



Residential Travel Plan

Land off Chester Road, Lavister

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1. INTRODUCTION

General

- 1.1. The Residential Travel Plan (TP) is to be implemented as part of the proposed development at land off Chester Road, Lavister (the Site) which is located within Wrexham County.
- 1.2. A wide range of potential benefits can accrue from the implementation of the TP, including improved health and well-being for individuals who can change their mode of travel, and reduced environmental effects in terms of air quality, noise and congestion near the site.
- 1.3. The Travel Plan will be secured against a Section 106 document.
- 1.4. The measures proposed and summarised in Table 10 at the back of this report will complement the existing facilities for non-car modes of travel near the site and help them to focus on the key objectives of TPs, namely to reduce the reliance on single occupancy car use.
- 1.5. The TP has been prepared in accordance with Planning Policy Wales Technical Advice Note 18 (TAN 18). TAN 18 was published in March 2007 and is a supplementary document to 'Planning Policy Wales' and outlines the national guidance relating to a transport related issues.

What is a Travel Plan?

- 1.6. A Travel Plan is essentially a series of initiatives that are introduced by an organisation to provide people with an enhanced range of transport opportunities. The overriding objective of TPs is to reduce the level of single occupancy car use.
- 1.7. Every development has potential implications for local transport systems to a lesser or greater degree. The way that these implications are managed is fundamental to the scale of transport effects associated with the development.
- 1.8. TPs are an important element of the Government's integrated transport strategy and are a means of managing the transport generated by a development or site and implementing initiatives to reduce identified adverse effects of such transportation.

Why do we have a Travel Plan?

- 1.9. While there are a wide range of benefits that can result from the operation of an TP, their implementation is increasingly being required within the planning system as a condition, or obligation, associated with development.

Benefits of Travel Plans

- 1.10. The most easily identifiable benefits of TPs are those that are directly related to reductions in vehicle use; namely proportionally less congestion, noise, air pollution and accidents.
- 1.11. There is however, also a broader range of more intangible benefits that can accrue from the implementation of TP initiatives. Depending on the characteristics of each development, such benefits can include:
 - Energy savings – through removal of fossil fuel use;
 - Increased use of public transport – through TP initiatives;
 - An improved environment for pedestrians and cycles;

- Cost savings;
- Improved quality of life – through time savings achieved because of less congestion and reduced stress; and
- Improved sense of community as neighbours' car share, get involved in Bicycle Users Groups (BUGs) or parents take initiatives to walk groups of children to school, for example.

Aim and Approach

- 1.12. The principal aim of the TP for the development is to help reduce car usage (particularly single occupancy journeys) and increase the use of walking and cycling.
- 1.13. The plan considers the existing transport conditions relevant to the development and the surrounding environment, and secondly, to propose several measures designed to increase travel awareness and to effectively manage and reduce the level of single-occupancy car use.
- 1.14. In advance of occupation of the site, the journey origin and mode of transport of residents cannot be determined and therefore, this initial version of the TP is focussed on setting out principles and objectives to residents and introducing key elements such as the Travel Plan Co-ordinator, thereby providing a framework on which to base future iterations of the TP.
- 1.15. Travel information relating to bus and train services as well as cycle/pedestrian routes, car club and the TP will be provided to residents prior to occupation.
- 1.16. A survey will be carried out to ascertain the prevailing modal travel patterns of residents. These results will be integral in the future development of the TP. The survey will aim to ascertain:
 - Attitudes towards more sustainable modes of transport;
 - Journey lengths and origin;
 - Preferences to the current modes of transport;
 - Attitudes to changing their preferred mode of transport if necessary; and
 - The most effective measures to induce a shift from private car usage to more sustainable modes of transport.

2. SITE DESCRIPTION & EXISTING SITUATION

- 2.1. The Site is situated to the east of B5445 Chester Road, Lavister, Wrexham LL12 0AX which is located to the north-east of Wrexham and south-west of Chester.
- 2.2. The Site location is shown in **Figure 1** below.

Figure 1: Site Location Plan



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Public Transport Accessibility

Travel by Bus

- 2.3. The closest bus stop to the Site is located 45m south of the site access on Chester Road, approximately 34 seconds walk time (1.33m per second walk speed), outside the Gatehouse Veterinary Centre (Stop ID: wregdjp). This stop is served by the 1 Sapphire northbound bus route, operated by Arriva.

