track the progress of the Travel Plan, an Implementation and Monitoring Group should be set up accountable to both the Chief Financial Officer and 3Ts (with regard to the planning conditions). This group should continue to promote alternatives as part of the Carbon Reduction Strategy (see below).



Monitoring and review process

The Travel Plan Implementation and Monitoring group will meet quarterly to review progress against targets.

Recommendations and conclusion

The BSUH Travel Plan complies with national and local policies as set out within appendix 1 and works towards making the best use of the existing transport infrastructure to promote new transport initiatives. It is therefore designed to encourage staff, patients and visitors to think about how and when they need to travel, ensuring that all reasonable measures are taken to minimise any adverse impact of their travel to the hospital. Implemented measures set out within the Travel Plan, such as pool cars and the inter-site bus (40X), have been very successful as they have targeted many of the sources of car travel – travel to, from and between sites and community visits. The Transport Bureau has been very proactive in delivering these schemes and developing future schemes.

The range of measures above suggests that BSUH has made good progress in creating a modal shift from private care usage by staff towards alternative transport arrangements. The comprehensive survey undertaken by WSP will be refreshed during 2014/2015 on mobilisation, pre-construction in order to assess whether this progress has been continued and whether further measures are needed. If this is the case there will be consultation with staff groups affected regarding any proposed changes to the travel plan. In particular, tighter implementation of the existing policies (i.e. parking permits) will require consultation with staff side and a presentation to the Executive Management Board. The overall emphasis with regard to the Travel Plan thenceforward will be the re-prioritisation of patient and visitor parking for priority groups, and continued emphasis of active transport (i.e. walking, cycling and public transport) for staff. The environmental benefits will be publicised coupled with continued financial disincentives for private car use.

As stated, initiatives such as the subsidised cycle purchase scheme have been well utilised and popular with staff. There is a sense that support for active transport and reduced reliance on private cars is growing, led by a minority who have embraced its health benefits as well as a belief in the importance of reducing negative environmental impacts. This has been coupled with a more rigorous approach to staff parking via a revised parking permit

allocation system and financial disincentives. However more needs to be done to improve other alternatives such as car sharing and lift sharing which have not been as well promoted and are not as popular. Other ideas which required further exploration are as follows:

- Procurement of pool cars based on environmental credentials
- Negotiation with bus companies (i.e. 40X) to improve fuel efficiency and environmental impacts
- Extending salary sacrifice to rail companies as well as bus companies
- Increased one-off promotional events such as the March 2014 Sustainability Day
- Workplace cycling promotion and safety advice through the recently launched 'Bicycle Users Group'.

Although there needs to be recognition that concerns about the safety of staff late at night, those who have dependents who rely on them for transport, as well as those who have limited mobility will continue to be obstacles for a minority of staff in adopting active transport initiatives. Nevertheless BSUH continues to perform well against other public sector comparators¹².

Appendix 1- Policy Guidance

NHS England published guidance in February 2014 ("**Sustainable, Resilient, Healthy People & Places A Sustainable Development Strategy for the NHS, Public Health and Social Care system**") which reinforced the contribution of the NHS to carbon reduction initiatives. Its key defining objectives are:

- Ensuring a strong, healthy and just society
- Living within environmental limits
- Achieving a sustainable economy
- Promoting good governance
- Using sound science responsibly

It covers not just NHS transport and procurement but also NHS construction processes in order to ensure that the NHS embraces environmental sustainability at every level. The document also cites the six Marmot policy objectives one of which is to "create and develop healthy and sustainable places and communities"¹³

Central Government Planning Policy Guidance Note 13 (PPG 13) (2001) outlines central government's key objectives for transport. PPG13 advocates that local authorities should promote land use policies and transport programmes which promote accessibility by more sustainable modes of travel including public transport, walking and cycling.

Key policies within PPG13 which remain relevant to the two hospitals include:

- Promoting more sustainable transport choices;
- Reduce the need to travel, especially by car; PPG13 advocates that "education establishments, schools and hospitals are major generators of travel and should be located so as to maximise their accessibility by public transport, walking and cycling".
- Similarly, proposals to develop, expand or redevelop existing sites should improve access by public transport, walking and cycling.

