

TRANSPORT ASSESSMENT



Proposed Redevelopment, Adult and Older Person Mental Health Unit (AOPMHU), Ysbyty Glan Clwyd Hospital, Bodelwyddan

ON BEHALF OF

Betsi Cadwaladr University Health Board

February 2023



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1. Introduction

- 1.1.1. Via Solutions has been appointed to prepare this Transport Assessment (TA) in support of a planning application for a proposed mental health unit within the Glan Clwyd Hospital, Bodelwyddan (the site) on behalf of Betsi Cadwaladr University Health Board. Figure 1 at Appendix A shows the site location in relation to the local highway network.
- 1.1.2. The development proposal seeks planning consent for the construction of a new two / three storey 'Adult and Older Person Mental Health Unit' (AOPMHU), to replace an existing unit in the Hospital, and provide additional parking spaces on the Hospital estate. A previous proposal for the Unit located in the south west corner of the Hospital Site was not approved by the Council. This revised proposal provides the Unit of a similar scale but located towards the north west corner of the Hospital Site.
- 1.1.3. This Transport Assessment considers such matters as traffic impact, access by all modes of transport and by people of all ages and abilities, sustainability, car parking and servicing and presents the proposals in relation to current guidance and data.
- 1.1.4. Both Local and National Transport policy have been reviewed in respect of the development. A review of road safety has been undertaken within this report. Sustainable transport accessibility has also been reviewed within the report. The development proposals have been explained and the impact on the highway network considered.
- 1.1.5. This Transport Assessment concludes that the proposal would not create any significant transport impacts on the existing highway and provides an acceptable use in planning terms.

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2. Transport Policy

- 2.1.1. When considering transport policy compliance for planning applications, the main thrust of local, regional, and national policy is that new development should be conveniently accessible by a range of sustainable transport modes, including public transport, cycling, and walking.

2.2. NATIONAL PLANNING POLICY

PLANNING POLICY WALES 2021

- 2.2.1. In February 2021, the Welsh Government published an updated version (Edition 11) of the Planning Policy Wales (PPW) document. The PPW sets out the Government's vision for a low carbon, resilient society with well-connected environments and integrated services. It sets out the planning policies and framework for achieving those objectives, including the requirements for local transport and development plans. 2
- 2.2.2. Sections 4 and 5 of the PPW sets out the Welsh Government's objectives with regards to transport and how these can be achieved through land use and demand management. These objectives broadly are to:
- *Improve accessibility by walking and cycling and to public transport;*
 - *Promote walking and cycling; and*
 - *Support sustainable travel options.*
- 2.2.3. Section 4 of the PPW also sets out the requirements for transport assessments, as set out in Technical Advice Note 18: Transport (TAN18), a supplementary document to the PPW. The TAN 18 sets the categories and thresholds for development that must be accompanied by a transport assessment.

FUTURE WALES. THE NATIONAL PLAN 2040

- 2.2.4. In February 2021, the Welsh Government published the new development plan for Wales entitled "Future Wales. The National Plan 2040". This document influences all levels of the planning system in Wales and will help to shape Strategic and Local Development Plans prepared by the local authorities.
- 2.2.5. This document is the highest level of development plan and focuses on solutions to issues at a national scale leaving more detailed matters to local authorities and sets out a variety of strategic policies to support that.

TECHNICAL ADVICE NOTE 18: TRANSPORT

- 2.2.6. Technical Advice Notes (TAN) are supplementary documents to PPW and are taken account of by the local planning authorities when preparing local development plans.
- 2.2.7. The TAN18 acknowledges that 'the integration of land use planning and development of transport infrastructure has a key role to play in addressing the environmental aspects of sustainable development' and to achieve the Welsh Governments' environmental outcomes and the sustainable development objectives set out in the PPW and the Welsh Transport Strategy.
- 2.2.8. Section 9 and Annex D of TAN18 sets out the requirements for transport assessments and travel plans associated with developments, including for hospitals.

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WALES TRANSPORT STRATEGY (2021)

2.2.9. The Wales Transport Strategy (WTS) was published by the Welsh Government in March 2021 and provides the strategic policy framework for transport in Wales for the next 20 years. It sets out the Government's Vision to get the most from the existing transport systems, make greater use of sustainable modes of travel and reduce demands on the transport system. This Vision for an accessible, sustainable and efficient transport system sets out three priorities as follows:

- ✦ *Bring service to people in order to reduce the need to travel;*
- ✦ *Allow people and goods to move easily from door to door by accessible, sustainable transport; and*
- ✦ *Encourage people to make the change to more sustainable transport.*

2.2.10. The WTS sets out the requirements for transport plans at a local authority level. There are two tiers of transport plans in Wales; the National Transport Finance Plan and the Local Transport Plans.

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NATIONAL TRANSPORT FINANCE PLAN (2018 UPDATE)

2.2.11. The National Transport Finance Plan (NTFP) is not a policy document however it lists all the schemes that the Welsh Government will deliver across the different areas of transport, to meet the requirements of the WTS.

2.2.12. Proposed schemes in the NTFP specifically in the Denbighshire area include the Station Improvement Programme Delivery RI2 Station Improvements Programme (NSIP+). This will see station improvements at Aberystwyth, Rhyl, Ystrad Mynach, Pontypridd, and Port Talbot Parkway to provide wheelchair access by use of on train ramps.

2.3. LOCAL PLANNING POLICY

DENBIGHSHIRE LOCAL DEVELOPMENT PLAN (2006 2021)

2.3.1. The current Local Development Plan is the Denbighshire Local Development Plan (LDP), adopted in June 2013 and which covers the period 2006 to 2021. The Replacement Local Development Plan is currently under consultation and development and will cover the period 2018 to 2033. Policies are set out in five key inter-related themes. The key objectives of the LDP, which the LDP policies aim to address, include, in relation to transport:

- *To place emphasis on integrating land uses to reduce the need to travel and promote sustainable transport; and*
- *To make best use of the County's two key transport corridors the A55 trunk road and the North Wales Coast main railway line.*

2.3.2. Further detailed guidance on a number of areas, including parking, is included in a number of Supplementary Planning Notes.

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DENBIGHSHIRE COUNTY COUNCIL SUPPLEMENTARY PLANNING GUIDANCE NOTE: PARKING REQUIREMENTS IN NEW DEVELOPMENTS (2014)

2.3.3. The Supplementary Planning Guidance Note (SPG) Parking Requirements for New Developments was published by Denbighshire County Council in October 2014 and sets the level of parking provision sought for new developments in the County.

NORTH WALES JOINT LOCAL TRANSPORT PLAN (2015)

2.3.4. The current Local Transport Plan is the 'North Wales Joint Local Transport Plan 2015' (NWJLTP), which covers the period 2015 to 2020 and presents a framework for schemes up to 2030. It was produced jointly by the six North Wales Local Authorities of Conwy County Borough Council, Denbighshire County Council, Flintshire County Council, Gwynedd Council, Isle of Anglesey County Council and Wrexham County Borough Council.

2.3.5. The key objectives of the NWJLTP include:

- ✦ *Connections to key destinations and markets;*
- ✦ *Access to employment;*
- ✦ *Access to services;*
- ✦ *Increasing levels of walking and cycling;*
- ✦ *Improved safety and security; and*
- ✦ *Benefits and minimises impacts on the Environment.*

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2.3.6. There are a number of schemes proposed in the NWJLTP that are proposed for the Rhyl area, however none are considered to have a direct impact on the development.

2.3.7. The consistent objectives across all these documents are to look to developments that promote more sustainable transport choices and reduce the need to travel by car and improve the environment.

3. Existing Situation

3.1. SITE DESCRIPTION

- 3.1.1. The application site is located with the existing Glan Clywd Hospital, which is located on the north eastern fringe of Bodelwyddan, around 5km south of Rhyl.
- 3.1.2. The Hospital was opened in 1980 and occupies a 39-acre site. The Hospital provides an extensive range of services including A&E, inpatients, day cases, outpatients, and support services. The Hospital also houses the Adult and Older Person Mental Health Unit (AOPMHU), which provides inpatient mental illness beds.
- 3.1.3. The Adult and Older Person Mental Health Unit will be relocated from its current location within the Hospital estate and a new unit constructed on the application site.
- 3.1.4. The application site is located on the north western boundary of the existing Hospital site and currently provides parking for the Hospital. It is bounded to the south and east by other hospital buildings (such as pathology and the mortuary) and the existing access road to the parking areas and to the north and west by open green space.
- 3.1.5. We are advised that whilst the park and ride site on the former Hotpoint factory site in Bodelwyddan is no longer in operation, all the other car parks on the Hospital site are free to users.
- 3.1.6. Figure 1 at Appendix A shows the site location in relation to the local highway network.

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3.2. HIGHWAY NETWORK

LOCAL HIGHWAY NETWORK

- 3.2.1. Within the Hospital estate there are a number of access roads, which together form internal loops within the site.
- 3.2.2. Sarn Lane is the main north-south access road within the site and passes close to the eastern boundary and the main Hospital entrance. The application site will be accessed from the internal loop system leading off Sarn Lane using the same route as the existing parking on the application site. This access road loops around the north of the Hospital estate then heads south passing close to the application site.
- 3.2.3. The Hospital estate has two principal access points onto Rhuddlan Road on the eastern boundary as shown on Figure 1 in Appendix A. The primary hospital access is taken from a mini roundabout with Rhuddlan Road linking to Sarn Lane. The majority of parking for the Hospital is located to the east of Sarn Lane between Sarn Lane and Rhuddlan Road, to the north and south of this link.
- 3.2.4. A secondary access is provided some 175 metres north of the roundabout, at a priority junction with a right turn ghost island provided.
- 3.2.5. The hospital access roads including Sarn Lane and the link to Rhuddlan Road all benefit from pedestrian footways, generally to both kerb lines. Dropped crossings and Zebra type crossings are provided for pedestrians at convenient locations and tactile paving is provided to aid people with mobility and vision deficiencies. The roundabout itself has pedestrian crossing islands on all arms with dropped crossings and tactile paving to aid people with mobility and vision deficiencies.

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- 3.2.6. Rhuddlan Road is a wide single carriageway road which runs parallel to the eastern boundary of the Hospital between the junction with the A55 North Wales Expressway to the south and the A525 St Asaph Road to the north. A shared pedestrian / cycleway is provided to the western kerbline of Rhuddlan Road between the hospital accesses and beyond to the north and south. Street lighting is provided at the hospital accesses and the road is subject to a double yellow line traffic regulation order.
- 3.2.7. A planning application is currently under consideration for a residential development located on the eastern side of Rhuddlan Road just south of the roundabout junction serving the Hospital (ref 40/2021/0825). The proposals will widen Rhuddlan Road to provide a right turn pocket into that development site and provide a shared pedestrian and cycle signal controlled crossing between that junction and the roundabout.

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STRATEGIC HIGHWAY NETWORK

- 3.2.8. Rhuddlan Road joins the A55 North Wales Expressway 950 metres to the south of the roundabout serving the Hospital. Rhuddlan Road joins a four-arm roundabout which provides access to the A55 in both directions. The A55 gives access to destinations in the north of Wales such as Holyhead, Llandudno and Conwy to the west and Cheshire, England, to the east.
- 3.2.9. The fourth arm of the roundabout gives access to the remainder of the Bodelwyddan built up area.

3.3. PEDESTRIANS AND CYCLISTS

WALKING

3.3.1. The national policy relating to transport and development is set out in the Planning Policy Wales and Wales Transport Strategy. Reference has been made to “The Guidelines for Providing for Journeys on Foot” (Institution of Highways & Transportation, May 2000), which describe best practice in planning and providing for pedestrians within the UK policy and legislative framework. This allows an assessment of the sites compliance with policy guidance on recommended walking distances to local services for site user (as provided in Table 1 below).

TABLE 1. PREFERRED MAXIMUM WALKING DISTANCES

	Town Centre	Commuting / School / Sightseeing	Elsewhere
Desirable	200m	500m	400m
Acceptable	400m	1000m	800m
Preferred Maximum	800m	2000m	1200m

Source: Providing for Journeys on Foot (IHT, 2000)

3.3.2. There are three main access points to the Hospital for pedestrians, to the north, west and east, however there are no direct links to the immediate south of the application site. The facilities within the preferred maximum walking distances are summarised in the Table 2 below. The walking distances are measured from the application site itself (the existing car park access).

TABLE 2. FACILITIES LOCATED WITHIN PREFERRED MAXIMUM WALKING DISTANCES

Facilities	
400m	Services within the Hospital site, bus stops
800m	Residential areas, bus stops
2000m	Residential areas, food and non-food retail and leisure.

- 3.3.3. There are level footways across the Hospital estate, providing a good level of accessibility, linking the numerous hospital buildings, and giving access through to footways on Rhuddlan Road. Uncontrolled zebra pedestrian crossings are provided at numerous convenient locations and tactile paving is provided to aid people of all ages (including accompanied children) and those with mobility and vision deficiencies.
- 3.3.4. The roundabout at the main hospital entrance has pedestrian crossing islands to all arms with dropped crossings and tactile paving. From here, a shared pedestrian / cycleway to the western kerbline of Rhuddlan Road gives access to the residential and built up areas of Bodelwyddan to the south, as well as the services identified in Table 3.
- 3.3.5. The proposed shared pedestrian and cycle signal controlled crossing on Rhuddlan Road to be provided by the residential development to the east of that road will further improve accessibility to the Hospital and our client's development within it.

CYCLING

- 3.3.6. National and Local policy encourage sustainable development and a shift away from private car use.

- 3.3.7. It is noted that the distances people will be willing to travel on a bicycle will be highly variable depending on the type of development, site users and age profile as well as the perception of personal safety in the local environment. However, Local Transport Note 2/08 (published by the Department for Transport) does provide a useful reference point; it indicates that an acceptable distance for general trips by cycle is considered to be up to 5km, but it also acknowledges that this may be slightly longer (up to 8km) for those commuting to employment uses by cycle.
- 3.3.8. There is a traffic free, shared pedestrian / cycleway to the western kerbline of Rhuddlan Road giving access to and from the Hospital and the residential and built up areas of Bodelwyddan to the south, as well as the services identified in Table 3. This is part of a wider Active Travel Initiative to encourage more sustainable modes of transport and includes routes along Rhuddlan Road and the surrounding network.
- 3.3.9. Given the proposed use of the building and the site location relative to the nearest residential areas, it is considered that staff and visitors would walk or cycle to the site. The facilities described above offer safe and commodious routes to do so.
- 3.3.10. In consideration of the above, it is judged that there is good existing pedestrian and cycle infrastructure giving practical and convenient links within the Hospital site and to and from the proposed development.
- 3.3.11. Given the proposed use of the building and the site location relative to the nearest residential areas, it is considered extremely unlikely that children accompanied by a visiting adult, would walk or cycle to the site. Having said that if they did, then the facilities described above offer safe and commodious routes to do so.

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3.4. PUBLIC TRANSPORT

BUSES

3.4.1. There is a bi-directional bus stop on Sarn Lane which serves the Hospital site and offers four different services. The stop has a shelter, seating provisions, timetable board and high-boarding kerbs. The location of bus stop is indicated on the Figure 1 in Appendix A.

3.4.2. Table 3 below provides a summary of bus routes in the area.

TABLE 3. BUS ROUTES LOCATED WITHIN PREFERRED MAXIMUM WALKING DISTANCES

Route No	Route Summary	Frequency	
		Monday to Saturday	Late Eve & Sunday
13	Llandudno – Colwyn Bay - Prestatyn	30mins	60mins
45	Bodelwyddan – Kimmel Bay – Rhyl	4/5 services	No service
51B/MAX	Rhyl – Rhuddlan – Bodelwyddan - Denbigh	30mins	60mins
54	St Asaph – Rhuddlan – Rhyl	1 service (excl Saturday)	No service

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3.4.3. The bus routes in table 3 above all service the stop within the Hospital site and therefore offer frequent, accessible bus services from the site to multiple local towns.