- 2.4. The corresponding southbound bus stop is located at 130m south from the site access (Stop ID: wregdjt), approximately 98 seconds walk time. This stop is served by the 1 Sapphire southbound service.
- 2.5. A summary of northbound and southbound bus services is summarised in **Table 1** below.

Table 1: Bus Services

Route No.	Closest Bus Stop	Route	Day	First Bus	Last Bus	Frequency
1 Sapphire	Chester Road (45m)	Wrexham Bus Station –	Mon – Fri	0604	2308	10-15 mins
		Marford – Rossett – Lavister –	Sat	0600	2308	15 mins
		Pulford – Chester Business Park – Chester Station	Sun	0838	2308	30 mins
	Chester Road (130m)	Chester Station – Chester Business Park – Pulford –	Mon – Fri	0656	2356	10-15 mins
		Lavister – Rossett – Marford –	Sat	0650	2356	15 mins
		Wrexham Bus Station	Sun	0926	2356	30 mins

- 2.6. The table above shows that the Site is served by a bus route that provides service on a regular basis, from bus stops in close proximity to the site. The above bus route provides regular access to Chester and Wrexham town centres and public transport hubs.

Travel by Rail

Wrexham General Station

- 2.7. Although the closest station to the Site, by distance, is Caergwrle, the Site is best served in terms of regular bus accessibility to Wrexham General and Chester Stations. Details of the services provided from each station are outlined in the Table 2 and Table 3 below.

Table 2: Wrexham General Station Train Frequency

Station	Line	Route Direction (Journey times)	Two-Way Frequency AM Peak (trains/hr)
Wrexham General	Borderlands Line	Liverpool Lime Street (83 minutes)	2
		Birkenhead Park (71 minutes)	2
	Shrewsbury to Chester Line	Chester (49 minutes)	2
		Shrewsbury (53 minutes)	1
Total			7

- 2.8. The above table indicates that the Site has connections to destinations in Wales and the north-west of England. Wrexham General Station also has 68 parking spaces and spaces accommodating for 20 bicycles. The station has step-free access to platform level.

Chester Station

- 2.9. The Site is also located near Chester Station, which is served by the 1 Sapphire Bus Route, which provides a direction connection with the existing Site. The train frequencies are outlined in the following table.

Table 3: Chester Station Train Frequency

Station	Line	Route Direction (Journey times)	Two-Way Frequency AM Peak (trains/hr)
Chester	Borderlands Line	Liverpool Lime Street (43 minutes)	2
		Birkenhead Park (49 minutes)	2
	Shrewsbury to Chester Line	Wrexham General (13 minutes)	2
		Shrewsbury (52 minutes)	1
	Virgin Trains (West Coast)	London Euston (122 minutes)	2
		Milton Keynes Central (87 minutes)	2
Total			11

- 2.10. The above table indicates that the Site is provides connections to multiple destinations, including London Euston.
- 2.11. Chester Station also has 113 car parking spaces with accessible spaces available, in addition to 76 bicycle storage spaces. The station has step-free access to platform level.

Pedestrian and Cycle Network

- 2.12. The section of Chester Road opposite to the Site's access road has well maintained footways with street lighting, therefore making it conducive for walking. Darland Lane also benefits from well maintained footways along both sides of the carriageway with street lighting present, again offering an environment conducive for walking.
- 2.13. Although there are no formal dedicated cycle routes present within the area, the 30mph speed limit and wide well-lit carriageway ensures that Chester Road can be considered a suitable road for cyclists. Accident records also indicate that there have been no recorded accidents involving cyclists during the past 5 years within 1km of the site, indicating that the local area is conducive for cycling.

Highway Network

- 2.14. The B5445 Chester Road/Wrexham Road runs north to south, providing a link to the A483 and Wrexham to the south and the A483, A55 and Chester to the north. It is subject to a 30mph speed limit which commences approximately 1km to the north and continues south to the southern extents of Rossett. Street lighting is present along the full extent of the B5445 and there are no parking restrictions present on the carriageway within the local Lavister area.