¹² Based on WSP 2011 survey

¹³ Marmot, M. 2010. Fair Society, Healthy Lives: Strategic Review of Health Inequalities in England post 2010 [Online] Available at: www.instituteofhealthequity.org/Content/FileManager/pdf/fairsocietyhealthylives.pdf [Accessed 06 January 2014]

As part of the wider strategy for walking PPG13 encourages health and education providers and employers to promote walking and cycling to and from schools and places of work, ideally in the context of site specific travel plans thus re-balancing the structure and use of the transport system in favour of more sustainable modes.

This guidance is complemented by several other policies:

Policy T2 which promotes the management of the existing transport system to encourage an overall reduction in the environmental impact of movement and an enhancement of the overall level of safety.

Policy TR1 sets out the priorities of the integrated transport and environment strategy. Those that are relevant to BSUH's travel plan are as follows;

- Encourage a reduction of the impact in traffic on communities and the environment by measures including appropriate parking policies, traffic management and restraint, safety and speed reductions measures;
- Encouragement of and provision for greater use of walking, cycling and public transport (including buses), particularly in urban areas and town centres; and
- To increase awareness of the problems arising from motor traffic and promote a more environmentally responsible attitude to the use of the car as part of traffic demand management.

With regard to traffic impact, **Policy TR3** states that any development (i.e. 3Ts) should not significantly worsen the traffic congestion and parking problems of the surrounding area.

Policy TR4 and TR5 suggest encouraging walking and cycling, in terms of facilities and access. The policies also suggest measures such as the development of clearly defined cycling and walking routes.

Policy TR8 and Policy TR9 identify the measures that should be introduced relating to cycle and pedestrian facilities for new developments. **Policies TR8-9, TR12 and TR14-15** seek the provision of appropriate walking and cycle infrastructure which would encourage the extension of existing networks. With regards to walking measures, those which give priority to pedestrians in situations of conflict between pedestrians and vehicles are encouraged.

Smarter Choices – Changing The Way We Travel DfT, 2004

This document discusses and analyses existing research on the use of “soft measures” to achieve modal shift. These “soft measures” are initiatives such as better provision of information implementation of travel plans in different scenarios and teleconferencing. It examines two scenarios for future impact on traffic of soft measures, high intensity usage and low intensity usage (based on current level) and the shift in traffic achievable. With low intensity, a 5% reduction in peak and a 2-3% in off-peak is deemed to be achievable.

The economic case for soft measures is also appraised and the research showed that every 1km of road mileage removed can cost 1.5p against a 15p saving associated with congestion etc.

Making Smarter Choices Work DfT, 2005

The Department for Transport (DfT) report ‘Making Smarter Choices Work’ signals continued government support for a range of measures aimed at raising awareness of alternative modes of travel to private car use, and actively encouraging the use of a wider range of

travel modes amongst individuals. These measures include travel plans, travel awareness campaigns, car sharing initiatives, and individualised travel marketing.

Transport and health Resource: Delivering Healthy Local Transport Plans DfT /DH 2011

This document provides guidance in the creation and implementation of local travel plans. It estimates that the annual costs to the NHS of the results of physical inactivity are between £1 billion and £1.8 billion, coupled with losses in productivity through sickness and the increased incidence of premature death which combine to create a global figure of more than £8.3 billion per year. This figure is set to increase to £9.7 billion a year (NHS cost only) with a projection of £49.6 billion across the whole economy by 2050 if this trend is not reversed.

These findings are confirmed by an independent academic economic modelling of the positive health effects of a combination of increased active travel (walking/cycling) and a reduction in vehicle emissions. The economic modelling looked at the likely health effects in both London and Delhi of a greener approach to transport. It concluded that the main benefit of a green transport policy was a significant reduction of the burden of ill health rather than through the reduction in pollution¹⁴.

Planning Policy Guidance 13 (PPG 13) – Transport (DfT, January 2011)

This outlines central government's most recent key objectives for transport. It advocates that local authorities should promote land use policies and transport programmes that promote accessibility by more sustainable modes of travel including public transport, walking and cycling. The principal objective of PPG13 is:

'To increase personal choice by improving the alternatives and to secure mobility that is sustainable in the long term'

Creating Growth, Cutting Carbon: Making Sustainable Local Transport Happen (DfT, January 2011)

This document sets out plans to encourage more sustainable transport choices through returning decision making to the local level. There is recognition that for some journeys, the car is the only viable mode and therefore low emission vehicles are also important and car sharing and car-pooling have an equal part to play in the strategy to reduce emissions. But for many shorter journeys, less than 5 miles, walking, cycling or using public transport can be a viable alternative. Giving people choices will encourage improvement not only to the environment, but also their health.