TRAINS

3.4.4. The nearest railway station is Rhyl town centre, some 5km from the site. This offers regular, frequent services to Holyhead, Shrewsbury, Birmingham, and Manchester.

- 3.4.5. The proposed development is considered to be well served by public transport, utilising bus stops that are well within the desirable walking distances given in 'Providing for Journeys on Foot'.

3.5. INJURY COLLISION RECORDS

- 3.5.1. Injury collision data has been obtained from 1 January 2016 to 31st December 2021 from the Crash Map website for the surrounding area. The collision data shows that there has been one slight injury collision on Rhuddlan Road along the eastern boundary of the Hospital. This was located at a more minor access into the Hospital at the northern extent of the Hospital. The accident record for this is provided in Appendix B.
- 3.5.2. Therefore, it is considered that the location is not a site for concern and the collision data shows that the network is operating safely.

4. The Development Proposals

4.1. PROPOSED DEVELOPMENT

- 4.1.1. The applicant seeks planning permission for a proposed mental health unit within the Glan Clwyd Hospital, Bodelwyddan (the site) on behalf of Betsi Cadwaladr University Health Board. A site location plan is included at Appendix A. The proposed development plans are shown on the drawings in Appendix C.
- 4.1.2. The proposals seek to relocate the existing Adult and Older Person Mental Health Unit (AOPMHU) to a new two/three storey unit on an existing parking area within the Hospital estate. The existing AOPMHU is located to the south-eastern boundary of the Hospital and accessed from Sarn Lane. The proposed AOPMHU facility will be located towards the north western boundary on an existing parking area, accommodating circa 244 spaces.
- 4.1.3. The existing AOPMHU will be retained and used potentially for storage of medical records. These records will be transferred from various locations around the Hospital and will not result in an increase in the number of staff, with some staff relocating from temporary accommodation to the existing facility.
- 4.1.4. The proposed AOPMHU will provide a 59-bed unit which will be slightly smaller than the existing 72 bed capacity facility, with a small change in the number of staff commensurate with the change in beds.
- 4.1.5. To reduce the impact of the loss of parking within the application site, it is proposed to provide two additional upper decks over part of the existing surface car park to the north-eastern corner of the Hospital site, close to the hospital secondary access detailed in section 3.2 of this report.

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- 4.1.6. All new parking areas will provide for people with mobility difficulties and the charging of electric / hybrid vehicles.

4.2. VEHICULAR SITE ACCESS

- 4.2.1. The existing car park on the AOPMHU application site takes access directly from the hospital access road passing to the eastern boundary of the site, and which circulates within the Hospital estate. The proposed AOPMHU facility will use a combination of the existing car park accesses and a new one to provide entry to service areas and drop off areas for the facility. Parking areas (10 spaces plus drop off) will be provided for use by the proposed AOPMHU.
- 4.2.2. The additional decks over part of the north eastern car park will utilise the same access points / arrangement from Sarn Lane as the existing surface car park.
- 4.2.3. The proposed access arrangements are shown in the drawings in Appendix C.

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4.3. PEDESTRIANS AND CYCLE ACCESS

- 4.3.1. Level access pedestrian and cycle access to and from the parking areas for the AOPMHU and the adjacent highway network to the building will be provided in accordance with current regulations. This will cater for people of all ages (including accompanied children) and those with mobility and vision deficiencies. Good quality pedestrian routes will be provided within the site linking the entrance to the hospital access road.
- 4.3.2. The proposed decks over part of the existing car park will be accessible via stairs. The existing crossing facility on Sarn Lane links directly into the Hospital.

- 4.3.3. Footways are generally provided to either kerblines of the hospital access roads, linking the proposed AOPMHU to other hospital buildings, the main parking areas for the Hospital to the north and east of the Hospital estate and routes exiting the Hospital estate itself. Dropped crossings, Zebra type crossings and tactile paving are provided at convenient locations for pedestrians of all ages (including the unlikely eventuality of children accompanied by an adult) and those with mobility and vision deficiencies.
- 4.3.4. Cyclists will continue to use the hospital access roads to access the proposed AOPMHU facility, to circulate around the Hospital estate and to / from the main access points on Rhuddlan Road.
- 4.3.5. Within the site, all pedestrian routes will be lit and will again incorporate dropped crossings and tactile paving.

4.4. PARKING PROVISION

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EXISTING PARKING ARRANGEMENTS

- 4.4.1. The application site (for the proposed AOPMHU) currently accommodates circa 244 marked parking spaces. These will be displaced with the construction of the proposed Adult and Older Person Mental Health Unit (AOPMHU).
- 4.4.2. The existing parking area to the north east of the Hospital estate currently accommodates circa 387 marked parking spaces.
- 4.4.3. Both of these existing parking areas are shown on the plans in Appendix C.

PROPOSED PARKING ARRANGEMENTS

- 4.4.4. In order to accommodate displaced parking as a result of the proposed AOPMHU development, it is proposed to add two additional upper decks with around 220 spaces over part of the existing parking area in the north east of the Hospital site. Whilst the effect of the new decks on the parking provision at ground level has yet to be finalised, it is likely there would be an overall provision of circa 588 parking spaces in this location.
- 4.4.5. It is proposed to provide a small number of parking spaces (10 plus drop off) immediately adjacent to the proposed AOPMHU development as indicated on the drawings in Appendix C.
- 4.4.6. Considering the above, it is anticipated there will be no net reduction in formal car parking spaces on the Hospital site.
- 4.4.7. The Supplementary Planning Guidance Note (SPG): Parking Requirements for New Developments was published by Denbighshire County Council in October 2014 and sets the level of parking sought for new developments in the County.
- 4.4.8. The SPG requires that a maximum of 2.5 spaces are provided for each hospital bed. The proposed AOPMHU will decrease the available bed capacity by 13 which would be equivalent to a reduction in parking required of 32 parking spaces.
- 4.4.9. The proposed development will replace existing service provision in the Hospital whereas the parking standards reflect the requirements for a new hospital. As such, the parking requirements may over-predict the parking required on an existing site. Nevertheless, the proposed parking arrangements meet the requirements of the parking SPG.

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4.4.10. Therefore, having due regard to these factors, it is considered the proposed level of parking provision is sufficient to cater for anticipated demands as well as helping to alleviate parking issues with informal parking at the Hospital.

4.5. SERVICING

4.5.1. The internal layout will be designed to provide adequate turning facilities for the anticipated size of delivery vehicles serving the site to allow them to enter and leave in forward gear.

5. Transport Impact

5.1. TRAFFIC IMPACT

TRAFFIC GENERATION

- 5.1.1. The proposals seek to relocate the existing Adult and Older Person Mental Health Unit (AOPMHU) with a new two/three storey unit on an existing parking area within the Hospital estate. The existing AOPMHU is located to the south-eastern boundary of the Hospital and accessed from Sarn Lane. The proposed AOPMHU facility is located towards the western boundary on an existing parking area.
- 5.1.2. The existing facility will be retained and used potentially for storage of medical records. These records will be transferred from various locations around the Hospital and will not result in an increase in the number of staff, with some staff relocating from temporary accommodation to the existing facility.
- 5.1.3. The Hospital currently has 496 beds split across 12 wards. The proposed facility will provide a 59-bed unit which will be slightly smaller than the existing 72 bed capacity facility, with a small change in the number of staff commensurate with the change in beds.
- 5.1.4. The decrease of 13 beds constitutes a 2.6% decrease in bed capacity based on the current provision.

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TRAFFIC IMPACT

- 5.1.5. Considering the above, the proposed development will result in a small change (decrease) in the number of beds available and a very small change in the number of staff required.
- 5.1.6. Trip generation during peak periods will be dependent on staff shift patterns and visiting hours, however it is unlikely that the proposed development will generate significant movements in either of the network peak hours.
- 5.1.7. Such negligible changes in traffic flows would not be discernible from the daily fluctuation in traffic volumes that exist on Rhuddlan Road or within the Hospital estate itself. Therefore, no further analyses of the traffic impact of the proposed development are considered necessary.

5.2. PARKING IMPACT

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- 5.2.1. Existing and proposed parking arrangements for the proposed site are presented in Section 4.4 of this report. The application site currently operates as a car park and this parking will be displaced as a result of the development. The development proposals include for the provision of two additional upper decks over part of an alternative existing car park within the Hospital estate.
- 5.2.2. Applying the current parking standards, a decrease the available bed capacity by 13 would be equivalent to a reduction in parking required of 32 parking spaces. This is considered to be a robust estimate.
- 5.2.3. It is considered that, whilst the effect of building over part the existing car park in the north east corner on the parking provision at ground level has yet to be finalised, the placement of circa 220 formal car parking spaces above the existing provision is adequate to meet the anticipated parking demands resulting from the proposals.

- 5.2.4. As a result, there will be no net reduction in the number of formal car parking spaces on the Hospital site.
- 5.2.5. The site is located in proximity to bus services which call into the Hospital estate close to the main hospital entrance. The bus stop is linked to the application site by good quality pedestrian infrastructure throughout the Hospital site.
- 5.2.6. The proposed development will replace existing service provision in the Hospital. Therefore, having due regard to these factors, it is considered the proposed level of parking provision is sufficient to cater for anticipated demands as well as helping to alleviate parking issues with informal parking at the Hospital.

5.3. TRANSPORT IMPLEMENTATION STRATEGY

INTRODUCTION

- 5.3.1. TAN18 advises that a Transport Implementation Strategy (TIS) should be prepared for proposed developments. This should set objectives and targets relating to managing travel demand and the measures required to achieve them. The guidance indicates that the TIS should also set a framework for monitoring these objectives and targets.
- 5.3.2. This part of this Transport Assessment considers these matters, as appropriate and commensurate to the scale of the proposed development. These are set out in a travel plan for the development which provides information on measures to improve access by public transport and other more sustainable modes of transport in order to reduce the number and impact of vehicle journeys.
- 5.3.3. The Glan Clwyd Hospital already has a site wide travel plan which was developed several years ago. This is designed to encompass all existing and proposed units on the entire Hospital site and so will include the new AOPMHU.

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- 5.3.4. Whilst we understand that this document is proposed to be reviewed, the present site wide travel plan is summarised in the following paragraphs and a copy is attached as Appendix E to this report.

EXISTING SITE WIDE TRAVEL PLAN

- 5.3.5. The Hospital's Site Wide Travel Plan (YGCHTP) considered the infrastructure that existed at that time to encourage access by sustainable modes by undertaking an audit of the same. The work carried out in preparing this TA provides a more up to date audit (relevant to the current proposals) and the same conclusion that the site is in a reasonably accessible location has been drawn.
- 5.3.6. The YGCHTP set out the benefits of a travel plan to all users including, patients and their visitors. This would benefit people of all ages (including accompanied children) and those with mobility and vision deficiencies. Staff and patients and their visitors were surveyed to ascertain how they travelled to the Hospital and from where in order to develop measures to encourage greater use on more sustainable modes. 23
- 5.3.7. These measures included proposals to encourage walking, cycling and greater use of public transport plus car sharing by staff and patients and their visitors. These measures would be applied to all users of the site (and the AOPMHU) including people of all ages (including accompanied children) and those with mobility and vision deficiencies. In order that the YGCHTP is implemented it needs to be managed and coordinated. A Travel Plan Coordinator would be appointed into this role perhaps shared with other sites within the area covered by the Health Board.
- 5.3.8. In line with good practice, the performance of the YGCHTP against agreed targets would be monitored on an annual basis by carrying out further staff, patient, and visitor surveys.

5.4. PUBLIC TRANSPORT ACCESSIBILITY INDEX

- 5.4.1. The nearest Service Access Point (SAP) is the bi-directional bus stop within the Hospital site. It is c.310m walking distance of the proposed unit along level footways of 2m or more in width and by using crossing points. The stop has seating, shelter, and travel information boards. Dropped crossings, tactile paving and Zebra type crossing facilities are provided all catering for the needs of people of all ages (including accompanied children) and for those with mobility and vision deficiencies.
- 5.4.2. The stop is located just off the main roundabout access into the Hospital which is c.130m away from the proposed hospital unit. This would take just under 4 minutes to walk between the two points based on a walking speed of 80m per minute.
- 5.4.3. The most frequent service which uses these stops is the 13 and 51b which both operate at a half hourly frequency during the normal working day and on Saturdays providing a convenient link to Prestatyn, Rhyl and Rhuddlan. Whilst the 54 only operates 4/5 services a day the timing of the service is such to match the expected start and finish times of various staff on site and so the limited frequency is considered reasonable. 24
- 5.4.4. Based on the above information, we have used the BREEAM Accessibility Index (AI) methodology calculations (which is similar to the TfL PTAL methodology) to determine the AI at this stop. The calculations are provided in Appendix D to this report and show this stop would have an Accessibility Index of **2.37**.

5.5. BREEAM ACCESSIBILITY

- 5.5.1. Furthermore, the BREEAM Technical Manual has been reviewed and notes that a review of the local amenities in proximity to the proposed site is required for a Transport Assessment. The amenities chosen are taken from table 7.1 in the manual.
- 5.5.2. Due to the nature of the site being located within a hospital (which itself is a listed amenity) there are various amenities already located on site. These include food outlets, access to cash, postal services and over the counter services associated with a pharmacy.
- 5.5.3. With regards to the other amenities, there is the Bodelwyddan Community Centre and associated playground c.500m from the site as well as an Eat Live Train gymnasium located c.1km west of the site. There is also the Ysgol y Faenol Primary School located c.750m from the proposed unit. Therefore, it is deemed that the availability of amenities in close proximity to the proposed site is excellent with the majority of amenities within the 500m catchment of the proposed site.