Local Facilities

2.15. The site's location provides accessibility to a limited number of local facilities located within the local area. The following facilities are located within 2km walking distance of the site:

- Darland High School - 800m;
- St Peter's Primary School - 1.3km;
- Co-op Convenience Store - 1.4km;
- Premier Convenience Store - 1.4km;
- Rossett Surgery/Alyn Medical Centre - 1.9km;
- Rossett Dental Surgery - 1.9km.

2.16. Additional facilities such as public houses, restaurants, hair and beauty salons are also present within the local area, accessible within 2km walking distance of the site.

2.17. In summary, the site is located in a sustainable location which offers a number of local facilities for the benefit of future residents within the Proposed Development.

2.18. Access to the local facilities is also available via the regular bus service that stops in close proximity to the site access, and at numerous locations on Chester Road, resulting in an attractive and convenient alternative to car use for those that can't walk to the facilities.

Method of Travel Census Data

2.19. The National Statistics database has been analysed to ascertain the Method of Travel percentage split of those residing in the local area of the site. Details of the Neighbourhood Statistics census has been obtained for "Method of travel to work" for the output area W00002216, within which the site resides. The results are provided in the table below.

Table 4: Method of Travel to Work Percentage Split (W00002216)

Mode of Transport	Percentage
Work mainly at or from home	5.5%
Train	1.2%
Bus, Minibus or Coach	3.1%
Taxi	0.6%
Motorcycle, Scooter or Moped	0.6%
Driving a Car or Van	76.7%
Passenger in a Car or Van	1.2%
Bicycle	1.8%
On Foot	8.6%
Other Method of Travel to Work	0.6%
Total	100%

Note: Data based on Method of Travel to Work Census Data 2011

- 2.20. The above table indicates that among existing residents within the immediate area of the development site, the most popular mode of travel is by car at around 77%, 9% travel to work on foot and 4% travel via public transport.

Local Car Ownership

- 2.21. To provide indication of the current level of car ownership in the area, data from the 2011 Census has been obtained for the W00002216 output area, in which the Site resides.

Table 5: Car/Van ownership in 'W00002216'

Cars	2011 Census	Percentages	Number of Vehicles
All Categories: Car or van availability	124	100%	203
No cars or vans in household	4	3.2%	0
1 car or van in household	46	37.1%	46
2 cars or vans in household	65	52.4%	130
3 cars or vans in household	9	7.3%	27
4 or more cars or vans in household	0	0.0%	0

UK Census (2011)

- 2.22. The above table indicates that 96.8% of households in the 'W00002216' output area owns at least 1 car or van, with 37.1% of households having ownership of 1 car or van, 52.4% having ownership of 2 vehicles and 7.3% of households in the local area owning 3 cars or vans. No households are recorded as owning 4 or more cars or vans.
- 2.23. The overall car ownership level among households in the output area, within which the site is located, has been calculated as 1.6 cars or vans per household. This reflects the predominantly rural area within which Lavister is located.

3. PROPOSED DEVELOPMENT

3.1. The proposed development seeks to provide up to 77 residential dwellings, comprised of the following:

- 21 x 3 bedroom detached private houses;
- 34 x 4 bedroom detached private houses;
- 3 x 5 bedroom detached private houses;
- 11 x 2 bedroom semi-detached affordable houses; and
- 8 x 3 bedroom semi-detached affordable houses.

Access

3.2. The proposed access arrangements are to remain broadly as per the existing arrangement, however, it is proposed to widen and upgrade the existing access junction to enable easier two-way vehicular movements and to reduce the possibility of vehicles queuing back onto Chester Road.

Proposed Parking

Car Parking

3.3. A maximum of 223 car parking spaces can be provided as part of the Proposed Development, this level of parking provision complies with WCBC's maximum car parking standards ('Local Planning Guidance Note 16 – Figure C') as follows:

Table 6: Wrexham County Borough Council Residential Car Parking Standards (maximum)

Number of Bedrooms per Dwelling	Maximum Number of Allocated Spaces	Proposed Number of Dwellings	Maximum Parking Provision
1 Bedroom	1.5	-	-
2 Bedrooms	2	11	22
3/4 Bedrooms	3	63*	189
5 + Bedrooms	4	3	12
Total		77	223

* 21 x 3 Bedroom Private Dwellings; 34 x 4 Bedroom Private Dwellings; and 8 x 3 Bedroom Affordable Dwellings.