Local Policy Guidance

The Brighton and Hove Corporate Plan.

The overall vision of the council for Brighton & Hove is 'a cosmopolitan, successful city by the sea where people have a high quality of life in a decent environment'.

The key objectives of relevant to BSUH are as follows; The Trust should

- make a positive contribution to people's quality of life in Brighton and Hove;

¹⁴ Woodcock et al (2009) Public health benefits of strategies to reduce greenhouse-gas emissions: urban land transport; Lancet, December 2009, vol./is. 374/9705(1930-43), 0140-6736;1474-547X.

- provide for a sustainable approach to the use of land which reflects people's needs and the aim of a more integrated and healthy society where no-one is excluded and people have access to the fullest range of services and facilities;
- make the best use of the land available and secure the re-use of sites that have lain vacant for too long;
- 'make the link' between land use and transport, reduce the need to travel and contribute toward an integrated transport system with more opportunities to walk, cycle or take public transport;
- minimise environmental impact and conserve, sustain and enhance environmental assets and resources;
- place a new emphasis on the 'importance of design' for individual buildings, streets, neighbourhoods and Brighton & Hove as a whole; and as part of this, to contribute to improving public safety and minimising crime and the fear of crime;
- provide for a range of sites and a supply of employment land and premises that will help to support and retain our existing businesses, attract new businesses and complement economic regeneration initiatives.

This plan was reinforced and expanded in 2011 within the **Local Transport Plan (Part A) Transport Strategy** which was produced in May 2011 (referred to henceforth as LTP3). The document highlighted the economic effects of poor transport links, and congestion which equates to 2.5 billion costs savings nationally. Moreover, inadequate transport doubly disadvantages the poorest communities who are less likely to be able to afford private transport, and are more likely to be unemployed. Children in the 10% most deprived wards in England¹⁵ are four times more likely to be hit by a car than children in the 10% least deprived wards. The communities are also more vulnerable to air pollution which is highest in the poorest areas of the city. (19% of CO2 emissions come from transport). More positively, the document also highlights then year on year increase in bus journeys and initiatives such as "pay-as-you-drive" car clubs.

Brighton and Hove City Council – 'Guidance for the Production of Workplace Travel Plans (2007)

The guidance recommends that a 'Workplace Travel Plan' should include the following:

- An Introduction detailing company name, size, location, its business and reason for undertaking a travel plan;
- The Particulars of Travel Plan Co-ordinator and their role and responsibilities.
- How and when staff currently travel to and from the workplace and to off-site locations
- Existing infrastructure such as cycle and bus routes;
- Any changes in commuting pattern predicted with new development;
- Details of proposed measures broken down by mode;
- Clearly defined targets and cost savings;
- Proposals for monitoring and review of the Travel Plan, to take account of the changing circumstances and needs.

The Brighton & Hove Cycle Strategy also has aims to:

- Maximise cycling as a transport mode and develop safe, convenient, efficient and attractive transport infrastructure which encourages and facilitates walking, cycling and the use of public transport.

The 2020 Sustainable Community Strategy

¹⁵ Transport and Health Resource: Delivering Healthy Local Transport Plans; Gateway reference 15079. January 2011.

Originally published in 2003, it promotes Brighton & Hove as the 'city of opportunities'. It was reviewed in 2009 to provide a long term plan of "opportunities for all" to improve the city's economic, social and environmental well-being. It includes 8 priority themes that will help achieve this objective:

- Promoting enterprise and learning;
- Reducing crime and improving safety;
- Improving health and well-being;
- Strengthening communities and involving people;
- Improving housing and affordability;
- Living within environmental limits and enhancing the environment;
- Promoting sustainable transport; and
- Providing quality advice and information services.

For transport, the Community Strategy's aim is to provide

"An integrated and accessible transport system that enables people to travel around and access services as safely and freely as possible while minimising damage to the environment and contributing to a safer, cleaner, quieter and healthier city".

This aim provides the basis for the core vision of the long-term strategy in this third Local Transport Plan.

In order to deliver this Strategy B&HCC is committed to achieve the following:

- Maintain-maintaining the transport network
- Manage-managing movement and the transport network, changing travel behaviour and informing people's travel choices
- Improve-delivering sustainable and accessible transport options, providing a safer environment, creating an attractive environment.

In terms of relevance to BSUH, B&HCC is committed to encouraging more people to access the hospital by walking, cycling or public transport. Improvements to Edward Street/Eastern road are part of this strategy.