25

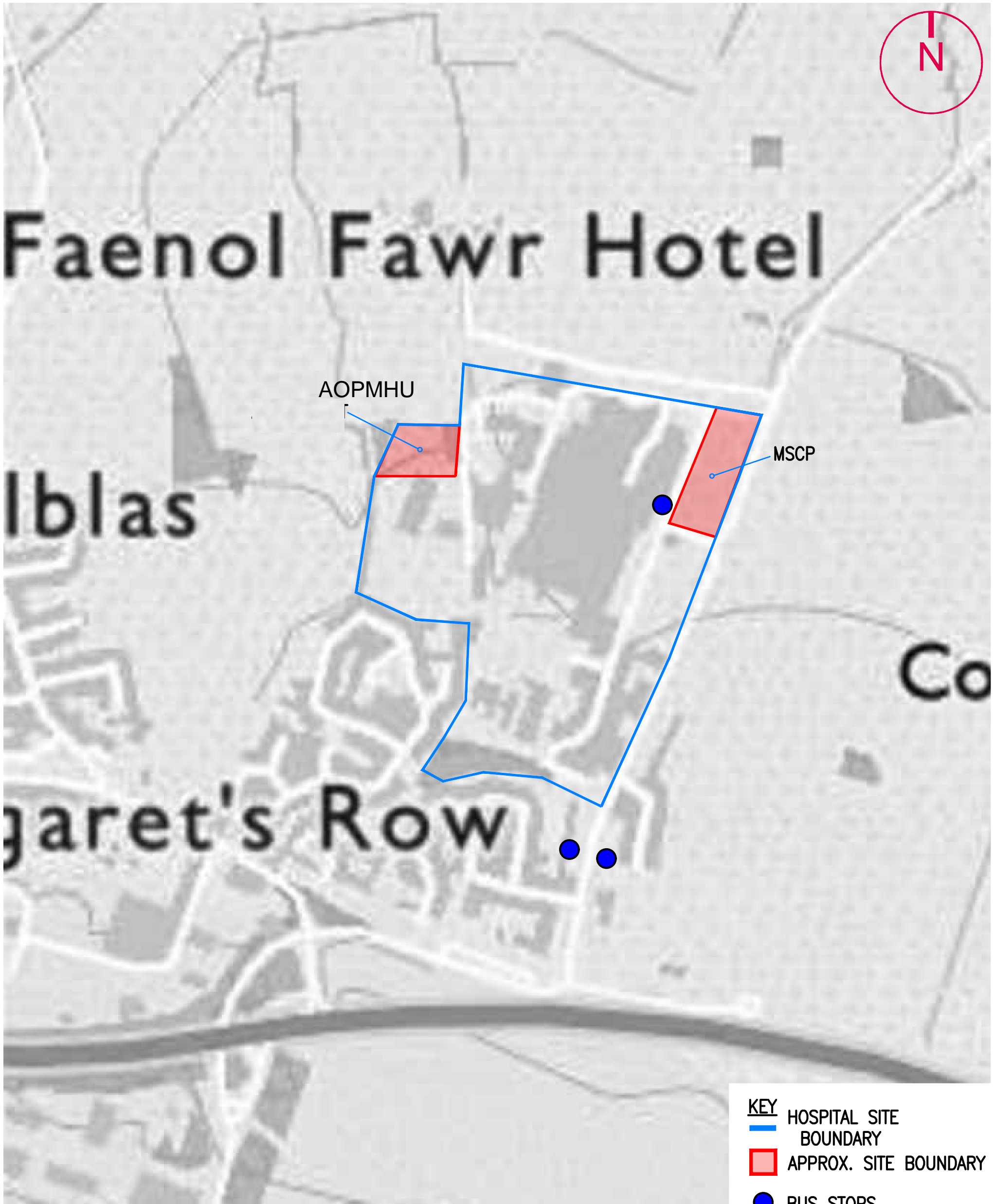
6. Conclusion

- 6.1.1. This Transport Assessment assesses the characteristics of the existing infrastructure in the surrounding area of the site and predicts that the number of development generated trips will be small / reduce and will not have a significant impact on the adjacent highway network. It is shown that there will be no net reduction in formal car parking spaces on the Hospital site. It concludes that the adjacent highway network can adequately accommodate the traffic impact of the proposed development in terms of safety and capacity.
- 6.1.2. The proposed development accords with both national and local transport policy.
- 6.1.3. The report also shows how an appropriate level of parking, access by all modes of transport and by people of all ages and abilities and turning provision is proposed. In addition, the Hospital is served by a number of quality, frequent bus routes running from the Hospital estate to a number of local destinations. The Hospital bus stop is accessible to the proposed development by people of all ages and degrees of mobility.
- 6.1.4. In conclusion, it has been demonstrated that the proposed development can be accommodated on the adjacent highway network without any significant negative impact and there are therefore no highway capacity or safety reasons why this development should not be granted planning approval.

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APPENDICES

APPENDIX A: Site Location Plan



VIA SOLUTIONS

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PROPOSED CONSTRUCTION OF NEW
HOSPITAL UNIT

GLAN CLWYD HOSPITAL, BODELWYDDAN

SITE LOCATION PLAN

SCALE: 1:5000 @A4

DATE: MAY 2021

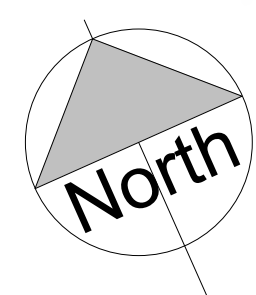
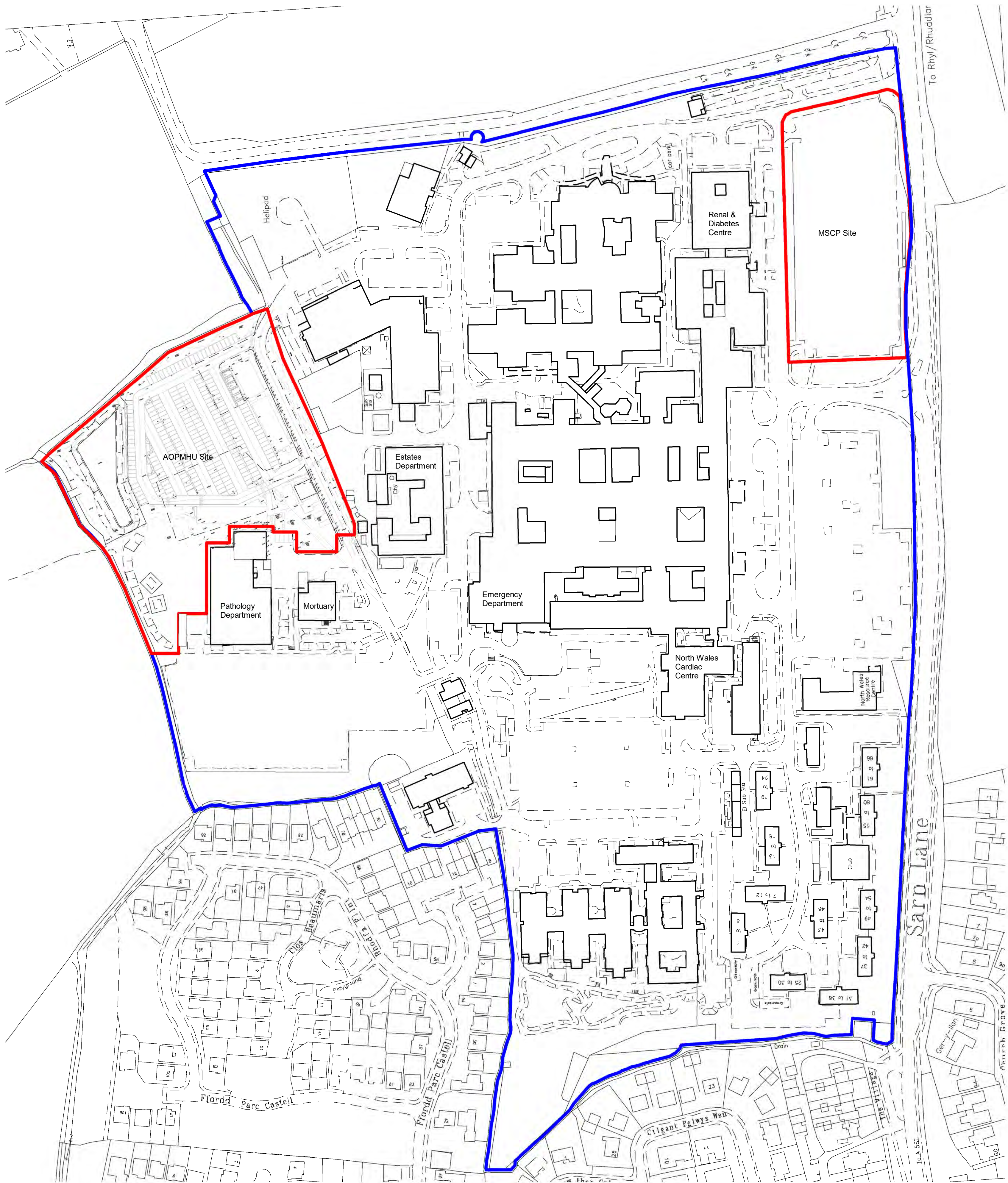
FIGURE 1

APPENDIX B: Collision Data



Collision Data from Crashmap – 01 / 01 /2016 – 31 / 12 / 2021

APPENDIX C: Proposed Development Layouts



- Glan Clwyd Hospital Ownership Boundary
- Application Sites

Application Site Areas

AOPMHU Site: 16584m²

MSCP Site: 9702m²

1 Site Location Plan

1 : 1250

0 10 20 30 40 50 60 70 80 90 100m
Scale 1:1250

This drawing must not be scaled.
Figured dimensions and levels to be used.
Any inaccuracies must be notified to the architect.
Detail drawings and large scale drawings take
precedence over smaller drawings.

Rev:
P01 Issued for pre-application

31.01.23

Chk'd:



STATUS

S2 - Issued for Information

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PDA Job No:
19095N

AOPMHU- PDA - ZZ - DR - A -	REV
05111	P01

Contract: Betsi Cadwaladr University Health Board
Adult and Older Persons Mental Health Unit – Ysbyty Glan Clwyd
Title: Site Location Plan

Scale: As indicated
Date: 14/05/21
Drawn: AH
Checked: RD

A1

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1 00 Site Plan
1 : 500

This drawing must not be scaled.
Figured dimensions and levels to be used.
Any inaccuracies must be notified to the architect.
Detail drawings and large scale drawings take
precedence over smaller drawings.

Rev:
P01 Issued for pre-application

31.01.23 Chk'd:



STATUS
S2 - Issued for Information

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PDA Job No: 19095N							
AOPMHU- PDA - ZZ - ZZ- DR - A - - 05112							
REV P01							
UPRN	ORIGINATOR	VOLUME	LEVEL	TYPE	ROLE	CLASS	NUMBER

Contract: Betsi Cadwaladr University Health Board
Adult and Older Persons Mental Health Unit – Ysbyty Glan Clwyd
Title: Site Plan

Scale: 1 : 500
Date: 14/05/21
Drawn: AH
Checked: RD

A1

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The image shows an aerial photograph of the Glan Clwyd Hospital car park. A technical site plan is overlaid on the central part of the image, detailing the proposed reconfigured parking layout. The plan includes several rows of parking spaces, some marked with wheelchair icons, indicating designated accessible parking. Key features include two staircases labeled 'Stair 1' and 'Stair 2', a central ramp area with a width of 8.45m, and various dimensioned zones such as 4.8m, 6m, and 2.4m typical widths. The surrounding environment includes the hospital buildings at the top, Rhuddlan Rd at the bottom, and other existing car park areas on the left and right.

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NOTES:
Do not scale from this drawing.
All dimensions to be checked on site by the contractor.
Report all drawing errors, omissions and discrepancies to the Bourne.
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The image shows an aerial photograph of the Glan Clwyd Hospital car park. A technical site plan is overlaid on the central part of the car park, detailing the proposed reconfigured DDA (Disability Discrimination Act) parking areas. The plan includes various parking bays, ramps, and stairs. Key features include:

- Reconfigured DDA Parking:** Indicated by yellow dashed boxes at the top left, containing symbols for wheelchair access.
- Stair 1:** Located near the top center of the plan area.
- Stair 2:** Located near the bottom right of the plan area.
- Dimensions:** Various measurements are provided, such as 8.45m Clear Ramp Width, 4.8m Typical, 6m, and 2.4m Typical.
- Access Points:** Marked with 'Ramp' and 'Door' labels.
- Surrounding Area:** The car park is bordered by Rhuddlan Rd at the bottom and other roads/parking areas at the top and sides.

NOTES:
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Rev No	Rev mark	Revision Description	Revision Date
P01	-	Issued for Approval	13.01.23

Client	BAM Construction
Project	Glan Clwyd Hospital Multi Storey Car Park, SCALE: 1:200 @A1
Date: 12.01.23	Drawn by: MUS Checked: BB Approved: SW
Drawing Title	Site Layout - Grade Level
Bourne Drawing No	-001
Drawing Reference	E-4201-0001 P01

APPENDIX D: BREEAM

Accessibility Index Calculation

BREEAM ACCESSIBILITY INDEX CALCULATION

Walking Speed (m per minute)	Distance to Stop	Walk time
80	310	3.875

Service	13	45	51B	54
Av Frequency	2	0.4	2	0.1
Scheduled Wait Time (SWT)	15	78	15	390
Average Wait Time (AWT) = SWT+2*	17	80	17	392
Total Access Time (TAT)	20.875	83.875	20.875	395.875
EDF Weighting	1	0.5	0.5	0.5
Equivalent Doorstep Frequency (EDF)	1.44	0.18	0.72	0.04
Accessibility Index (AI) =	2.37			

* Reliability factor for 2 mins for buses

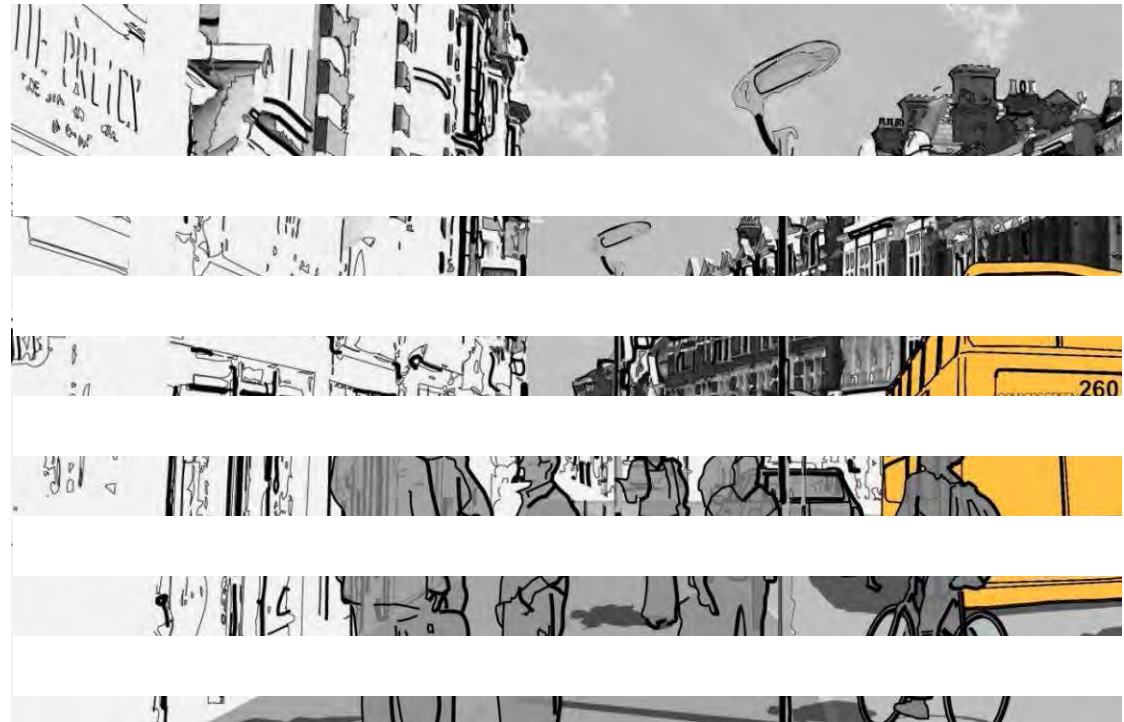
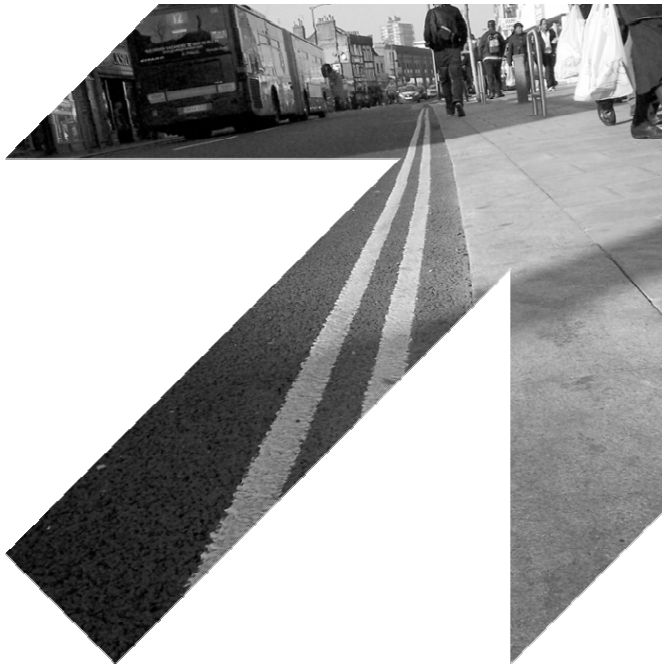
APPENDIX E: Existing Hospital Travel Plan

Ysbyty Glan Clwyd Travel Plan



GIG
CYMRU
NHS
WALES

Bwrdd Iechyd Prifysgol
Betsi Cadwaladr
University Health Board





Job No.	NW90510
Report No.	1
Prepared By	HN
Verified	RL
Approved By	HC
Status	Revised Draft
Issue No.	1
Date of Issue	25 April 2012

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Ysbyty Glan Clwyd Travel Plan

This document has been issued and amended as follows:

Status/Revision	Revision Description	Issue No.	Approved By	Date
Report	-	1	RL	25/04/12

Ysbyty Glan Clwyd Travel Plan

Section	Title	Page
1	Introduction	5
2	Travel Plan Approach and Benefits	7
3	Site Audit Summary	9
4	Staff Travel Survey Summary	10
5	Visitor/Patient Survey	13
6	Staff Focussed Travel Plan Measures	17
7	Visitor/Patient Focused Travel Plan Measures	23
8	Implementation of the Travel Plan	24
9	Monitoring of the Travel Plan	27
10	Travel Plan Targets	28
11	Conclusions	31

Appendices

A	Site Audit	32
B	Staff Travel Survey Results	42
C	Travel Survey Templates	55

Introduction

Background

In 2003, the former Conwy & Denbighshire NHS Trust (C&D) recognised that a Travel Plan would be a necessary to address the existing traffic problems at the Ysbyty Glan Clwyd (YGC) hospital site, in addition to providing an essential component to support any application for further development of land adjacent to the hospital site. The Trust resolved to appoint specialist consultants to produce a Travel Plan for the Ysbyty Glan Clwyd (YGC) in 2004.