Cycle Parking

3.4. The WCBC Cycle Parking Standards seek a minimum provision of 154 cycle spaces within the development, this is based upon the requirement for sufficient space to provide at least 2 secure cycle parking spaces per dwelling ('Local Planning Guidance Note 16 – Figure C').

Servicing and Refuse Collection

- 3.5. The Site has been configured to allow for an 11.2m refuse vehicle to manoeuvre within 25m of the bin storage areas throughout the site.
- 3.6. Emergency vehicles will be able to get within 45m-60m of the dwellings (dependant on provision of automatic fire suppression system), which therefore accords with the requirements as outlined in the Building Regulations Approved Document B and Manual for Streets Guidance.

4. TRANSPORT POLICY & GUIDANCE

General

4.1. The development plan for the Proposed Development comprises the following key documents:

- Planning Policy Wales – Edition 9 (November 2016);
- Planning Policy Wales Technical Advice Note 18: Transport (March 2007);
- North Wales Regional Transport Plan, TAITH (September 2009); and
- Wrexham Unitary Development Plan (February 2005).

Planning Policy Wales – Edition 9 (2016)

- 4.2. Planning Policy Wales (PPW) sets out the land use planning policies of the Welsh Government. It is supplemented by a series of Technical Advice Notes. Procedural advice is given in circulars and policy clarification letters. It translates the Welsh Government’s commitment to sustainable development into the planning system so that it can play an appropriate role in moving towards sustainability.
- 4.3. The planning system manages the development and use of land in the public interest, contributing to improving the economic, social, environmental and cultural well-being of Wales, as required by the Well-being of Future Generations (Wales) Act 2015. It should reconcile the needs of development and conservation, securing economy, efficiency and amenity in the use of land, and protecting natural resources and the historic environment. A well-functioning planning system is fundamental for sustainable development.

Transport

4.4. Paragraph 8.1.1 states:

“The Welsh Government aims to extend choice in transport and secure accessibility in a way which supports sustainable development and helps to tackle the causes of climate change by: encouraging a more effective and efficient transport system, with greater use of the more sustainable and healthy forms of travel and minimising the need to travel¹. This will be achieved through integration:

- *within and between different types of transport;*
- *between transport measures and land use planning;*
- *between transport measures and policies to protect and improve the environment;*
and
- *between transport measures and policies for education, health, social inclusion and wealth creation.*

For example, ensuring that development is accessible by means other than the private car will help to meet the Welsh Government’s objectives for social inclusion. Encouraging cycling and walking will contribute to the aim of improving the levels of health in Wales.”

4.5. Paragraph 8.1.4 states:

“The Welsh Government supports a transport hierarchy in relation to new development that

establishes priorities in such a way that, wherever possible, they are accessible in the first instance by walking and cycling, then by public transport and then finally by private motor vehicles. Careful consideration needs to be given to the allocation of new sites which are likely to generate significant levels of movement in Local Development Plans to ensure that access provisions which promote walking and cycling, as well as by public transport are included from the outset.”

Parking Provision

- 4.6. Regarding parking standards paragraph 8.4.2 provides guidance, as follows:

“Car parking provision is a major influence on the choice of means of transport and the pattern of development. Local authorities should ensure that new developments provide lower levels of parking than have generally been achieved in the past. Minimum parking standards are no longer appropriate. Local authorities should develop an integrated strategy on parking to support the overall transport and locational policies of the development plan.”

Encouraging Sustainable Travel

- 4.7. Section 8.2 ‘Promoting Active Travel’ states:

“The Active Travel (Wales) Act 2013 aims to make walking and cycling the most attractive option for shorter journeys. In particular, everyday journeys such as to and from a workplace or education establishment or in order to access health, leisure or other services or facilities.

Walking should be promoted for shorter trips. The impact of policies and development on pedestrians should be considered. Planning authorities should, taking into account the requirements of the Active Travel (Wales) Act 2013, promote specific measures to assist pedestrians including the provision of safe, convenient and well-signed routes.