The former C&D became the Central Area of the newly formed North Wales NHS Trust in September 2008. In spring 2009, North Wales NHS Trust commissioned JMP Consultants Ltd to prepare an update on the 2004 YGC Travel Plan. YGC hospital site is located in Rhyl, Denbighshire. The Travel Plan was required through the Welsh Health Circular 2008 document 058. The former North Wales NHS Trust in turn became the Betsi Cadwaladr University (BCU) Health Board in October 2009, which commissioned JMP again in spring 2011 to prepare an update on the 2009 travel plan.

Objectives

JMP has aimed to fulfil the following objectives in the preparation of this Travel Plan update;

- Monitor the progress with the implementation of the 2009 Travel Plan recommendations.
- Resurvey the hospital's staff to discover if attitudes towards modal shift from the car to other forms of travel have changed and what the barriers are that prevent them making alternative travel arrangements for at least part of the time.
- Survey the hospital's visitors/patients to discover their attitudes towards modal shift from the car to other forms of travel and what the barriers are that prevent them making alternative travel arrangements for at least part of the time.
- Produce a new Travel Plan Action Plan which states target completion dates for each action.
- Respond to the requirement to produce a Travel Plan as part of the planning requirement for the pathology development.

Development Proposals

Background

The BCU Health Board has submitted proposals for a new pathology development within the hospital grounds and the redevelopment of the Accident and Emergency Department. The proposal is to relocate the pathology and mortuary facilities to a new site to enable the redevelopment the hospital Accident and Emergency (A&E) area to meet current size requirements of assessment theatres. Planning has been sought to relocate these two facilities within a new development within the hospital grounds as highlighted in the photograph below.



This Travel Plan has been prepared to address on site travel issues as part of the wider travel plan strategy for the Betsi Cadwaladr University Health Board but also in response to the planning requirement set out below by Denbighshire County Council specifically related to the two development / redevelopment proposals;

‘Notwithstanding the submitted Travel Plan, no part of the development hereby permitted shall be brought into use until there has been submitted to and approved in writing by the local planning authority an updated Travel Plan to take into account the proposed development’.

The development will not provide any additional services and not require any additional staff members to be recruited to the hospital site. As such no additional staff vehicle trips associated with the development are to be created.

2. Travel Plan Approach and Benefits

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, whether they have access to a car or not and therefore helps 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 hospital and staff.

Land use at the site is entirely for hospital use. For new developments where travel habits are unknown, it is most beneficial to encourage sustainable travel from the point of occupation before travel patterns become instilled. However, Ysbyty Glan Clwyd is an existing operational and well established building and therefore all staff at the site will already have developed their own travel patterns. Visitors and patients to the hospital have different needs and considerations and sustainable transport will not be a high issue for the vast majority of them. Therefore at this stage the Travel Plan can act to influence a change in staff to more sustainable modes.

2. Travel Plan Approach and Benefits

Benefits of introducing Travel Plan measures

Trust

Decreased pressure on the car parks.

Improved corporate social responsibility.

Ysbyty Glan Clwyd has ISO 14001:2004 certification for its environmental management system. Site traffic is a significant aspect. A successfully managed Travel Plan will ease the environmental impact of vehicles accessing and parking on the site.

Reduced cost of the implications of 'no shows' to appointments caused by delays in accessing and parking on site by patients.

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

Improved accessibility to the hospital site by all modes of transport.

Improved employee health and wellbeing.

Greater choice of travel options to new and existing employees.

Cost savings.

Visitors / Patients

Improved accessibility to the hospital site by all modes of transport.

Less traffic congestion entering the site.

Improved ease of parking for appointments or visiting patients.

Site Audit Summary

Introduction

A site audit was undertaken by JMP to assess the layout and accessibility of the Ysbyty Glan Clwyd site and the surrounding area. Full details are provided at **Appendix A**, with a summary below.

Pedestrian access

Pedestrian access across the site is generally good and, unlike the audit carried out in 2009, no obstructions to walk ways caused by cars parking outside official marked bays were observed during the site audit.

Cycling access

Cycle access to site from surrounding area is good. The traffic free National Cycle Route 54 links both Rhyl and St Asaph to the site. Covered parking for cycles is available on site.

Public Transport Access

Buses route via the hospital site from the surrounding areas of Prestatyn, Llandudno, Conwy, Denbigh, St Asaph, Rhuthin and Rhyl. Limited public transport information is available on site to inform potential users of the services.

A covered bus shelter has been installed near the main hospital entrance.

The nearest train station is located over eight kilometres from the site in Rhyl. Trains from Chester and Holyhead call at the station on a 30 minute frequency during the week, with reduced services at the weekend.

Motorcycles

During the site audit a motorcycle parking bay was observed with two motorcycles parked in the bay. It was also noted that a car was partly parking in the motorcycle parking facilities.

Site Audit Conclusions

Following the Travel Plan site audit and desktop review of travel options to Ysbyty Glan Clwyd it is considered to be located in a reasonably accessible location.

Staff Travel Questionnaires

In order to identify local accessibility issues facing staff, an online staff travel survey was assembled and circulated to all staff at the hospital with an email account. In addition, JMP distributed hard copies of the survey forms to members of staff visiting the hospital canteen.

The staff travel survey undertaken was aimed at providing a snap shot of staff travel patterns and attitudes to travelling to the hospital site in inform this Travel Plan update. A short summary of key results is provided below, with full results provided in **Appendix B** and a copy of the survey included at **Appendix C**.

Results

49 staff travel surveys were completed online and a further 202 collected from the staff canteen on the 22nd of July 2011. A total of 251 staff therefore completed the 2011 staff travel snap shot survey.

Key Results of the Staff Travel Survey

Car Travel

71.6% of respondents travel to work as single occupants, compared with 85% in 2009 which is a substantial 13.4% decrease.

6.4% of respondents live within 2 miles of Ysbyty Glan Clwyd, compared to 5% in 2009. A good opportunity exists to encourage walking and cycling to work by staff living this close to the site.

19% of respondents drive to work as they consider their car is essential to perform their job, compared to 23% in 2009.

16.7% of respondents live over 20 miles from Ysbyty Glan Clwyd.

Car Sharing

From the staff travel survey, 54% of respondents revealed that they already car share or would be prepared to car share if incentives were offered and a system was introduced to help them find a car share partner. This represents a fantastic opportunity to further reduce the single car occupancy mode share.

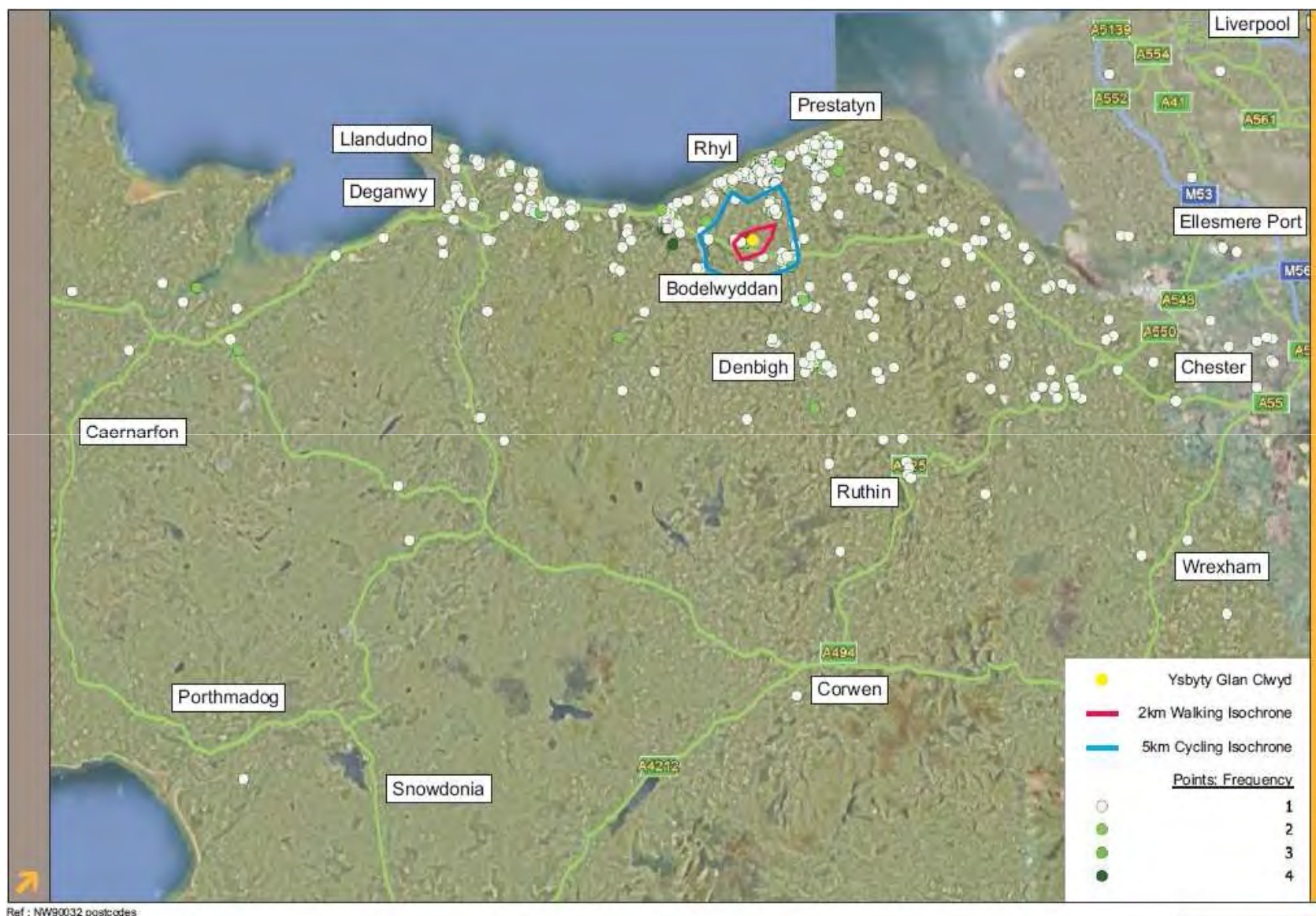
Sustainable Travel

4% of respondents travel to work by bus. Popular measures that would encourage staff to use public transport include improvements such as more frequent services and more reliable services were introduced to the site.

Some staff would also consider walking and particularly cycling to work if appropriate facilities were available to them such as showers and changing facilities, secure cycle parking and appropriate improvements to lighting were made.

4. Staff Travel Survey Summary

Postcodes of respondents to the staff travel survey



Patient and Visitor Travel Questionnaires

Patients and visitors using Ysbyty Glan Clwyd were asked to complete a hard copy questionnaire regarding their travel habits. In total 80 patients and visitors provided a response to the questionnaire. The results of the questionnaire have been used to inform the development of the measures and initiatives included in the travel plan. A copy of the patient and visitor survey is included at **Appendix C**.

Key Results

Age of Respondents

19% (15) of the respondents were under 45, 16% (13) aged 45 – 59 and 65% (52) over 60. Despite nearly two thirds of the patients / visitors being over 60 (and therefore eligible for free concessionary bus travel), only a low proportion used public transport (5%).

Journey Time

41% (32) of the respondents travelled to the site within 15 minutes, 54% (42) between 16 and 60 minutes and 5% (4) over 60 minutes.

Travelling Alone

22% (17) of the respondents travelled to the site alone, 74% (56) with a family member or friend, and 4% (3) travelled to the site to assist someone else in attending their appointment.

Modal Choice

24% (19) of the respondents travelled to the site by car alone, 66% (52) travelled by car share, and 11% (8) of respondents travelled sustainably to the site. The survey therefore showed that the majority of patients and visitors using the site travel by car, with a low proportion of other modes of transport being utilised.

Travel Issues – General

77% (59) of the respondents had no problems on their journey to the hospital.

Patient and Visitor Travel Questionnaires

Key Results Continued

Travel Issues – Car Travel

The most common problem relating to car travel as stated by 17% (13) of the respondents was difficulty parking the car nearby. One respondent commented that the “Extra car park is not signed for new Ivor Lewis Centre” and another had difficulty parking with a blue badge.

Although most patients and visitors using their cars did not experience any difficulties parking at the hospital site, as 17% of those surveyed did, car parking issues must be addressed as part of the travel plan. Any measures to be implemented to control staff parking will in turn free up spaces for patients and visitors, and alleviate some problems.

Travel Issues – Sustainable Travel

Several respondents raised problems relating to sustainable travel use, as follows:

- Difficulty walking from the car park/bus stop/railway station to the surgery (2 respondents);
- Difficulty affording the cost of the journey (1 respondent) ; and
- Difficulty knowing where to get off the bus/train (1 respondent) .

Conclusions

It is vital that the Trust works closely with public transport providers in an effort to provide service improvements, provide accurate public transport information, consider discounted tickets and actively promote public transport use.

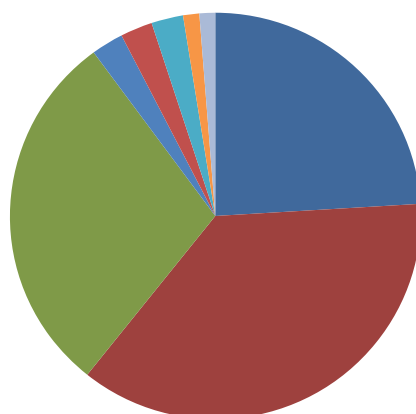
It is clear from the results of the survey that more needs to be done to increase sustainable travel by patients and visitors. This will involve effective promotional techniques in addition to closer working with providers of public transport as well as voluntary/community transport providers.