Cycling should also be encouraged for short trips and as a substitute for shorter car journeys or, as part of a longer journey when combined with public transport. Local authorities should, taking into account the requirements of the Active Travel (Wales) Act 2013, encourage the implementation of specific measures to develop safe cycling, including new or improved routes, and secure parking and changing facilities in major developments and at transport interchanges. Where appropriate, planning authorities should also seek to assist the completion of the national cycle network, and of key links to and from the network.”

Planning Policy Wales – Technical Advice Note 18: Transport (March 2007)

- 4.8. Technical Advice Note 18 (TAN 18) was published in March 2007 and acts as a supplementary note to Planning Policy Wales. TAN 18 sets out national policy guidance in relation to transport related issues.
- 4.9. TAN 18 highlights the importance of integration between transport and land use planning, in order to contribute to the delivery of sustainability. TAN 18 discusses the importance of suitably managed parking provision and ensuring that all new developments offer appropriate provision for pedestrians and cyclists.

Regional Policy and Guidance

North Wales Regional Transport Plan, TAITH (September 2009)

- 4.10. The North Wales Regional Transport Plan (NWRTP) was adopted in September 2009 to outline the strategic vision for transport, over the next 25 years, held by the six local authorities that make up the North Wales (TAITH) area; Anglesey, Conwy, Denbighshire, Gwynedd, Flintshire and Wrexham, within which the site is located.
- 4.11. The overall vision of the NWRTP can be summarised as follows:
- “TAITH will deliver safe, sustainable and efficient transport networks to support the economic and social activities of North Wales’ diverse communities and businesses having regard to its strategic European role”*
- 4.12. The NWRTP identifies seven main objectives, the following two are directly related to the proposed development:
1. *“Optimise accessibility to employment, education, health and services for all the diverse communities of North Wales”*
- 4.13. The TS (ref. ‘WIE10287-102-R-3-2-3-TS’) that is to be submitted in conjunction with this TP identifies that the Proposed Development is suitably located to offer accessibility to employment, education, health and services for future residents.
4. *“Provide, promote and improve sustainable forms of transport and infrastructure to minimise the negative impacts of transport on the local and global environment”*
- 4.14. This Travel Plan provides support to this objective by seeking to actively encourage and promote the modal shift towards use of sustainable modes of travel by those travelling to and from the site.

Wrexham Unitary Development Plan (February 2005)

- 4.15. The following highway related policies from the UDP are considered to be relevant to the proposed development;

Policy T8 - Parking

“Development granted planning permission will be required to provide vehicle parking spaces either on site or nearby, in accordance with the Council’s current parking standards. Special regard will be paid to the following factors, as appropriate:

- a) the availability of public transport nearby,*
- b) proximity to public car parking,*
- c) proximity to local services and facilities,*
- d) road safety hazards and amenity considerations arising from on-street parking in the vicinity of the site.*

Where implementation difficulties arise in making parking provision on-site or nearby, the Council will require a developer to make financial contributions for measures to assist public transport or walking and cycling as appropriate.”

Policy T9 - Walking, Cycling and Horse Riding Routes

“Development proposals will be required to provide walking and cycling routes, where feasible and

appropriate, that link with existing or proposed walking and cycling routes and integrate with the public transport system. Opportunities for horse riding along these routes will be secured where appropriate.”

Policy Summary

- 4.16. The above policy review highlights that the Proposed Development accords with the prevailing national and local planning policy.
- 4.17. The Proposed Development has access to local public transport in addition to the strategic local road network.

5. FORECAST TRAVEL GENERATION

General

- 5.1. This section considers the likely travel generation of the proposed development (described in Section 3) forecast using multi-modal trip rate information for the most similar sites available on the TRICS databases.
- 5.2. This section summarises key sections of the trip generation presented in the accompanying Transport Assessment (TS), and would form the basis of future comparison surveys as the Proposed Development is occupied

Forecast Residential Trip Generation

- 5.3. For the Proposed Development, reference has been made to the TRICS database (v7.5.3) to derive the anticipated Total Person trip rates associated with the Site's characteristics. The resulting Total Person trip rates derived from these surveys are summarised below.