Patient and Visitor Travel Questionnaires



Modal Choice

How do you normally travel to the site/ How did you travel here for your appointment today? If your journey uses more than one form of transport please indicate the main part of your journey?	Frequency	Percent	Cumulative Percent
Car – (alone as a driver)	19	24	24
Car – (with others as a driver)	29	37	61
Car – as a passenger	23	29	90
Walk	0	0	90
Cycle	0	0	90
Motorbike	0	0	90
Bus – direct	2	3	92
Bus – need to change buses	2	3	95
Train	0	0	95
Taxi	0	0	95
Ambulance	2	3	97
Voluntary (Dial a ride)	1	1	99
Other	1	1	100
No reply	2		



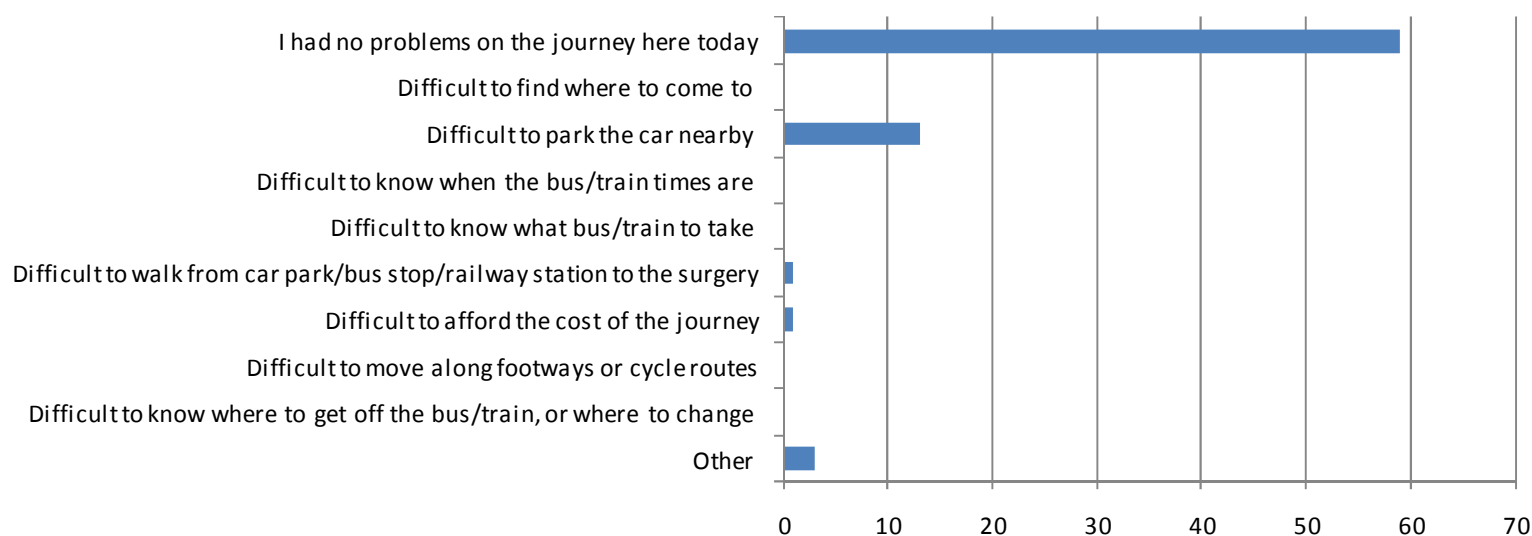
- Car – (alone as a driver)
- Car – (with others as a driver)
- Car – as a passenger
- Walk
- Cycle
- Motorbike
- Bus – direct
- Bus – need to change buses
- Train
- Taxi
- Ambulance
- Voluntary (Dial a ride)
- Other

Patient and Visitor Travel Questionnaires



Travel Problems

Did you have any of the following problems with your journey here today	Frequency	Percent	Cumulative Percent
I had no problems on the journey here today	59	77	77
Difficult to find where to come to	0	0	77
Difficult to park the car nearby	13	17	94
Difficult to know when the bus/train times are	0	0	94
Difficult to know what bus/train to take	0	0	94
Difficult to walk from car park/bus stop/railway station to the surgery	1	1	95
Difficult to afford the cost of the journey	1	1	96
Difficult to move along footways or cycle routes	0	0	96
Difficult to know where to get off the bus/train, or where to change	0	0	96
Other	3	4	100
No reply	6		



Introduction

This section of the Travel Plan sets out measures that should be considered for implementation at the Ysbyty Glan Clwyd site following the results of the staff and visitor/patient travel surveys and site audit.

Measures to Reduce Car Use by Staff

The following section sets out a series of measures that should now be considered for implementation at Ysbyty Glan Clwyd, as indicated by the results of the staff travel survey.

Car Sharing

As the hospital is located in a rural setting, it is likely that car sharing will offer a convenient sustainable transport solution for staff working at the site. Car sharing offers potential to reduce the number of cars needing to access site car parks and local roads, whilst at the same time facilitating the flexibility and comfort associated with the private car. Car sharing is the measure most likely to bring about a significant impact for the hospital. However, due to the nature of work undertaken at a hospital, car sharing will not be viable for all staff, including those who provide an on-call service.

From the staff travel survey 54% of respondents revealed that they already car share or would be prepared to car share if incentives were offered and a system was introduced to help them find a car share partner. A car share scheme should therefore be considered for the site.

Car Share Software

A number of car share software providers supply car share databases. Staff details are entered into the database and potential car share partners are identified. The databases enable shift times, home locations and routes to work to be entered and staff with closely matching details to be found. Such software should be sourced by the hospital.

Guaranteed Parking

In a site such as Glan Clwyd where parking is spread across a large area around the hospital, a number of spaces in priority locations reserved for car sharer use only could prove a real incentive to car sharing. These spaces should be located in a convenient location to highlight the benefit of car sharing to other members of staff.

Guaranteed Ride Home

A concern relating to car sharing is one person being left behind when their car share partner has to leave in an emergency. To stop this being an issue, Ysbyty Glan Clwyd could offer a free taxi ride home for the car share passenger, in the event of the driver being called away in an emergency.

Measures to Promote and Facilitate Walking by Staff

Results of the 2011 staff travel survey revealed that 4.5% of respondents live within 1 mile of the hospital site compared with 1.5% in 2009. As 2km (1.2 miles) is considered the maximum preferable distance to encourage people to walk to work (IHT Guidelines 1999), it would be reasonable to expect locally living staff to walk on their journey to work, and encourage them to do so.

The most popular measures from the survey results to encourage staff to walk to work include improved safety of routes in terms of lighting and security, more direct routes, and workplace lockers and changing facilities. Other measures which would assist include:

- Free personalised alarms – could be offered to all staff walking or using public transport to reach the hospital. The alarms 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;
- Umbrellas could be provided to staff on wet days, to further encourage walking from local areas;
- The existing lunchtime power walks should be widely promoted to staff at the hospital to encourage them to be more active as part of their work day; and
- As part of the “how to get to” guide, a series of routes could be identified from local residential areas, with details including expected journey length and distance.

Walking audits should be undertaken to examine lighting and security issues along routes to nearby residential areas. Issues such as overgrown foliage and broken pavement should be reported to Denbighshire County Council. Any improvements to the routes should be promoted to all staff as part of the wider Travel Plan promotion.

Measures to Promote and Facilitate Cycling by Staff

Results of the 2011 staff travel survey revealed that 16 respondents (6.5%) live within 2 miles of Ysbyty Glan Clwyd, which is considered a reasonable cycling distance from the hospital. A good opportunity, therefore, exists to further promote cycling to the site.

1% of respondents cycle to work as their main mode of transport (2 respondents); 18 respondents occasionally travel to the hospital by bicycle. The measures indicated for encouraging cycling within the staff travel survey include changing facilities, lockers and showers, improved cycle paths, discounts at a local cycle shop and secure parking.

Cycle to Work Scheme

A cycle to work scheme was launched on the 9th March 2012 with a window to purchase a tax free bike available until the end of October 2012. The cycle scheme provider held a roadshow at Ysbyty Glan Clwyd during the spring of 2012. The scheme which is available to all BCU Trust employees includes the purchase of equipment. Full details are available on the Trust's intranet site.

Free Maintenance Checks

A local bike retailer should be encouraged to visit the site periodically, to offer staff free cycle maintenance checks. This will ensure staff are confident that their bicycles are in good working order. Holding a maintenance clinic during the spring may further encourage staff to cycle to work as the mornings and evenings get lighter and the weather improves.

Storage and Changing Facilities

52 respondents indicated that they would consider cycling if facilities were introduced at the site, including showers, changing facilities and lockers to store cycling equipment.

Cycle Route Information

The transport information carousel and Travel Plan noticeboards should be updated to contain information on all local cycle routes; this will assist with promoting cycling to staff.

Reflective clothing

Safety can be a key concern for people considering cycling. By providing free reflective clothing such as vests or arm bands staff may feel more secure cycling on the local roads in the knowledge that they are more visible to other road users.



Measures to Promote Public Transport by Staff

The main public transport improvement respondents to the staff travel survey would most like to see is the availability of more direct (67 respondents) and frequent (66 respondents) services, and discounted tickets (59 respondents).

Rail

8% (18) of respondents to the staff travel survey indicated that they would like to have more frequent train services and better bus links to work from station. Opportunity therefore exists to work with local bus operators to provide a shuttle between Rhyl rail station and the site to boost levels of staff using rail for their journey to work.

Subsidised Bus Fares

A successful pilot of subsidised staff travel passes in 2005 led to a proposal to provide free bus travel on a permanent basis for up to 150 members of staff, with the condition that those staff members would commit to not using a car to access the hospital site. The trial lasted 12 months but was discontinued due to lack of funding.

59 respondents to the staff travel survey indicated that they would use public transport if discount tickets and passes were available at work. Staff at Ysbyty Glan Clwyd are still able to make use of discounted weekly bus pass, on production of a valid staff ID badge. Staff are clearly not aware of this. Promotion of this incentive, along with any others in place, should form part of the Travel Plan and should be promoted to be both existing and new employees. This would be a good incentive with which to help relaunch the hospital Travel Plan.

Public Transport Information and Awareness

As part of the 2004 Travel Plan, Arriva Bus provided a presence in the main hospital reception for three months to provide bus timetable and travel information. This service which was funded by both Denbighshire County Council and Arriva, but was discontinued due to lack of funding.

To ensure that staff, patients and visitors are aware of the available services, a leaflet dispenser should be installed in the staff canteen and main reception area, to provide bus information such as timetables and route information. Summary public transport information should also be included on the hospital's website and on Travel Plan notice boards across the hospital site. In addition, posters should be placed in the bus waiting area to raise awareness of any bus-related measures.

Traveline Cymru offer all public transport information over the phone, as well as providing a text messaging service to mobile phone users. Promotion of this service should be undertaken by a site Travel Coordinator.

Measures to Promote Alternatives by Staff

Car Park Management

The implementation of any successful Travel Plan relies on a robust package of Travel Plan measures, realistic targets and a high profile awareness campaign. However, an effective car park management strategy on-site is integral to a successful Travel Plan. Clearer signage on site is required to ensure that the temporary overspill car park is used for staff ensuring visitors and patients are parking in the main hospital car parks near to the hospital main entrance.

Measures to promote travel to work by Motorcycle

Denbighshire County Council offer free 'Bikesafe' workshops for residents of the Denbigh area, to help improve bikers' road safety awareness. The Travel Plan notice board should contain details of how courses and workshops can be booked.

A number of motorcycles were observed parking in the motorcycle parking area on the day of the site audit. Consideration should be given to supplying a covered motorcycle parking area to encourage more people to ride to the site.

Awareness Raising

Feedback received informally from staff at Ysbyty Glan Clwyd highlighted a lack of awareness from staff on Travel Plan issues. Awareness raising has started with the opportunity to complete the staff travel survey. The Trust should now ensure that all staff are informed of the results of the survey and provided with information on new Travel Plan measures on site.

Staff representatives should be sought to assist in the implementation of Travel Plan measures on site and help form travel user groups or become Travel Plan steering group members.

Communication

Communication of measures should be carried out through specific groups/meetings, or through newsletter or e-mail. Regular articles featuring updates on the Travel Plan should be included in the 'Net Work' staff newsletters. Travel Plan notice boards should be installed in the hospital at key locations to inform staff and visitors of travel related issues.

The hospital radio station could also be utilised to inform visitors and staff of any one-off events taking place e.g. In Town Without My Car. Routine events, such as the lunchtime power walks could also be promoted via this means.

One respondent to the staff travel survey commented that similar surveys were carried out before but nothing had changed since. It is very important to effectively communicate any measures being taken, changes being made and the impact they are having so that staff are aware that their opinions matter and that changes are being made as a result of the surveys.

Business Travel

Pool cars

The hospital currently provided pool vehicles for staff to travel between Trust sites. Staff wishing to drive to other sites from Ysbyty Glan Clwyd must first check the availability of a pool car through the Trust's transport manager. The estates department who have considerable business travel requirements have acquired a department specific vehicle for team members who travel on a daily basis.

Pool vehicles enable staff to leave their own vehicle at home in the knowledge that a pool vehicle is available to them if they need to travel on business.

Consideration should be given to selecting the more 'environmentally friendly' types of vehicles that are now available for purchase. The hospital already purchases green electricity so opportunity may exist to purchase an electric powered vehicle.

60 respondents to the staff travel survey stated that the car is essential to performing their job awareness raising of the pool vehicles would assist in promoting uptake of the pool vehicles.

Video Conferencing

A video conferencing facility is available on the Ysbyty Glan Clwyd site in the Cancer Treatment Centre. The BCU trust covers the whole of North Wales and potentially requires a great level of travel between sites. The opportunity to introduce further video conferencing facilities should therefore be examined in an attempt to reduce the miles travelled by staff on business. This will aim to save both time and money, as well as enabling staff to consider more sustainable forms of transport to reach work, in the knowledge that they can conduct their meetings via video conferencing.

Visitor/Patient Measures

Many of the staff based measures will also be applicable to visitors/patients, as highlighted for specific measures. However, the key visitor/patient measures are summarised below, all of which aim to increase the current level of visitor/patient travel by sustainable modes (currently 11%), particularly by those living locally.

- 17% of respondents to the visitor survey had trouble parking their car nearby. An effective car park management strategy on-site is therefore integral to a successful Travel Plan and to alleviate existing visitor/patient parking issues.
- Awareness raising of the Travel Plan has started with the opportunity to complete the visitor/patient travel surveys. The Trust should now ensure that, where feasible, visitors are informed of the results of the survey and provided with information on new Travel Plan measures on site.
- Information notice boards and carousels should be provided and updated within the communal visitor areas.
- The hospital website should include details of safe walking and cycle routes within the vicinity of the site and should publicise accurate sustainable travel information to raise awareness of its potential convenience, for example:
 - Information on walking and cycling;
 - Timetables and promotional literature from regular operators;
 - Special Promotions offered by operators (discounts, return tickets, weekly/monthly tickets etc);
 - Public transport information and information on discounted ticketing (if available);
 - Details of Community Transport schemes currently operating within the area;
 - Details for the 'Traveline' Cymru telephone number; and
 - Telephone numbers of taxi companies operating in the area.
- Cycle parking provision should be promoted to visitors/patients.
- Details on Travel Plan measures or a summarised version of the Travel Plan should be made available to visitors/patients.

8. Implementation of the Travel Plan

Implementation of the Travel Plan

Introduction

The previous sections have examined the results of the staff and patient/visitor surveys. A series of updated Travel Plan measures informed by the results have been discussed that should be considered for future implementation.

For the Travel Plan at Ysbyty Glan Clwyd to become effective and start to address demand on the car parking and the lack of alternative options in reaching the site, a number of key components to the plan are needed to ensure a successful Travel Plan is put in place.

This section identifies a range of measures that will assist in promoting sustainable transport choices at the site.

- Management of the Travel Plan
- Marketing of the Travel Plan
- Monitoring and reporting of the Travel Plan
- Setting robust Travel Plan targets.

Management

Travel Plan Co-ordinator

The implementation of the Travel Plan recommendations require effective co-ordination and management within the Trust. The first key step toward developing the TP strategy is to ensure that there is an effective management and administrative structure in place. Thus, a Travel Plan Co-ordinator. No Travel Plan Co-ordinator post exists at Ysbyty Glan Clwyd but this role could be shared between other sites within the Trust including Wrexham Maelor & Ysbyty Bangor.

It is essential that a Travel Plan Co-ordinator needs now to be appointed to undertake the following tasks:

- To promote and encourage the use of travel modes other than the car.
- To provide a point of contact for all travel related enquiries.
- To ensure all relevant Travel Plan information is provided to all employees, patients and visitors.
- To establish and co-ordinate a car sharing scheme, bicycle user group and walking buddy scheme.
- To maintain contact with the local authority Taith Travel Plan Co-ordinator and transport operators.
- To review the Travel Plan and all associated targets and measures in line with the monitoring strategy.
- To ensure that Ysbyty Glan Clwyd maintains a commitment to addressing sustainable travel to the site.