Table 7: Proposed Residential Use – Total Person Trip Rates & Trips (77 Units)

Time Range	Trip Rates			Trips		
	Arrivals	Departures	Two-Way	Arrivals	Departures	Two-Way
08:00-09:00	0.247	0.842	1.089	19	65	84
17:00-18:00	0.637	0.290	0.927	49	22	71

- 5.4. By applying the percentage modal splits from Table 4 to the proposed development vehicle trip numbers in Table 8, the number of trips by travel mode can be determined and a comparison provided, as follows.

Table 8: Forecast Residential Peak Hour Trip Generation (two-way)

Description	Modal Split	AM Peak	PM Peak
Work mainly at or from home	5.5%	5	4
Train	1.2%	1	1
Bus, Minibus or Coach	3.1%	3	2
Taxi	0.6%	1	0
Motorcycle, Scooter or Moped	0.6%	1	0
Driving a Car or Van	76.7%	64	54
Passenger in a Car or Van	1.2%	1	1
Bicycle	1.8%	2	1
On Foot	8.6%	7	6
Other Method of Travel to Work	0.6%	1	0
Total	100%	84	71

Note: discrepancies a result of rounding

- 5.5. The above table forecasts that the proposed development would generate 64 two-way vehicle trips during the AM peak and 54 two-way vehicle trips during the PM peak hour period.
- 5.6. It is expected that 4 trips undertaken would be undertaken via public transport (bus and train) in the AM peak with 3 public transport trips undertaken during the PM peak. A total of 7 walking trips during the AM peak and 6 walking trips during the PM peak are also expected.
- 5.7. Although technically not a trip onto the local network, 'Work Mainly at or From Home' has been included as a travel mode in the above assessment due to the presence of resident's working from home within the existing population. It should also be noted that the arrangement to 'Work Mainly at or From Home' is likely to increase due to advancements in connectivity and changes to work habits and should therefore be accounted for.

6. OBJECTIVES & TARGETS

The Focus of the Travel Plan

- 6.1. This preliminary TP is primarily focussed on residents and therefore most of measures proposed within the plan are intended to encourage residents to vary, or change, from current reliance on private car travel to more sustainable methods of transport when appropriate.

Objectives

- 6.2. There are many objectives that the implementation of the TP is intended to help fulfil:
- To influence travel behaviour of residents.
 - To encourage a modal shift in travel towards more sustainable methods of travel.
 - To reduce the need for unnecessary journeys by residents.
 - Reduction in overall mileage.
 - To help improve the health of residents.
 - Accommodating those journeys that need to be made by car.

Targets

- 6.3. The objectives given previously provide the framework for the travel plan measures. Where applicable, targets can be included in a TP to help achieve the objectives and there are two main types that are applicable to TPs. The most easily demonstrated are the commitment to deliver the package of measures set out in the plan. These measures are set out in the next chapter and include initiatives to promote increases in the use of cycling, walking, car-sharing and public transport.
- 6.4. The second form of target is aspirational and related to proportional changes in the travel modes used to get to the site. At this stage, it is difficult to define exactly the aspirational targets in advance of the development opening, as the modal split of residents is not known. However, possible targets could be to increase travelling by cycling by up to 2% over a two-year period based on the estimated multi-modal trips suggested. The results of the residents' travel questionnaire survey (to be undertaken within 6 months of first occupation of the dwellings) will provide more accurate information on the prevailing travel choices of residents and hence will provide a basis for the setting of aspirational targets in a later revision of the Travel Plan.
- 6.5. TPs are evolving documents that need to remain adaptable to changing working practices and local conditions and therefore, the plan targets will be given over varying timescales. Table A at the very end of this report details the proposed measures and the respective timescales.
- 6.6. Based on evaluation of similar sites, using the primary objectives of the TP and based on the forecast low car ownership, the key targets of the Travel Plan will be as follows:
- Reduce solo private car use by 5% within five years when compared to the modal split from the initial survey;
 - Increase car sharing, as an alternative to solo private car use, within five years of the initial survey;
 - Increase the number of trips being undertaken by public/sustainable transport by 5% within five years of the initial survey.

- 6.7. Based on the forecast modal split as presented in Table 8 and the above targets, a summary of the likely change in modal split brought about by the Travel Plan is summarised below.