Site Steering Group

The Travel Plan Steering Group needs to be expanded to concentrate on taking forward the recommendations of this updated Travel Plan report.

The site Travel Plan steering group should contain representatives from the following teams & departments of the hospital:

Trade Unions/Staff organisations	Communications/IT	Health & Safety	Finance
Patient Interest Group Representative	Estates Management	The Trust Board	Security
Voluntary organisations Representative	Corporate Services Manager	Human Resources	Facilities

Senior Management Support

Ensuring that senior managers commit to the hospital Travel Plan is essential. A summary report of the Travel Plan including the staff travel survey results should be produced and circulated to all staff on site and be signed by a member of the senior management team. The a member of senior management should be asked to chair the Travel Plan Steering Group.

Marketing

Raising awareness, providing appropriate information and promoting alternatives to the single occupancy vehicle can be the most important tool to achieving travel behaviour change. Without a dedicated member of staff looking after Travel Plan activities on site the effectiveness of any Travel Plan measures introduced will not be as great.

It is suggested that the following promotion and awareness activities are undertaken, most of which were suggested back in 2009 but have not been implemented to date:

- A carousel of travel information to be introduced in both the main reception and the canteen, housing bus timetable information, local cycle route maps and details of the suggested car share scheme. Any other local information such as 'plusbus' and rail times should also be included.
- The hospital website to be updated to provide details of all TP activities and further information on how to reach the site.
- A number of Travel Plan notice boards to be erected across the site to provide staff and visitors with any new Travel Plan initiatives taking place and detailing the various options available to reach the site. This could include any hospital specific passenger transport information and details on car parking.
- A 'how to get to' guide be created for the hospital to be sent to all new patients with their appointment letters.
- A Travel Plan pack should be assembled for all new employees working at the hospital site. The pack should be issued to them before their first day to enable them to have full information to make an informed decision on their preferred method of travel to the site.
- One off events should be held at the hospital site to raise awareness of travel options to staff. Opportunities to tie in with local and national events such as Bike2Work week should be made the most of through provision of small incentives i.e. bikers breakfasts, free cycle maintenance checks, etc.

Travel Plan Branding

It is recommended that the Travel Plan for the hospital 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 patients to name the plan, which would assist with ensuring staff 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 who take part in Travel Plan activities. For example, all staff registering with the car share scheme could be provided with a Travel Plan key ring; this would raise the profile of the Travel Plan.

Monitoring

Since the 2009 Travel Plan, very limited monitoring of individual Travel Plan measures has taken place. Monitoring travel behaviour is key to understanding the success of measures introduced to promote the use of alternative travel modes.

A systematic approach to monitoring the Travel Plan is required and should be agreed with the Taith Travel Plan Officer and the Welsh Assembly Officer. It is recommended that the following monitoring strategy should be adopted by the Trust as part of the Travel Plan for Ysbyty Glan Clwyd.

- Annual staff and visitor/patient snap shot surveys are undertaken during an agreed month of the year.
- Mode share counts are undertaken during the agreed monitoring month to include, car sharing, cycling, walking and public transport use.
- Traffic counts at main entrances are undertaken on an annual basis as part of the monitoring of the Travel Plan.
- Use of any measures introduced to address travel between Trust sites such as pool cars are monitored.

Reporting

Welsh Health Circular (2008) 058 requires that the Travel Plan must be monitored on an annual basis and an annual report of performance against the identified targets be submitted to the appropriate WAG officer.

Progress of the Travel Plan should also be reported to the Taith Travel Plan officer and appropriate contact at Denbighshire County Council to ensure that they are kept up to date with progress made in addressing car parking issues and the promotion of sustainable travel to the site.

Progress made with the implementation of the Travel Plan should be reported to the BCU Board on a regular basis. Senior Management support for the Travel Plan will be essential to ensure buy in from staff at Ysbyty Glan Clwyd. Without the support from the board it is unlikely that the Travel Plan will receive the investment and the credibility needed to persuade staff at the hospital to address their own travel to the site.

Targets

To assist the Board in the implementation of the Travel Plan at Ysbyty Glan Clwyd, in 2009, JMP set out mode share targets to be accomplished by 2012 and a clear Travel Plan Action Plan for implementation. The targets are required to assess whether the objective to reduce single occupancy vehicle travel has been achieved. Targets in this revised Travel Plan are again split into two types - modal share targets for staff and Action targets for staff and visitors/patients.

Table 10.1 provides an update on achievement of staff-related targets and sets out revised targets based on recent survey findings. **Table 10.2** sets out action type targets for both staff and visitors. The suggested targets should be agreed with the Taith Travel Plan officer and appropriate contact at Denbighshire County Council.

There has been limited progress made on the action type measures since 2009, hence it is important the Trust now focus on the implementation of the measures set out in **Table 10.2**. However, some good progress has been made on the 2012 mode split targets set out in 2009. **Table 10.1** indicates that the 2012 targets set in 2009 for car alone and walking have already been achieved, although further progress on car sharing, public transport and cycling are required. The action-type targets set out in **Table 10.2** will assist in achieving these targets.

Table 10.1 Staff Mode Share Travel Plan Target Achievement and Update for Ysbyty Glan Clwyd

Travel Mode	2009 Mode Split Based on survey results	2009 Target Set for Achievement by 2012	2011 Mode Split Based on Survey Results	Target Achieved to Date?	Revised 2012 Mode split targets i.e. September 2012
Car alone	84.2%	80%	71.6%	Yes	70%
Car share as passenger (2%) or as driver (4.8%)	6.8%	10%	8.1%	No	15%
Train	0%	6%	0%	No	6%
Bus	4.7%		4%		
Taxi	0%		0.4%		1%
Cycle	0.9%	2%	0.7%	No	2%
Walk	1%	2%	3.3%	Yes	5%
Motorbike/Scooter	0.6%		0%		1%
Other	1.3%		8.7%		
No reply	0.4%		3.3%		
Totals	100%	100%	100%		100%

Table 10.2 Ysbyty Glan Clwyd Staff and Visitor/Patient Travel Plan Action Plan 2012 – 2013 i.e. Action Targets

Measure	Timescale
Trust Support	
Secure senior management support for the implementation of the Travel Plan	2011
Travel Plan Co-ordination	
Identify a site Travel Plan Co-ordinator	2012
Establish a Travel Plan Steering Group	2012
Car Sharing (Staff Only)	
Purchase appropriate database and promote a site car share scheme	2012
Make available at least 20 car share spaces in the staff car park and offer a guaranteed ride home	2012
Car Parking	
Introduce staff car park permit system as part of a site-wide car park management strategy	2013
Improve on site signage relating to car parking	2012
Public Transport	
Install a public transport information carousel in public areas and stock with appropriate information	2012
Install Travel Plan notice boards and posters in key areas across the hospital to promote all Travel Plan measures and sustainable travel information (including community transport and Traveline Cymru)	2012
Actively promote public transport use and promote the discounted weekly bus ticket available	2012
Consider introducing interest free public transport season ticket loans and free taster tickets for staff	2013
Liaise with public transport providers to explore opportunities to improve services (including a railway shuttle service and services to suit shift times), provide and promote ticketing initiatives and provide data on journey times to key destinations and the reliability of services.	2013
Walking and Cycling	
Encourage walking and cycling by staff and visitors who live close to the site	2012
Install storage lockers and shower facilities for cyclists and walkers	2013
Promote the secure cycle and motorcycle parking facilities	2012
Provide staff walking and cycling to work with reflective clothing	2013
Hold cycle maintenance sessions and promote cycle to work scheme for staff	2013
Liaise with County Council to encourage lighting, footpath, cycle path and security improvements.	2013

Table 10.2 Ysbyty Glan Clwyd Staff and Visitor/Patient Travel Plan Action Plan 2012 – 2013 i.e. Action Targets

Measure	Timescale
Marketing	
Hold a competition amongst staff and patients/visitors to brand the Travel Plan	2012
Launch Travel Plan with agreed branding	2012
Create a new starters Travel Plan induction pack	2012
Create a How to Get to Guide for the Hospital for use by visitors/patients and staff	2012
Update the hospital's website to include up-to-date information on all travel options to reach hospital site and Travel Plan measures	2012
Hold Travel Plan events such as national bike week, car share days and car free days	2012
Business Travel	
Promote the use of pool vehicles for travel between Trust sites and increased provision and use of video conferencing facilities – promote these facilities amongst staff	2013

Conclusions

This Travel Plan report has reviewed progress made by the Board since the 2009 Travel Plan report in addressing travel to the Ysbyty Glan Clwyd site. Some progress has been made on action type measures and there has been a significant reduction in single occupancy vehicle travel to the site. The Board needs to now focus on the action type measures set out in **Table 10.2** of this report.

The contents of this report should be considered carefully and shared with members of the Trust Board. Investment in terms of both time and funding is needed to address the over demand on parking spaces and lack of alternative options available to site users.

Ysbyty Glan Clwyd

Since the official opening in 1980 by H.R.H. Princess Margaret, the 15.6-hectare YGC site has been under continuous development. The main hospital building was designed in the 1960s and was completed in 1979.

The main block is based on a H block configuration. The original styling was continued on the principal extensions (care of the elderly and the MDTU /scanner wing) until 1993 when the St George's cross nucleus design was adopted for the women and children's unit. The North Wales Cancer treatment Centre and Radiology Unit opened in 2000.

Service Developments

Service Developments since the 2009 Travel Plan include;

- Expansion of Cancer Centre
- New 350-space car park



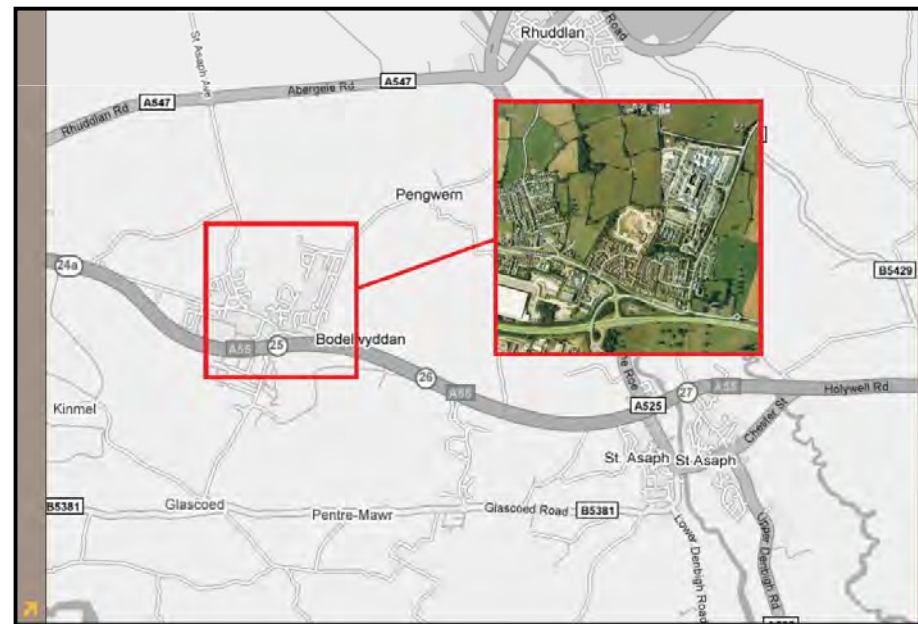
Site Audit

A site audit was undertaken by JMP to assess the layout and accessibility of the Ysbyty Glan Clwyd and the surrounding area. The audit was conducted on Friday 3rd June 2011 between the hours of 10:30am and 12:15pm. The weather conditions were sunshine with clear skies.

The full site audit undertaken as part of the Travel Plan is included as Appendix A.

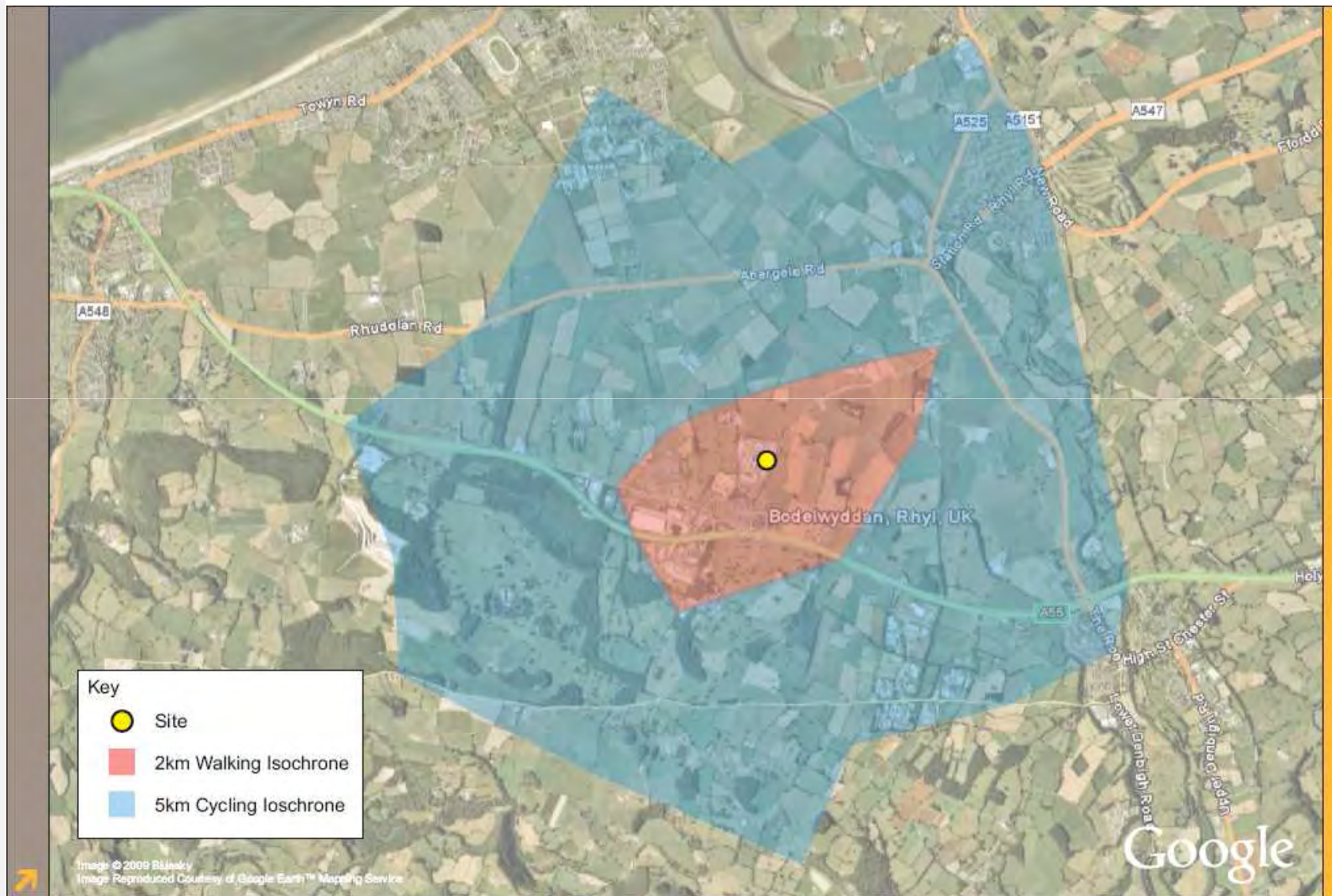
Site Location

YGC is located in the village of Bodelwyddan near Rhyl in Denbighshire as shown in the figure below. The hospital can be accessed at two points. The main hospital access is from a mini-roundabout off Sarn Lane. The second access is approximately 50m to the north along Sarn Lane. This access is mainly used as a service access and an exit point for bus services to the site.



Location of Ysbyty Glan Clwyd

Walking and cycling isochrones



Parking

Welsh Health Circular (2008) 11 set out that from 1st April 2008, free car parking is to be provided at all NHS Hospital sites for patients, staff and visitors. Where there are external contracts in place they should be allowed to run their course, they should not however be renewed or extended. When contracts expire services must be brought back in-house and all parking provided free of charge to patients, staff and visitors.

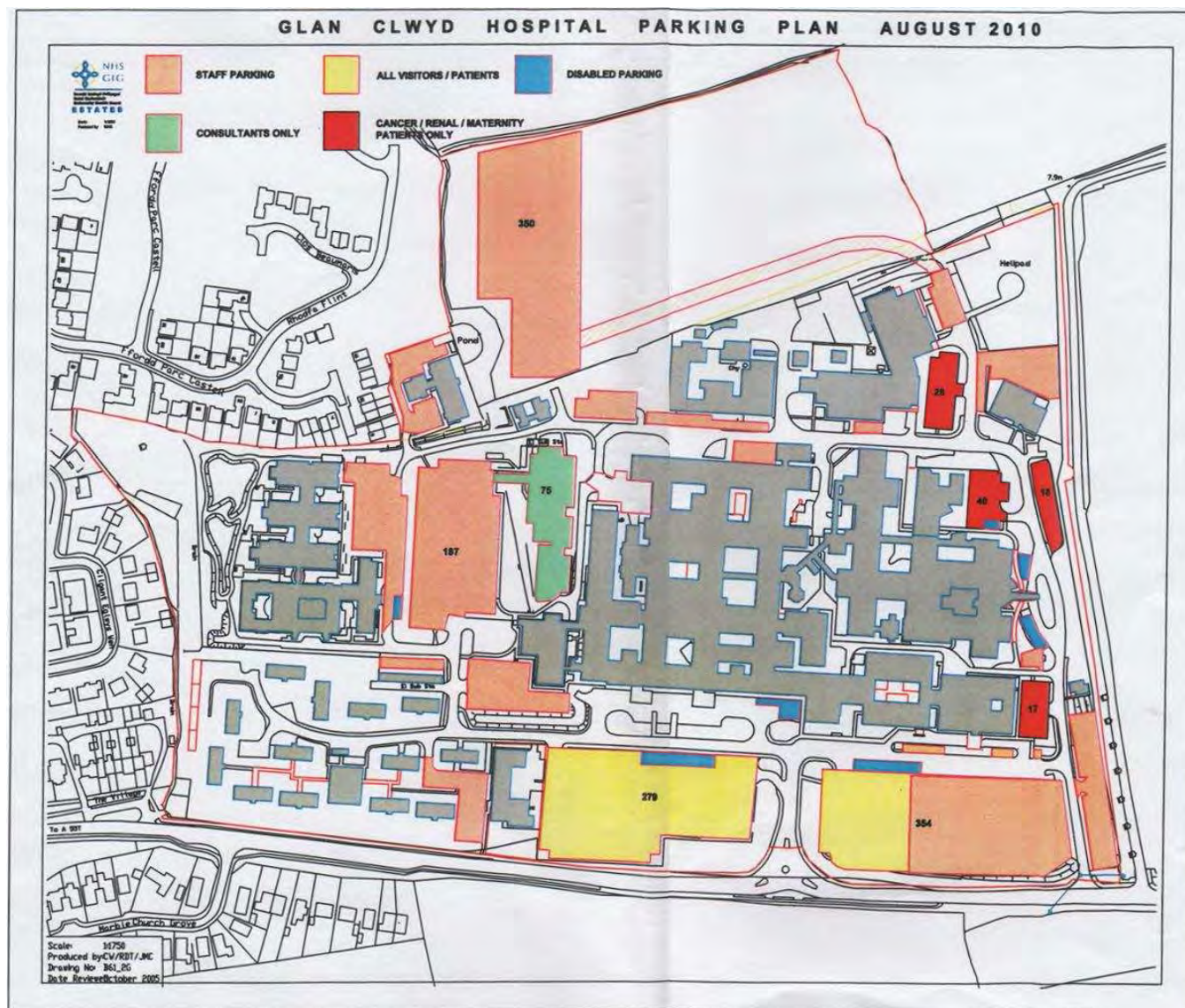
A total of 1284 car parking spaces were available on site in 2004 and pressure on parking was identified in the Travel Plan report. In 2009 YGC provided 1520 official car parking spaces for its site users; 900 spaces for staff use and 350 for visitors. However, approximately 100 car parking spaces were lost to accommodate the cancer centre building extension. The Trust also purchased a 9 acre field adjoining the YGC site to accommodate future healthcare developments and 350 parking spaces are since provided on part of this development land.

It was predicted in the 2009 Travel Plan that about 100 cars will continue to park in inappropriate and in some instances, dangerous places on site unless action is taken. During the site audit, however, no major parking issues were observed. In fact ample parking spaces were observed mainly in the new staff car park and elsewhere.



Appendix A: Ysbyty Glan Clwyd Site Audit

Current Parking Provisions



Pedestrian Access

Sarn Lane runs along the eastern edge of the hospital site. The footways are in good condition and are well-lit. Crossing points have dropped kerbs and tactile paving.

Zebra crossing and dropped kerbs are available at all major crossing points with dropped kerbs and tactile paving present at minor crossings.

At points of gradient change there are handrails present along the footway to aid mobility.

The two main car parks situated at the front of the building have pedestrian routes linking them to the hospital buildings.

There are some obstructions caused to pedestrians due to cars parking outside of official marked bays.



PPG13 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 PPG 13).

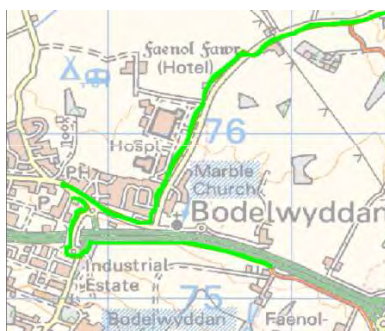
The settlement of Bodelwyddan is located within a reasonable walking distance of the hospital.

Cycle Access

The hospital site is very accessible by cycle. Along the eastern boundary of Ysbyty Glan Clwyd is an off-road Local Cycle Route. This is a traffic free route and is clearly marked, signed and is in good condition. The cycle route is accessed directly from the main hospital access road and is approximately 35m from the nearest cycle parking facility.

This Local Route connects to the traffic-free National Route 84, linking to Rhyl to the north and St Asaph to the south.

The route is illustrated below:



There are three main cycle shelters on the hospital site. The first is situated at the entrance to the visitor car park and provides secure parking facilities for 12 cycles. At the time of the site audit there were 8 cycles secured at the shelter.

Motorcycles park adjacent to this shelter but there are some obstructions caused by cars parked in the motorcycle parking area. At the time of the site audit there were 2 motorcycles parked.

There is a cycle parking shelter to the rear of the building, located near to the estates department building with capacity for 12 cycles and at the time of the site audit 4 cycles were secured at the shelter. There is also a cycle parking shelter to the side of the Cancer Centre with capacity for 5 cycles and at the time of the site audit 2 cycles were secured at the shelter.

PPG13 notes that for journeys of less than five kilometres, cycling offers a potential substitute to car borne trips. The settlements of Rhuddlan, Bodelwyddan and St Asaph are all located within a reasonable cycling distance of the site.

Bus Access

Regular Bus Services

Bus services access the hospital from the main site access to the east of the site. Services then use the Hospital's internal highway network via a short one-way system, and exit the site from a secondary access point at the northeast corner.



The bus stop serving Ysbyty Glan Clwyd is situated close to the main hospital entrance at the front of the building. The shelter itself is covered and enclosed by glass. There is adequate seating within the shelter with a visible timetable for passengers.

Public transport information

Following the 2004 Travel Plan, a representative from Arriva was available in the main reception of the hospital to provide bus information to visitors and staff. This initiative was funded by Denbighshire County Council and Arriva. The initiative was discontinued after three months due to lack of funding.



Bus Access

The table below details the service number and timetable information of buses serving Ysbyty Glan Clwyd

Service	Route	Operator	Frequency		
			Mon – Fri	Saturday	Sunday
SBP (St Asaph Business Park)	YGC – St Asaph Business Park	M&H Coaches	20 mins Dep 12:11 – 13:11	NA	NA
SBP	St Asaph Business Park - YGC	M&H Coaches	20 mins Arrival 12:25 – 13:25	NA	NA
13	Prestatyn - Llandudno	Arriva	60	60	NA
15	YGC - Conway	Arriva	NA	NA	3 services only 12:29, 14:29, 16:29
13	Llandudno – Prestatyn	Arriva	60	60	NA
51	Rhyl – Denbigh – Ruthin	Arriva	20	20	60
51	Ruthin – Denbigh – Rhyl	Arriva	20	20	60
45	Rhyl – YGC	Arriva	120	120	NA
55	YGC - Rhyl	Arriva	120	120	NA

Rail Access

The closest rail station to Ysbyty Glan Clwyd is Rhyl station which is located approximately 8km from the Hospital site. Rhyl station is on the North Wales Coast railway line and provides a link to the various stations on this line i.e. Chester, Holyhead, Llandudno and Flint.

On average there is a 30 minute southbound service from Chester for Llandudno Junction and Holyhead destinations. The northbound route towards Chester also has a service operating every 30 minutes.

On Saturdays these services reduce to an hourly service in both directions and a two hourly service on a Sunday. Given the distance to the train station and the limited service frequencies, rail is not likely to be a preferred option of travel to Glen Clwyd Hospital. However, there is currently in operation a Plusbus ticket scheme which would provide a linkage from Rhyl station to the Hospital.

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 buses around the whole urban area of Rhyl.



Plusbus operating area
Source: <http://www.plusbus.info/>

Vehicular Access

Vehicular access to the Hospital site is initially from two access points, a main access and a secondary access.

The main hospital access is from a mini-roundabout off Sarn Lane. Sarn Lane has a 30mph speed limit and connects directly to the strategic road network and to the nearby locations of Rhyl via the A525 and Abergele, Queensferry and Chester via the A55.

The second access is approximately 50m to the north along Sarn Lane. This access is mainly used as a service access which includes an exit point for bus services to the site. This secondary access can also be used as an access for staff to the staff parking areas to the rear of the building.

Both vehicular access roads have a 10mph speed restriction.



Staff Travel Survey Full Results and Analysis

General Characteristics

Approximately 76% of respondents are female and the majority of people work office hours starting between 08:00 and 09:00. Although many stated that their work varies while some work shifts, others are on call.

Questions	Response	Frequency	Percent
Gender	Male	60	24
	Female	190	76
	No response	1	
Age	Under 25	14	5.6
	25-34	57	22.7
	35-44	73	29.1
	45-54	64	25.5
	55 or over	40	15.9
	No response	3	1.2
Working Hours	Office Hours 9-5	122	
	Part Time	31	
	Day Shift	35	
	Out of Hours	24	
	Other	82	

Distance Travelled and Journey Time to work

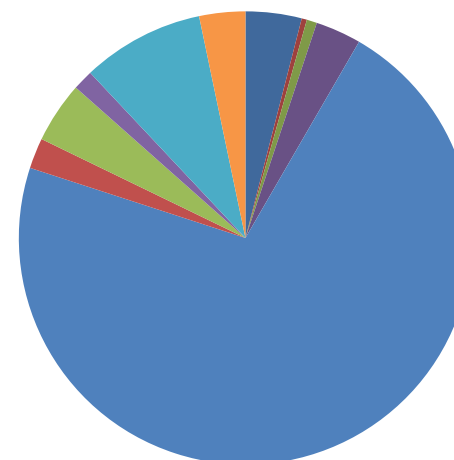
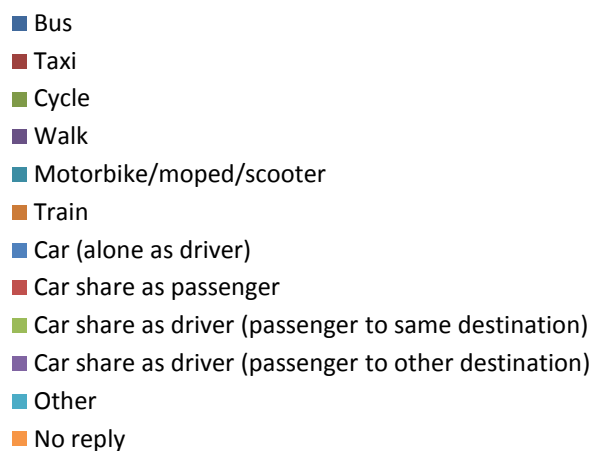
The distance from a place of work and journey time are often important factors in the mode choice. The tables below outline the distance travelled and time taken for employees to commute to Ysbyty Glan Clwyd on a typical day. 61 (24.3%) of respondents travel up to 4 miles to work with the majority (83/33.1%) travelling between 4 and 10 miles to work. A further 101 (40.2%) respondents travel over 10 miles to travel to work. Only 11 people travel less than 1 mile, this is likely to be due to the rural area surrounding the hospital, with the nearest urban area being at least 2 miles away. About 80% of the respondents take less than 30 minutes to travel to work and 239 (95.2%) of respondents take less than 60 minutes.

How far do you travel to work? (one way)	Frequency	Percent	Cumulative Percent
Up to 1 mile	11	4.4	4.4
Between 1 and 2 miles	5	2.0	6.4
Between 2 and 4 miles	45	17.9	24.3
Between 4 and 10 miles	83	33.1	57.4
Between 10 and 20 miles	59	23.5	80.9
More than 20 miles	42	16.7	97.6
No response	6	2.4	100

How long does it usually take to get to work	Frequency	Percent	Cumulative Percent
Up to 15 minutes	105	41.8	41.8
16 – 30 minutes	94	37.5	79.3
31 – 60 minutes	40	15.9	95.2
61 – 90 minutes	4	1.6	96.8
Over 90 minutes	0	0.0	96.8
No response	8	3.2	100

Modal Choice

How do you normally travel to work? If your journey to work uses more than one form of Transport please indicate the main part of your journey	Frequency	Percent	Cumulative Percent
Bus	11	4.0	4.0
Taxi	1	0.4	4.4
Cycle	2	0.7	5.1
Walk	9	3.3	8.4
Motorbike/moped/scooter	0	0.0	8.4
Train	0	0.0	8.4
Car (alone as driver)	197	71.6	80.0
Car share as passenger	6	2.2	82.2
Car share as driver (passenger to same destination)	12	4.4	86.5
Car share as driver (passenger to other destination)	4	1.5	88.0
Other	24	8.7	96.7
No reply	9	3.3	100



Modal Choice

In order to encourage sustainable travel at the site it is important to understand the current modal split of employees travelling to the Ysbyty Glan Clwyd site. The table above provides a breakdown of the responses for modal split.

It can be seen from the definitive modal split that over 25% (69) of questioned staff commute in a sustainable manner (mostly car share or on buses), with the majority of other journeys being undertaken in single occupancy vehicles (71.6%). Two staff members who responded to the survey currently cycle to work, and nine staff members who responded to the survey currently walk to work. Only one person travels by taxi and no one by train; the nearest train station being 6 miles away in Rhyl.

The modes occasionally used to travel to work are given in the table below. 219 staff occasionally travel by sustainable modes, which is encouraging for reducing car use, with 'being dropped off by someone else' representing the highest number of responses with a frequency of 49. 32 people car share, 18 people occasionally cycle to work and 23 occasionally walk, which does show some interest as an occasional form of transport.

Which of the following do you occasionally use instead of your usual form of transport	Frequency	Percent	Cumulative Percent
Bus	25	7.1	7.1
Taxi	9	2.6	9.7
Cycle	18	5.1	14.8
Car (Alone)	29	8.2	23.0
Car (with others)	32	9.1	32.1
Walk	23	6.5	38.6
Motorbike / Scooter	0	0.0	38.6
Train	6	1.7	40.3
Drop off by someone else	49	13.9	54.3
Other	57	16.2	70.5
No reply	104	29.5	100

Reasons for Modal Choice

The questionnaires highlight that there are a range of reasons why individuals select their method of transport, with the highest percentage of respondents indicating convenience as the main factor for their choice (26.1%) followed by time taken (23.0%) and cost (14.3%). Safety and personal security, comfort and carer responsibilities also featured as reasons for mode choice. Environmental impact was not popularly seen as an important factor in modal choice as only 20 respondents selected it.