Table 9: Potential Change in Modal Share Due to Targets

Mode of Travel	Potential Modal Share		
	Year 1	Year 3	Year 5
Work Mainly at or From Home	5.5%	5.8%	6.0%
Train	1.2%	1.3%	1.7%
Bus, Minibus or Coach	3.1%	3.5%	4.1%
Taxi	0.6%	0.6%	0.6%
Motorcycle, Scooter or Moped	0.6%	0.6%	0.6%
Driving a Car or Van	76.7%	74.2%	71.7%
Passenger in a Car or Van	1.2%	1.3%	1.8%
Bicycle	1.8%	2.0%	2.8%
On Foot	8.6%	9.6%	10.1%
Other Method of Travel to Work	0.6%	0.6%	0.6%
TOTAL	100%	100%	100%

Note: Above figures subject to initial travel survey

- 6.8. If the above targets are not met, then discussions between the Travel Plan Coordinator (TPC) and the Local Authority will be had to establish how the targets can be achieved.

7. TRAVEL PLAN INITIATIVES

General

- 7.1. To ensure that the opportunities for modal shift can be realised there are many measures that will be implemented and encouraged.

Measures to Reduce Car Use by Residents

- 7.2. The proximity of the proposed dwellings to the local facilities and public transport will limit the need to make shopping journeys and would achieve a reduction in the need to travel.
- 7.3. It is acknowledged that some journeys may be difficult to make by travel modes other than car; for instance, journeys to collect materials from DIY stores, or for work meetings in less accessible locations.
- 7.4. All residential units within the development will have broadband internet connection. Broadband access can enable home working, potentially reducing the number of workplace trips made from the proposed development. Broadband provision enables residents to carry out shopping for groceries etc. over the internet and arrange home delivery.
- 7.5. Further measures to reduce car use by residents are identified below.

Provision of Travel Information

- 7.6. Travel Information Packs are to be provided to all households. This will increase awareness of the different travel options available and provide information about the TP, and reasons for it, cycle routes, pedestrian access and public transport information etc.
- 7.7. A copy of the TP will be provided upon request to residents by the TPC who will be present on site.
- 7.8. Travel Information will also be made available online for residents to view, potentially via a development wide intranet system.

Measures to Promote Sustainable Travel

- 7.9. General measures to promote sustainable travel are to include promotional events which could be undertaken every 1 to 2 years such as a campaign day.
- 7.10. Residents will have opportunities to work from home and also to make full use of non-car modes. This will reduce the need to travel by car.

Measures to Promote and Facilitate Cycling

- 7.11. The residential dwellings will be provided with secure cycle parking, undercover within the development, other measures include:
- Monitor cycle parking as part of the TP update and increase the provision if necessary;
 - Consider maintenance sessions on a 12-month basis;
 - Negotiate discounts with local cycle shops.

Measures to Promote Walking

- 7.12. Measures aimed at increasing the viability of accessing the residential dwellings on foot will be

based around provision of the facilities and benefits prior to occupation, as follows.

- 7.13. Information on the 'on and off highway' pedestrian network routes to residents and visitors, and include this information on maps made available through the transportation notice boards.
- 7.14. Provide improved pedestrian access within and into the dwellings, including wide paved areas and lighting.

Measures to Promote and Facilitate Public Transport Use

- 7.15. To increase and encourage the use of public transport, the following measures to encourage public transport use will be implemented:
 - Provide up-to-date public transport information including timetables and bus company contact information within the Travel Packs;
 - Promotion of walking routes connecting with bus stops and local facilities.

Travel Plan Co-ordinator and Associated Support

- 7.16. The TP Co-ordinator (TPC) will work in conjunction with the LPA, the local community and other interested parties for the continuing progression of the TP. The TPC will be appointed prior to first occupation of the development. When a change in the TPC is proposed, this will be agreed in writing with WCBC prior to any changes.
- 7.17. A TP needs a Co-ordinator to take responsibility for the development and management of the plan and ensure its delivery. In the case of the Residential TP, the Co-ordinator has a particularly important role in presenting the plan to residents who may not otherwise feel any common cause with its implementation. It is therefore important that the Co-ordinator is either located on site or makes regular visits to it and can become a familiar and trusted person.
- 7.18. The TPC will devote one day a month (on average) to enable the proper implementation of the TP and its measures.
- 7.19. The role of the TP Co-ordinator will be as follows:
 - To promote and encourage the use of travel modes other than the car, including publicity;
 - To provide a point of contact and travel information for residents;
 - To ensure that all relevant information is provided to all new residents;
 - To arrange for travel surveys to be undertaken;
 - To provide a point of contact with transport operators and officers of the Council and work with other local businesses to pursue joint plans and initiatives where relevant.

Monitoring and Review Mechanisms

- 7.20. An objective of TPs is that there will be an on-going improvement process including periodic monitoring to be conducted at the end of years 1, 3 and 5 to be carried out within 3 months of occupation or at 70% capacity (whichever is first). The TP will be reviewed in consultation with the Local Authority. All monitoring surveys will be iTRACE/TRICS compliant, or similar.
- 7.21. The TPC will form a contact point for communication with the Local Authority. Findings from authority discussions and reviews will be communicated to residents via newsletters.
- 7.22. The existing residential modal split will act as the baseline data with regular monitoring being

undertaken so that an indication of changes over time can be assessed.

- 7.23. In addition to the residents, the staff of the commercial use on site will also be provided with the Travel Packs, be included in the monitoring process and any promotional events that take place. However, the staff will not be subject to targets.

Travel Surveys

- 7.24. Questionnaire surveys of residents' travel patterns will be undertaken as part of the review process on an annual basis, commencing three months after occupation or at 70% capacity (whichever is first) and will form the baseline survey. These will be of a more basic nature, seeking to determine any change in the modal split and uptake of travel plan initiatives.

Multi-Modal Counts

- 7.25. A regular count of all trips made to and from the site will be undertaken and will be iTRACE/TRICS compliant or similar. These will occur every 2 years, with the first count taking place approximately 6 months after occupation.

Marketing and Communication

- 7.26. In addition to the initiatives already outlined within the TP, there will be ongoing marketing and communication of information following on from the launch via a notice board.

Dissemination and Feedback

- 7.27. Residents will receive information via newsletters and the Travel Information Packs. The Travel Information Pack will be sent to the Local Authority for review prior to sending to residents.

Residents

- 7.28. To be able to determine the potential effect of residents' travel habits, residents will be asked to complete the travel questionnaire upon occupation. In this way, the travel patterns of all new people can be considered in the same light as those already at the development. Information will also be provided for new residents within their welcome pack on the various means of non-car access available. Clearly, the opportunities for making journeys by public transport are significant.

Table 10: Summary of the measures and monitoring of the TP

Objectives	Target	Measures	Timescales	Responsibility	Monitoring progress towards target		
Increase public transport awareness		Provide bus, rail maps and timetables	On occupation	TPC	Annual questionnaire surveys to be undertaken.		
		Promotion of walking routes connecting with local bus stops and local facilities			Bi-annual multi-modal counts to be undertaken at regular intervals. Information to be reviewed every 12 months and updated if necessary.		
To increase walking	To increase number of residents walking, cycling and using public transport to travel to work, shops, leisure and school by 5% over the period of the TP at the expense of single occupancy car travel.	Information on the 'on and off highway' pedestrian network routes to residents	On occupation	TPC	Annual questionnaire surveys to be undertaken.		
		Provide high quality pedestrian environment within site			Bi-annual multi-modal counts to be undertaken at regular intervals. Surveys and updates to be sent to WCBC. Nil cost – TPC to forward information		
To increase cycling		Promote health benefits	On occupation	TPC	Information to be reviewed every 12 months and updated if necessary.		
		Secure, covered cycle parking to be provided in line with WCBC requirements			Annual questionnaire surveys to be undertaken.		
		Provide cycle mapping and information for the local area via e-mail and development wide intranet			Surveys and updates to be sent to WCBC. Nil cost – TPC to forward information		
		Promote health benefits					
To increase working from home		Pool Bicycles for resident cyclists to be investigated	On occupation	TPC	Group to provide feedback to TPC. Within 6 months of occupation		
		Promote benefits			Prior to occupation	Developer	Information to be reviewed every 12 months and updated if necessary.
		Ensure Wi-Fi/Broadband internet facilities are provided					

UK and Ireland Office Locations