The fact that convenience is the most popular reason may mean that there is some potential to encourage at least occasional use of other modes. However, it is probable that for some staff, reasons of convenience relate to shifts which commence early in the morning or finish late at night and therefore such people may be reluctant to consider other modes.

A breakdown of reasons for modal choice is shown in the table below:

What factors do you take into consideration when deciding how to travel to and from work	Frequency	Percent	Cumulative Percent
Convenience	165	26.1	26.1
Cost	90	14.3	40.4
Time Taken	145	23.0	63.4
Comfort	64	10.1	73.5
Environmental Impact	20	3.2	76.7
Safety and Personal Security	67	10.6	87.3
Carer Responsibilities (e.g. drop off/ pick up children/partner on route to/from work)	55	8.7	96.0
Other	25	4.0	100

Travel by Car

Unlike the 2009 survey staff survey, parking is not highlighted by staff as being a problem at the hospital which was confirmed during the site audit.

The main reasons cited for car use are the lack of alternatives (21.8%) and car being essential to perform job (18.7%). The car is also used by 29 respondents in order to drop off/collect children on the way (9%).

A breakdown of reasons for car use is shown in the table below:

If you usually travel to work by car what is your main reason for using the car	Frequency	Percent	Cumulative Percent
Car is essential to performing job	60	18.7	18.7
Dropping off/collecting children	29	9.0	27.7
Health reasons	1	0.3	28.0
Personal Security	13	4.0	32.1
I give someone a lift	9	2.8	34.9
Other	85	26.5	61.4
Lack of alternatives	70	21.8	83.2
No reply	54	16.8	100

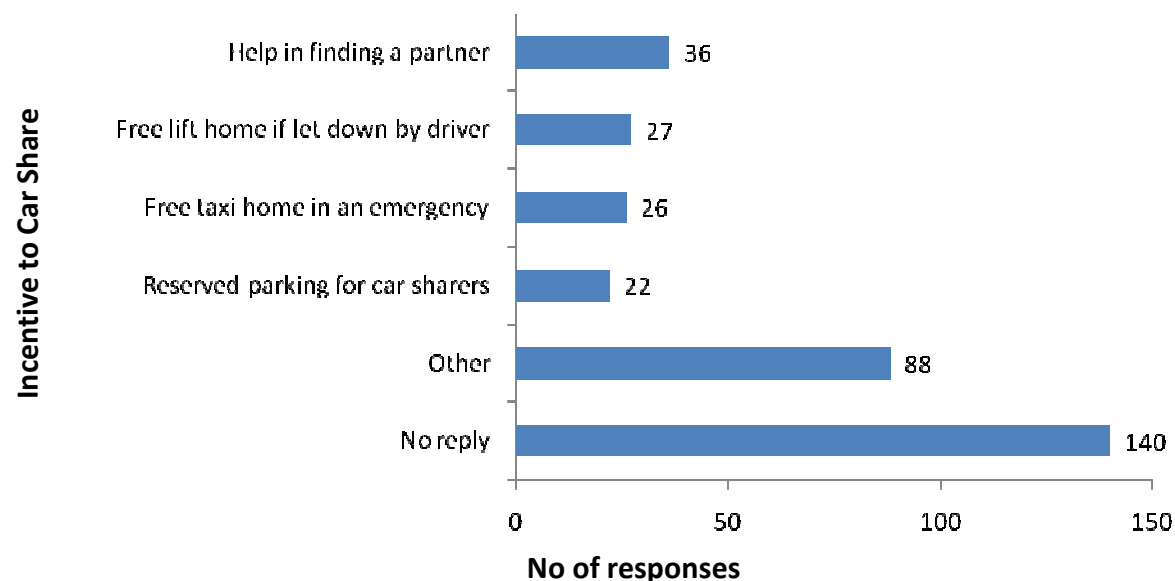
Car Sharing

Respondents were asked to indicate if they would be prepared to car share. The results show that, in addition to the 8.8% who already car share, 45.4% of staff indicated they would be prepared to car share. Approximately 38.6% of people who responded indicated they would not be willing to car share.

A break down of the results is given in the table below:

Would you be prepared to car share	Frequency	Percent
Yes	114	45.4
No	97	38.6
Already Car Share	22	8.8
No Reply	18	7.2

Building on this, respondents were asked to indicate what would encourage them to car share. The results are shown below:



Incentives to car share

The most popular incentive for car sharing is receiving help to find a suitable car share partner (18% of those who responded to this question). This would suggest the provision of car share information and a car share database system linking people who live close together could be beneficial for the staff at the site. Further to this, advice on ways to agree how to share the cost could encourage people to car share.

A free lift home if let down by driver (13.6%) and free taxi home in an emergency (13.1%) are also popular answers followed by reserved parking for car sharers (11.1%). Of the respondents who selected 'other' some stated that they already car share and others indicated that none of the reasons would encourage them to car share. Many of the respondents who selected 'other' indicated all or a combination of the reasons given. Others stated that they would not be able to car share due to a number of reasons including the fact they do not go straight home after work, they collect children, they work different start and finish times and concerns over reliability.

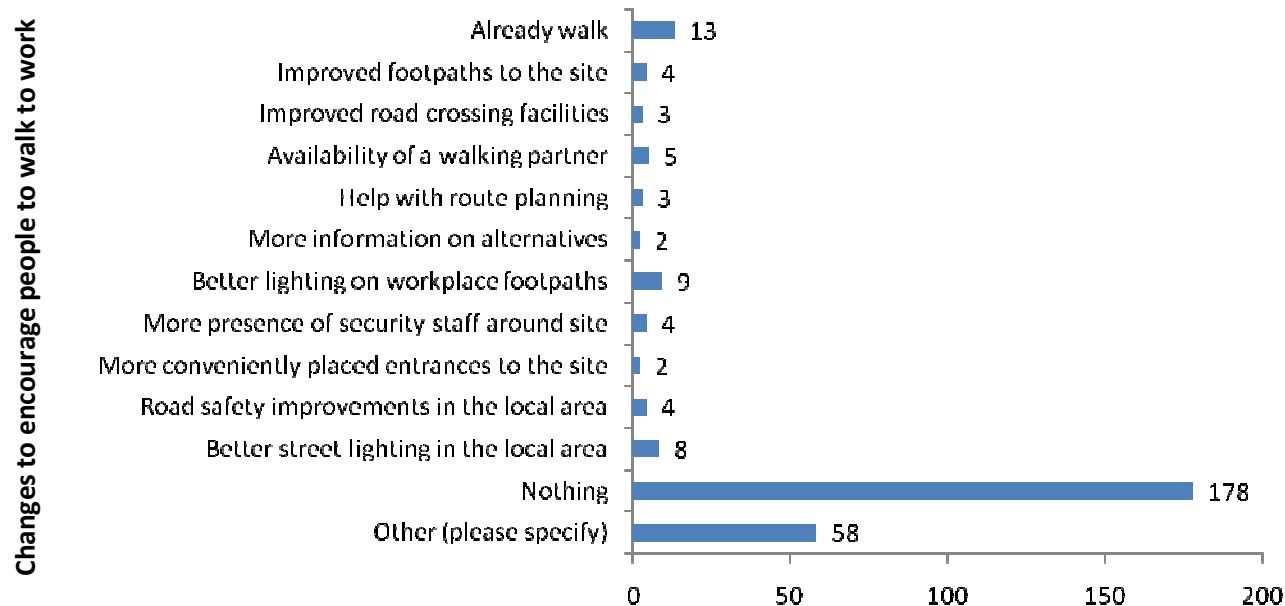
Description of car based journeys

The table below is an abstract of the modal choice table featured above in this report showing the car based journeys and the percentage of all surveyed staff. As can be seen from the table, a high percentage of trips are single occupancy with almost 72% of car drivers (197 staff) travelling alone. A combined percentage of 8.1% of staff (22 staff) who travel by car currently car share either as the driver or passenger.

How do you normally travel to work? If your journey to work uses more than one form of Transport please indicate the main part of your journey	Frequency	Percent
Car (alone as driver)	197	71.6
Car share as passenger	6	2.2
Car share as driver (passenger to same destination)	12	4.4
Car share as driver (passenger to other destination)	4	1.5
Other	24	8.7
No reply	9	3.3

Walking

To identify if employees could be encouraged to walk to work, they were asked to indicate the changes that would encourage them to walk. The results of this are presented below.

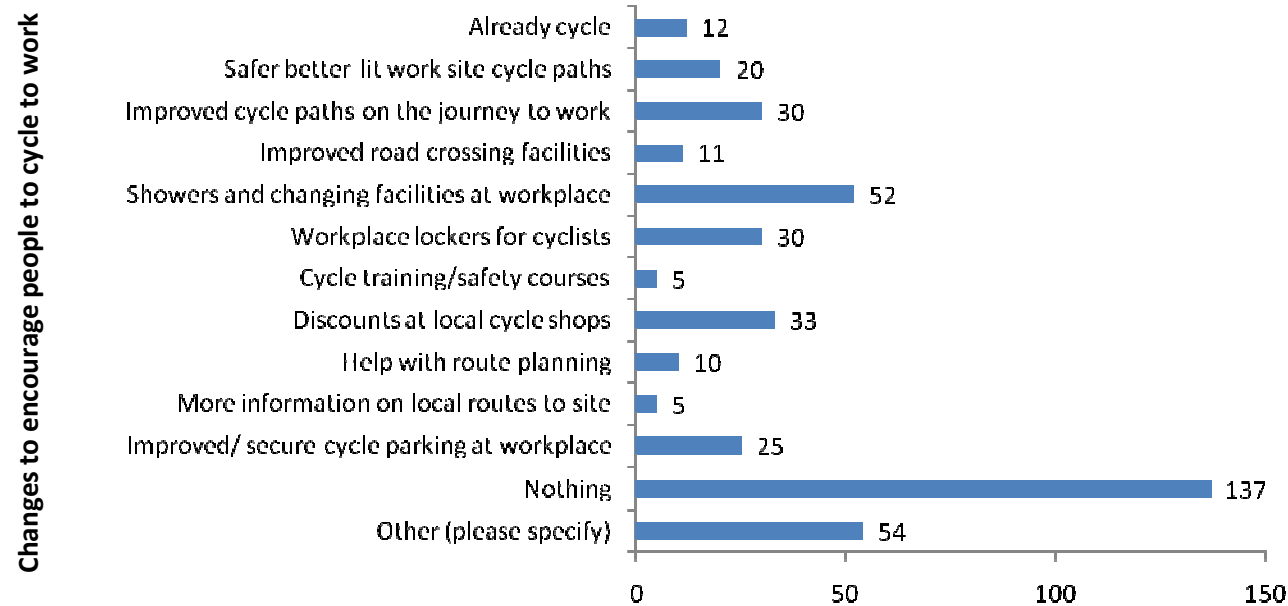


The chart clearly shows a high number of respondents (178) indicated that none of the improvements would encourage them to walk to Ysbyty Glan Clwyd. A number of staff (57 responses) however did indicate that they already walk or some measures would encourage them to walk. The most popular measures cited were better street lighting at workplace footpaths and in the local area, as well as the availability of a walking partner.

PPG13 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 PPG 13). Only 16 respondents to the staff travel survey live within a reasonable walking distance of the site and therefore the results shown in chart above are not surprising as the potential for staff to walk is limited.

Cycling

As with walking, employees were asked to identify if any improvements would encourage them to cycle to work. The results are shown below:



Again, a high percentage of respondents (32%) indicated that none of the options would encourage them to cycle to work. However there were 233 positive responses to the measures listed. Popular measures to encourage cycling included provision of showers and changing facilities at workplace (12%) and discounts at local cycle shops (8%). Other popular measures included improved cycle paths on the journey to work, workplace lockers for cyclists and secure cycle parking at the workplace.

Many of the respondents who selected 'other' indicated that the distance they had to travel was too far and some said they already cycle to work.

PPG13 notes that for journeys of less than five kilometres, cycling offers a potential substitute to car borne trips. Many urban/residential areas are encompassed within a 5km catchment of the Ysbyty Glan Clwyd site. Approximately 61 respondents (approximately 24.3%) live within a reasonable cycling distance of the site. There is therefore good potential to increase the number of staff cycling if the favoured measures can be put into place.

Public Transport

All respondents were asked to indicate which changes would encourage them to use public transport to travel to work. The Table below identifies the favoured changes by staff:

Which of the following changes would encourage you to use PUBLIC TRANSPORT on your journey to work	Frequency	Percent
Already use public transport	16	7.0
More direct bus routes	67	29.3
More frequent bus services	66	28.8
More frequent train services	18	7.9
More reliable services	41	17.9
Cleaner/smarter bus/train	17	7.4
Improved waiting facilities	16	7.0
Discount tickets and passes available at work	59	25.8
More convenient bus drop off points	30	13.1
Better bus links to work from station	18	7.9
Better lighting at bus shelters and workplace footpaths	8	3.5
Improved pedestrian links from bus stop to work	2	0.9
Public transport information	19	8.3
Having my journey planned for me	5	2.2
Nothing	104	45.4
Other	34	14.8

Public Transport

Almost half of the responses, 104 (45.4%), indicated that nothing would encourage them to use public transport. The reasons specified for never using the bus to travel to work included the fact that there are no services available; increased journey times of public transport; reliability; flexibility and convenience of the car; and other responsibilities such as child care preventing people from considering the use of the bus.

However, the results indicated that there are a number of measures that can be implemented to encourage staff to travel by public transport. These are mainly bus-related as the nearest rail station to Ysbyty Glan Clwyd is 5 miles away in Rhyl and hence is not a feasible option.

The most attractive bus improvements to staff are more direct and frequent bus services, discount tickets and passes available at work, and more reliable services. In combination with any tangible improvements to the bus services in the future, actions could also be undertaken on site to alter people's perception of the bus service. For example, information could be published on the actual reliability of bus services and the actual time taken to reach key destinations from nearby bus stops.

Only 18 respondents (7.9%) said that they would like to have more frequent train services and better bus links to work from rail station. Given the rural location of the hospital, the distance to the station and the limited connections to the rail network, this is unsurprising.

Additional Comments

Staff were given the option to provide any additional comments on travel to work. Most comments related to reasons why respondents drive to work or can not walk, cycle, use public transport or car share. These included work needs, bad weather, travel distance, time involved, lack of alternatives, need to carry equipment, need to travel between different sites, shift patterns and dropping off children at school, amongst other commitments.

Suggested improvements included:

- Free bus travel
- Help with rising fuel cost
- More direct bus services with coordination with bus operators to link bus times with shift patterns and to allow cross ticketing between them
- Need for a crossing by the bridge in Rhuddlan because of amount of traffic volumes
- Better transportation from the train station to the hospital
- Work from home or other locations - touchdown centres/ hot-desks in community hospitals
- Support of an organised car share scheme and setting up web-based car sharing pool
- Some would consider cycling if showers, lockers & changing facilities were available as well as discounts with cycle shops
- One commented that similar surveys were carried out before but nothing had changed since
- 6 respondents highlighted difficulty finding a parking space when working on shifts & the walking distance from car park

Staff Home Locations

Based on the postcode data provided, it is evident that staff commute to the site from a large catchment area. This encompasses Llandudno, Rhyl, Prestatyn, Bodelwyddan, Denbigh and Ruthin. Some staff also live as far away as Caernarfon, Porthmadog, Wrexham, Chester, Ellesmere Port and beyond. There are particular clusters of staff within Denbigh, Rhyl and Prestatyn.

The widespread area of staff and the significant distances travelled over rural areas by some is not likely to facilitate the availability of an appropriate public transport option for many. However given the clusters of staff within specific areas, the potential for a successful car share scheme on the site is large.

Travel Questionnaires

A copy of the staff and visitor/patient travel surveys are included overleaf.



